Phase II Environmental Site Assessment

Tiger Pause Chevron Gas Station
1750 SW Basin Street
Ephrata, Washington 98823
GIEIM Project Number 24-01482

July 25, 2024

Prepared for:
US Metro Bank
1055 North Tustin Avenue
Anaheim, CA 92807

Prepared by:
Green Environmental Management
(855) 277-5307

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1 Introduction

Green Environmental Management (G|E|M) conducted a Phase II Environmental Site Assessment (Phase II) for US Metro Bank at the property located at 1750 SW Basin Street, Ephrata, Washington 98823.

The site vicinity is depicted on Figure 1: Site Location Map. The configuration of the property is depicted on Figure 2: Site Plan.

1.1 Background

G|E|M was provided a copy of a Phase I Environmental Site Assessment (Phase I) of the subject property, performed by Partner Engineering and Science (Partner) and issued May 31, 2024. According to the Phase I, the subject property consists of a single 2.13-acre Grant County tax lot developed with a 1977-era 6,094 square-foot convenience store and a gas station equipped with four (4) underground fuel storage tanks (USTs) and four (4) fuel pumps under a canopy.

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 excerpted from the partner Phase I as follows:

- *According to records reviewed, the on-site UST system appears to be in compliance with the EPA's 1998 upgrade requirements and all applicable local regulations. The review of reasonably ascertainable information pertinent to the status and operation of the storage tank system, which included a review of inspection records and system tightness reports, did not reveal any reported discharges or gross compliance deficiencies. The tanks are monitored by an automatic tank gauging system (Gilbarco) with automatic line leak detectors and overfill alarms. All dispensers are equipped with containment sumps. A copy of the Gilbarco readout from May 23, 2024 reported all systems operating normally. Registration is valid through August of 2024. Partner was provided with a copy of the most recent line tightness test, dated January 15, 2024. All lines tested as tight at that time. According to a 2017 ESA, subsurface sampling conducted in 2011 reported no releases to the soil. Although the documentation reviewed did not reveal any reported discharges, the possibility exists that releases may occur from tanks or tank systems that are otherwise testing as tight. Partner is unable to rule out the potential that a release from the USTs has affected the subsurface of the subject property. Based on this information, and the age of the UST system (28+ years), the underground storage of petroleum products at the subject property is considered a REC.*
- *According to a review of Ecology records, three USTs were decommissioned at the subject property prior to 1989. One gasoline UST was closed in place, with a gasoline UST and a diesel UST reportedly removed from the subject property. No closure documentation associated with the former on-site USTs was included in the reviewed regulatory documents. Partner was also not provided with information regarding the former location of the USTs or the capacity. Historical records reviewed indicate that the subject property was developed with a service station in 1953; however, Ecology records state that the previous generation of USTs was installed in December 1964. The December 1964 date is a common UST installation date in Ecology records, and does not appear to reflect the actual installation date of the former generation of on-site USTs. Based on the lack of information suggesting that*

additional USTs have been located at the subject property, the former generation of USTs were likely installed during construction of the original service station in 1953. Due to a lack of associated closure documentation, potential releases associated with the former on-site USTs are considered a REC.

- *Historical records reviewed indicates that the subject property was occupied by a service station from at least 1953 to at least 1979, and portions of the subject property building were likely utilized for automotive repair into the 1980s. No evidence of inground vehicle lifts or waste oil tanks were observed during the site reconnaissance, and no records of these types of features were included in a review of municipal records. However, a suspected former vehicle service pit and an interior drain were observed within the southwest portion of the building, which appears to have been historically utilized for automotive repair and maintenance. No staining or hazardous material storage was observed in the vicinity of the drain. Partner was unable to determine the discharge location of the drain; however, given the lack of a connection to the municipal sewer system, this drain likely discharges directly to the subsurface or to the on-site septic system. Based on the duration of automotive repair activities (26+ years) and the observed interior drain and suspected former service pit, the former use of the subject property for automotive repair represents a REC.*
- *Sanitary discharges from the subject property appear to be directed to an onsite septic system. No septic system records were available from the Grant County Health District, the City of Ephrata, or the subject property owner; however, a septic tank or tanks were observed to the southeast of the subject property building during the site reconnaissance. Partner was unable to identify the location of the associated drainfield; but suspects it is located on the unpaved area on the central portion of the subject property. The septic system represents a direct conduit to the subsurface of the subject property for any materials discharged to this system from the subject property building. In addition, due to the unknown discharge point of the floor drain in the southwest portion of the building (former automotive repair area), it is possible that materials from this area of the building have been discharged to the septic system. Based on the historical use of the subject property for automotive repair, and the current and historical use of the subject property for automotive fueling, the use of a septic system for waste water disposal represents a REC.*

Although the location of the former service station and its USTs was not provided by Partner, historical aerial photographs included with the Phase I, dating from 1961, 1964, 1976 and 1982, depict what appears to be a previous structure or building (smaller than the current building) underlapping the north end of the current convenience store (see Figure 2). No other structures were apparent on the historical aerial photographs. G|E|M assumes the former service station and its USTs were located in this area.

Based on the conclusions of the Partner Phase I and our review of historical aerial photographs, G|E|M recommended a Phase II consisting of a geophysical survey to locate and map the onsite septic drain field and to clear planned boreholes of utilities ahead of the investigation, followed by the advancement of six (6) direct-push soil borings to approximately 20 feet below ground surface (bgs), or refusal, whichever is first encountered for the collection of six (6) soil samples for gasoline (TPH-G) and diesel (TPH-D) to heavy oil (TPH-O) -range hydrocarbons analysis, and for analysis of volatile organic compounds (VOCs), to include the gasoline-related VOCs benzene, toluene, ethylbenzene and xylenes (collectively BTEX), the gas additive methyl tert-butyl ether (MTBE) and lead scavengers 1,2-dibromoethane (EDB) and ethylene dichloride (EDC).

2 Scope of Services

The recommended scope of services for this investigation as outlined in G|E|M's proposal dated June 17, 2024, included the following:

- G|E|M will contract and oversee a geophysical survey to locate and map the onsite septic drain field and to clear planned boreholes of utilities ahead of the investigation.
- G|E|M will advance up to six (6) direct-push soil borings for the collection of six (6) soil samples.
- The soil samples will be field screened for odors and discoloration. Soil cores will be continuously monitored with a handheld portable photoionization detector (PID).
- Soil samples will be analyzed for TPH-G via Northwest Method NWTPH-Gx, TPH-D and TPH-O via NWTPH-Dx, and VOCs via EPA Method 8260.
- G|E|M will prepare a report detailing our findings and recommendations.

The geophysical survey was conducted July 8, 2024. The Phase II investigation was conducted on July 15, 2024.

3 Investigation Activities

Washington One-Call was notified of the impending investigation on July 8, 2024 (Ticket No 24280483). Geophysical contractor, Geopotential, of Halsey, Oregon was contracted for the geophysical survey. B&W Standard Environmental Probe of Spanaway, Washington, was contracted for the soil boring portion of the investigation.

3.1 Geophysical Survey

GeoPotential of Fairview, Oregon conducted a geophysical survey at the property utilizing a Geometrics 858G Cesium Vapor Magnetometer, a Mala Easy Locater Ground Penetrating Radar (GPR) System coupled to a 425-MHz antenna, a Schonstedt GA52 Magnetic Gradiometer, an Aquatronics A6 Tracer and a Heath Sure Lock Pipe & Cable Locator.

The survey identified and mapped the septic leach field along the east side of the subject building. Geopotential additionally cleared six (6) potential drilling areas. The areas to the north of the fuel island and immediately north of the subject building were ruled out due to the presence of disturbed soil and potential fuel product lines. The survey results and cleared soil borings were marked on the ground surface with white paint. The GeoPotential Geophysical Survey Report is included as Appendix A.

3.2 Direct-push Boring

On July 15, 2024, G|E|M advanced six (6) soil borings onsite; designated B-1 through B-6. Boring B-1 was advanced at the west exterior of the subject building, adjacent to the former service pit identified by Partner. Borings B-2 and B-3 were advanced along the south and west sides respectively of the fuel dispenser island. B-4 was advanced in an accessible location off the northwest corner of the UST nest, and at the north margin of the former onsite structure. B-5 was placed adjacent to the west side of the UST nest and the northern portion of the septic leach field. B-6 was placed adjacent to the southern portion of the septic leach field. The locations of the borings are depicted along with features of interest on Figure 2.

The borings were advanced via truck-mounted heavy-duty Geoprobe® 6600 direct-push hydraulic drilling machine; operated by Washington-licensed driller Russell Vaughan. Each of the 2½-inch outer diameter macro-cores was lined with an acetate sample liner and driven in approximately 5-foot intervals until maximum desired depth was achieved. After the advancement of each core interval, the core was retrieved, core barrel disassembled, and the sample liner was removed and transferred to the onsite project geologist. The cores were measured, and soils were logged. The soil cores were visually inspected for discoloration

and odors, and were continually monitored for VOCs using a handheld MiniRae™ PID. Sampling equipment, including probe rods, sampling barrels, and other equipment, was decontaminated between core intervals using a triple-rinse system containing Alconox™.

Borings B-5 and B-6 were refused at a depth of 10 feet bgs. The remainder of the borings were completed to the planned depth of 20 feet bgs. The borings generally encountered about 5 feet of fill material under the asphalt cover in turn underlain by native silts and gravels to the depths explored. With the exception of a zone of gray stained soil between 2½ and 5 feet bgs in boring B-6, no unusual discoloration or odors were observed and no elevated PID readings were noted in any of the soil cores. Groundwater was not encountered in any of the borings. The borings were backfilled with hydrated bentonite chips at the close of the investigation as required by the Washington Department of Ecology, and the ground surface was patched to match the preexisting cover.

Boring logs are included as Appendix B.

3.3 Soil Sample Collection

One (1) soil sample was collected from each boring for a total of six (6) soil samples. Soil samples were collected from depths best determined to assess the feature of interest and to provide a distribution of data over the intervals assessed. The soil sample nomenclature was designated by boring and depth: B-1-7, B-2-10, B-3-7, B-4-20, B-5-5, and B-6-5.

The samples were collected via EPA Method 5035. Each of the soil samples were immediately placed into clean laboratory-supplied glass containers, distinctively labeled, and placed into a cooler on ice pending transport for analysis under proper chain-of-custody to the project laboratory, Apex Labs of Tigard, Oregon.

4 Soil Analytical Results

All six (6) soil samples were submitted to Apex Labs for analysis of TPH-G via Northwest Method NWTPH-Gx, for TPH-D and TPH-O via Northwest Method NWTPH-Dx/Dx extended and for a full suite of VOCs via EPA Method 8260/5035.

The soil analytical results were compared to their applicable Washington State Method A (Unrestricted Land Use) and Method B Cleanup Levels (where Method A Cleanup Levels do not exist) as published in the Washington Department of Ecology's *Cleanup Levels and Risk Calculation (CLARC) Master Table*. CLARC is an online compendium of technical information related to calculating cleanup levels under MTCA[1] Regulation. The Master Table was most recently updated in February 2024.

No TPH-G or TPH-D was detected in any of the soil samples in excess of the laboratory method reporting limits (MRLs), which were in each case below the MTCA Method A Cleanup Levels for gasoline and diesel in soil of 100 milligrams per kilogram (mg/Kg; no benzene present) and 2,000 mg/Kg respectively.

Soil sample B-6-5 was found to contain 8,130 mg/Kg TPH-O. This result exceeds the MTCA Method A Cleanup Level for heavy oil in soil of 2,000 mg/Kg. Soil sample B-6-5 was collected from the area of the septic leach field. The detection of heavy oil in this sample above the Method A Cleanup Level is an indication the leach field has been impacted by past releases from the historical onsite auto service activities identified by the Partner Phase I.

[1]*Model Toxics Control Act Statute and Regulation - Model Toxics Control Act Chapter 70.105D RCW, Uniform Environmental Covenants Act Chapter 64.70 RCW, MTCA Cleanup Regulation Chapter 173-340 WAC*, (revised 2013).

No VOCs were detected in any of the soil samples in excess of the MRLs which were, with a handful exceptions, all below the most stringent applicable Cleanup Levels. VOCs with MRLs > Cleanup Levels included methylene chloride, dichlorodifluoromethane, 1,3-dichlorobenzene, chloromethane, carbon tetrachloride and bromoform. None of these are contaminants of concern for the subject property and are therefore not suspected to be present in excess of Cleanup Levels.

The soil analytical results are presented in the Apex Labs report in Appendix B.

5 Findings

G|E|M conducted a Phase II for US Metro Bank at the property located at 1750 SW Basin Street, Ephrata, Washington 98823. The purpose of the investigation was to assess the subsurface of the property for potentially adverse subsurface impacts related to the onsite operation of an active retail gas station with a 28 year old UST system as well as the historical long-term use of the site as a (previous generation) service station that reportedly began operating onsite in approximately 1953. In addition, the subject property is served by an onsite septic system, which is a concern given the property's history of auto service and the potential for petroleum products or hazardous wastes to have entered the system and impact the subsurface via the septic leach field.

G|E|M advanced six (6) soil borings onsite; designated B-1 through B-6, alongside of the fuel dispensers, the UST nest and the former building footprint as well as adjacent to the septic leach field.

The borings were completed at depths ranging from 10 to 20 feet bgs. With the exception of a zone of gray stained soil between 2½ and 5 feet bgs in boring B-6, no unusual discoloration or odors were observed and no elevated PID readings were noted in any of the soil cores. Groundwater was not encountered in any of the borings.

One (1) soil sample was collected from each boring for a total of six (6) soil samples. Soil samples were collected from depths best determined to assess the feature of interest and to provide a distribution of data over the intervals assessed. The soil sample nomenclature was designated by boring and depth: B-1-7, B-2-10, B-3-7, B-4-20, B-5-5, and B-6-5.

All six (6) soil samples were analyzed for TPH-G, TPH-D, TPH- O and a full suite of VOCs. No TPH-G or TPH-D was detected in excess of MRLs, which indicates the current UST system is tight and intact. Additionally, no VOCs were detected in any of the soil samples.

Soil sample B-6-5 which was collected from a boring emplaced along the leach field was found to contain 8,130 mg/Kg TPH-O. This result exceeds the MTCA Method A Cleanup Level for heavy oil in soil of 2,000 mg/Kg. The detection of heavy oil in this sample above the Method A Cleanup Level is an indication the leach field has been impacted by past releases from the historical onsite auto service activities identified by the Partner Phase I. Given no volatile compounds (VOCs) were detected in this sample, the oil release appears to be old, which is commensurate with the historical use of the property for auto repair.

Based on the results of the investigation, no impacts to the subsurface were detected in association with the active onsite fuel USTs and pumps. However, the identified heavy oil impact to the onsite septic leach field warrants remediation. G|E|M recommends delineation of the extent of the oil contamination followed by excavation and permitted offsite disposal of petroleum contaminated soil at a suitable Subtitle D landfill.

6 Closing Statements and Signatures

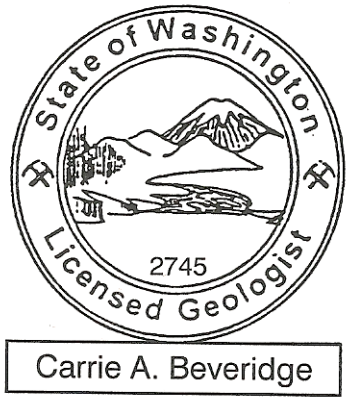
This report presents a summary of work completed by GIEIM. The completed work includes observations and descriptions of site conditions encountered. Where appropriate, it includes analytical results for samples taken during the course of the work. The number and location of samples were chosen to provide the required information, but it cannot be assumed that they are representative of areas not sampled. In addition, GIEIM has relied on information provided by others, which is assumed to be correct, however, GIEIM cannot assume any responsibility for its correctness or accuracy. All conclusions and/or recommendations are based on these analyses, observations, provided information, and the governing regulations at the time of the assessment. Conclusions beyond those stated and reported herein should not be inferred from this document.

These services were performed in accordance with generally accepted practices, in the environmental engineering and construction field, which existed at the time and location of the work.

If you have any questions regarding our investigation, please do not hesitate to contact Carrie Beveridge at (503) 329-9325.

Date: July 25, 2024

Report prepared by:



Expires 12/18/2024

Carrie Beveridge
Senior Geologist

Report reviewed by:

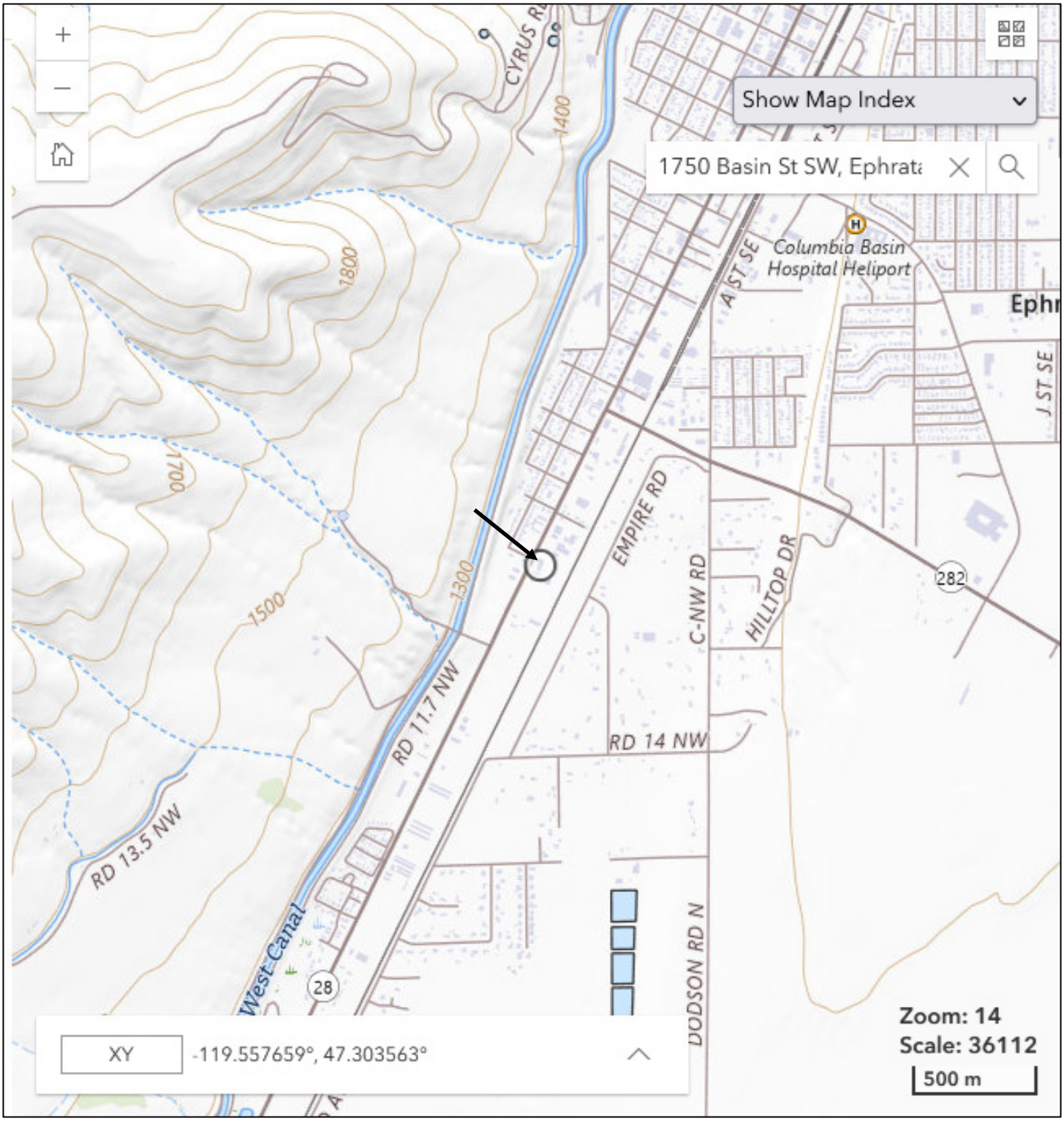
Cristina Brischler
Vice President

7 References

Partner Engineering and Science, Inc., *Phase I Environmental Site Assessment Report, 1750 SW Basin Street, Ephrata, Washington 98823,* May 31, 2024

Washington Department of Ecology, Model Toxics Control Act Statute and Regulation - *Model Toxics Control Act Chapter 70.105D RCW, Uniform Environmental Covenants Act Chapter 64.70 RCW, MTCA Cleanup Regulation Chapter 173-340 WAC*, revised 2013

Washington Department of Ecology, Cleanup Levels and Risk Calculation (CLARC), Master Data Table, https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Contamination-clean-up-tools/CLARC, updated January 2023



Base map was downloaded from The National Map (U.S.G.S), https://apps.nationalmap.gov/downloader on 7/24/2024.

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Figure 1: Site Location Map

1750 SW Basin Street, Ephrata, Washington 98823
Project Number: 24-01482

GEM
Green Environmental Management

Base photograph was acquired 7/16/2023. Features depicted in approximate locations and are not to scale.

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Figure 2: Site Plan

1750 SW Basin Street, Ephrata, Washington 98823

Project Number: 24-01482

GEM
Green Environmental Management

Appendix A – Geophysical Survey Report

1750 SW Basin Street, Ephrata, Washington 98823

July 2024

GeoPotential
ENVIRONMENTAL & EXPLORATION GEOPHYSICS
330 Creekside Terrace, Fairview, OR 97024 Phone: (503) 912-6441 Fax: (503) 912-6448
WEB http://www.geopotential.biz/ E-MAIL GeoPotential@geopotential.biz

Letter Report

Subsurface Mapping Survey for
A Septic Leach Field

Commercial Site
1750 Basin Street SW
Ephrata, Washington

GeoPotential Project# 1640

Performed for:

Green Environmental Management
P.O. Box 2212
Sisters, Oregon 97759

Survey Date: July 8, 2024

Report Date: July 11, 2024

Personnel: GeoPotential; Ralph Soule. GEM; Carrie Beveridge

Geophysical Surveys Conducted: Ground Penetrating Radar (GPR) utilizing a Mala Easy Locator with a 425 MHz antenna. Magnetic scan with a Schonstedt GA52B Magnetic Gradiometer. Pipe and cable locating with a Heath Sure Lock and an Aqua-Tronics A6 Tracer.

Procedures: Subsurface Mapping Surveys (SMS) were conducted in the vicinity of a known septic tank to search for the Septic Leach Field (see Figures 1 & 2). Historical information provided by GEM in Figure 1 showed the location of the septic tank. In addition a Subsurface Clearance Survey (SCS) was conducted over 6 proposed borehole locations.

Results: Results are shown on Figure 2 and were marked at the site with marking paint.

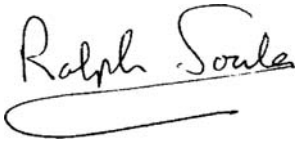
The Septic Leach field was found to be a trench with approximate dimensions of 11 X 45 feet. An underground power cable was located as shown.

A SCS was conducted over the 6 borehole locations shown on Figure 2.

LIMITATIONS

Limitations of GPR surveys can be seen in the Appendix.

Geophysical surveys consist of interpreting geophysical responses from subsurface features. Since a variety of subsurface features can produce identical geophysical responses, it is necessary to confirm the geophysical interpretation with intrusive investigations such as excavating or drilling. In addition, many subsurface features may produce no geophysical response.



Ralph Soule ***Jul y 11, 2024***
GeoPotential

FIGURE 2: SITE PLAN

Project No. 24-449364.2

PARTNER

GeoPotential ENVIRONMENTAL & EXPLORATION GEOPHYSICS 330 Creekside Terrace, Fairview, OR 97024 Phone: (503) 912-6441 Fax: (503) 912-6449 WEB http://www.geopotential.biz/ E-MAIL GeoPotential@geopotential.biz	LOCATION: Commercial Site 1750 Basin Street SW Ephrata, WA	Figure 1: GEM Site Plan
DATE: July 9, 2024 *SUBSURFACE MAPPING SURVEY* PROJECT No. 1640	CLIENT: GEM	

GeoPotential

ENVIRONMENTAL & EXPLORATION GEOPHYSICS

330 Creekside Terrace, Fairview, OR 97024 Phone: (503) 912-6441 Fax: (503) 912-6449
WEB http://www.geopotential.biz/ E-MAIL GeoPotential@geopotential.biz

DATE: July 9, 2024 *SUBSURFACE MAPPING SURVEY* PROJECT No. 1640

LOCATION:
Commercial Site
1750 Basin Street SW
Ephrata, WA

CLIENT: GEM

Figure 2: Interpretation Results

GeoPotential

ENVIRONMENTAL & EXPLORATION GEOPHYSICS

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GROUND PENETRATING RADAR SURVEYS

Ground Penetrating Radar (GPR) can be a valuable tool to accurately locate both metallic and non-metallic UST's and utilities, buried drums and hazardous material at some sites. It may detect objects below reinforced concrete floors and slabs. GPR may delineate trenches and excavations and, under some conditions, it may be used to locate contaminant plumes. It has been used as an archaeological tool to look for buried artifacts. It may accurately profile fresh water lake bottoms either from a boat or from a frozen lake surface. GPR may be used to locate voids below roads and runways. GPR has numerous engineering applications. It can be used in non-destructive testing of engineering material, for example, locating rebar in concrete structures and determining the thickness of concrete and other structural material.

GPR uses short impulses of high frequency radio waves directed into the ground to acquire information about the subsurface. The energy radiated into the ground is reflected back to the antenna by features having different electrical properties to that of the surrounding material. The greater the contrast, the stronger the reflection. Typical reflectors include water table, bedrock, bedding, fractures, voids, contaminant plumes and man-made objects such as UST's and metal and plastic utilities. Materials having little electrical contrast like clay and concrete pipes may not produce strong reflections and may not be seen. Data are digitally recorded or downloaded to a laptop computer for filtering and processing.

The frequency of the radar signal used for a survey is a trade off. Low frequencies (250 MHz – 50 MHz) give better penetration but low resolution so that pipes and utilities may not be seen. Pipes and utilities may be seen using higher frequencies (500 MHz) but the depth of penetration may be limited to only a few feet especially in the wet, clayey soils found in many areas of the NW USA. The GPR frequency is dependent upon the antenna. Once an antenna is selected, nothing the operator can do can increase the depth of penetration.

Radar data is ambiguous. Many buried objects produce echoes that may be similar to the echo expected from the target object. Boulders and debris produce reflections that are similar to pipes and tanks. Subtle changes in the electrical properties along a traverse caused by changes in soil type, mineralogy, grain size, and moisture content all produce “noise” that can make interpretation difficult. Interpreting radargrams is an art as much as a science.

Under some conditions, although a UST itself may not be clearly visible in a GPR record, the excavation or trench in which the UST is buried is evident. Usually GPR data is used to compliment data from other “tools”. For example, a trench-like reflection but no clear UST reflection, combined with a “tank” shaped magnetic anomaly suggests the presence of a UST. Although the UST itself could not be seen using GPR, the radar showed a trench-like reflection. The magnetic data showed a large ferrous object. We would report a possible UST at that location.

GPR is often used in conjunction with magnetometer surveys. Magnetometer Surveys are very fast and large areas can be covered cost effectively. Magnetic anomalies are marked in the field, and then may be further investigated using radar.

GPR, like other geophysical tools, is excellent at detecting changes across a site, but it is poor at actually identifying the cause of the change. **The only definite way to identify buried objects is through excavation.**

ADVANTAGES - General

- When GPR data is properly interpreted subsurface objects can usually be confidently identified. This often requires the GPR data be combined with other geophysical data, surface features and historical information.
- GPR provides continuous records along traverses which, depending on the goal of the survey, may be interpreted in the field.
- At flat, open sites, for reconnaissance purposes, the antenna can be towed behind a vehicle at several mph.
- Many GPR antennas are shielded and are unaffected by surface and overhead objects and power lines.
- GPR can be used in conjunction with magnetic or EM surveys to accurately locate buried objects.

ADVANTAGES – Site specific

- With a low frequency antenna, in clean, dry, sandy soil, reflections from targets as deep as 100 feet are possible. Geologic features such as bedrock and cross bedding may be seen at some sites.
- The resolution of data is very high particularly for high frequency antennas.
- Shallow, man-made objects generally can be detected.
- Fiberglass UST's and plastic pipes can be detected using GPR.

LIMITATIONS - General

- To acquire the highest quality data, proper coupling between the antenna and the ground surface is necessary. Poor data may be obtained at sites covered with debris, an uneven surface, tall grass and brush. Objects located at curbs are difficult to see.
- Acquiring GPR data is slow. The antenna must be over the target. The signal from the antenna is cone-shaped. Reflections from objects to the side of the antenna may be seen, but their actual location relative to the antenna is not obvious.
- Penetration of the GPR signal is "site specific" and its depth of penetration at a particular site cannot be predicted ahead of time. Near surface conductive material, such as salty or contaminated ground water and wet, clay-rich soil, may attenuate the radar signal, limiting the effective depth of the survey to several feet. Reinforced concrete also can attenuate the signal. Rebar may produce reflections that look like pipes.

- GPR may not be cost-effective for some projects. For a detailed survey mapping underground storage tanks and utilities, it may be necessary to collect data in orthogonal directions at 5-foot line spacing.

LIMITATIONS – Interpretation

- Interpretation can be difficult. Radar data are ambiguous. Subsurface objects can be detected but, in general, they cannot be identified. USTs and utilities have a characteristic reflection, however, large rocks and boulders have a similar reflection.

- The reflection visible in a GPR record is very complex and may be caused by small changes in the electrical properties of the soil. The target in mind may not produce the reflection. Due to "noise", the target may be missed. USTs and deep utilities may be missed if they are under debris and/or other pipes.

- Other methods may be necessary to aid in the interpretation of the data (use a magnetometer to detect a large metallic mass, then GPR to determine if the object is tank-like, or a utility locator to determine if there are feed lines and fill pipes leading to the object).

- Adequate contrast between the ground and the target is required to obtain reflections. UST's may be missed if they are badly corroded. Utilities made of "earth" materials like clay and concrete may not be detected since their electrical properties are similar to the surrounding soil.

- To determine the depth to an object without "ground truth", assumptions must be made regarding soil properties. Even with ground truth at several locations on the same site, changes in material across a site (therefore changes in signal velocity) can cause errors in depth measurements at other locations.

Appendix B – Boring Logs

1750 SW Basin Street, Ephrata, Washington 98823

July 2024

Project: Chevron Gas Station	Project Number: 24-01482	Client: US Metro Bank	Boring No. B-1
Address, City, State 1750 SW Basin Street, Ephrata, WA		Drilling Contractor: B&W Standard	Drill Rig Type: Geoprobe 6600
Logged By: Carrie Beveridge	Started: 7/15/2024	Bit Type: Direct-push	Diameter: 2½ inch
Drill Crew: Russel Vaughan	Completed: 7/15/2024	Core Length: 5 feet	
Locate Ticket Number: 24280483	Backfilled: Bentonite	Groundwater Depth: N/A	Total Depth of Boring: 20'

Depth (feet)	Sample Interval	Sample ID	Graphic Log	Color/Soil Description/USCS Soil Classification	Recovery (%)	Moisture	PID (ppm)
				3 inches of asphalt underlain by brown silty gravel (FILL), dry	50	D	0
				Medium-stiff brown SILT (ML), slightly moist		SM	0
5					80	SM	0
	X						
	X	B-1-7					
10				Stiff, moist	100	M	0
15				Dense brown and dark gray sandy silty GRAVEL (GM), slightly moist	100	SM	0
20							

Project: Chevron Gas Station	Project Number: 24-01482	Client: US Metro Bank	Boring No. B-2
Address, City, State 1750 SW Basin Street, Ephrata, WA		Drilling Contractor: B&W Standard	Drill Rig Type: Geoprobe 6600
Logged By: Carrie Beveridge	Started: 7/15/2024	Bit Type: Direct-push	Diameter: 2½ inch
Drill Crew: Russel Vaughan	Completed: 7/15/2024	Core Length: 5 feet	
Locate Ticket Number: 24280483	Backfilled: Bentonite	Groundwater Depth: N/A	Total Depth of Boring: 20'

Depth (feet)	Sample Interval	Sample ID	Graphic Log	Color/Soil Description/USCS Soil Classification	Recovery (%)	Moisture	PID (ppm)
				4 inches of asphalt underlain by brown silty gravel (FILL), dry	60	D	0
				Medium-stiff brown SILT (ML), slightly moist		SM	0
5					80	SM	0
	X						
10	X	B-2-10		Stiff, moist	100	M	0
15				Dense brown and dark gray sandy silty GRAVEL (GM), slightly moist	100	SM	0
20							

Project: Chevron Gas Station	Project Number: 24-01482	Client: US Metro Bank	Boring No. B-3
Address, City, State 1750 SW Basin Street, Ephrata, WA		Drilling Contractor: B&W Standard	Drill Rig Type: Geoprobe 6600
Logged By: Carrie Beveridge	Started: 7/15/2024	Bit Type: Direct-push	Diameter: 2½ inch
Drill Crew: Russel Vaughan	Completed: 7/15/2024	Core Length: 5 feet	
Locate Ticket Number: 24280483	Backfilled: Bentonite	Groundwater Depth: N/A	Total Depth of Boring: 20'

Depth (feet)	Sample Interval	Sample ID	Graphic Log	Color/Soil Description/USCS Soil Classification	Recovery (%)	Moisture	PID (ppm)
				4 inches of asphalt underlain by brown silty gravel (FILL), dry	60	D	0
				Medium-stiff brown SILT (ML), slightly moist		SM	0
5					80	SM	0
	X						
	X	B-3-7					
10				Stiff, moist	100	M	0
15				Dense brown and dark gray sandy silty GRAVEL (GM), slightly moist	100	SM	0
20							

Project: Chevron Gas Station	Project Number: 24-01482	Client: US Metro Bank	Boring No. B-4
Address, City, State 1750 SW Basin Street, Ephrata, WA		Drilling Contractor: B&W Standard	Drill Rig Type: Geoprobe 6600
Logged By: Carrie Beveridge	Started: 7/15/2024	Bit Type: Direct-push	Diameter: 2½ inch
Drill Crew: Russel Vaughan	Completed: 7/15/2024	Core Length: 5 feet	
Locate Ticket Number: 24280483	Backfilled: Bentonite	Groundwater Depth: N/A	Total Depth of Boring: 20'

Depth (feet)	Sample Interval	Sample ID	Graphic Log	Color/Soil Description/USCS Soil Classification	Recovery (%)	Moisture	PID (ppm)
				4 inches of asphalt underlain by soft brown silt with scattered grav to gravelly, jumbled (FILL), moist	70	M	0
				Stiff brown SILT (ML), moist		M	0
5					100	M	0
10					100	M	0
15				Dense gray GRAVEL (GP), dry	100	D	0
	X			Hard gravelly SILT (ML), moist		M	0
20	X	B-4-20					

Project: Chevron Gas Station	Project Number: 24-01482	Client: US Metro Bank	Boring No. B-5
Address, City, State 1750 SW Basin Street, Ephrata, WA		Drilling Contractor: B&W Standard	Drill Rig Type: Geoprobe 6600
Logged By: Carrie Beveridge	Started: 7/15/2024	Bit Type: Direct-push	Diameter: 2½ inch
Drill Crew: Russel Vaughan	Completed: 7/15/2024	Core Length: 5 feet	
Locate Ticket Number: 24280483	Backfilled: Bentonite	Groundwater Depth: N/A	Total Depth of Boring: 10'

Depth (feet)	Sample Interval	Sample ID	Graphic Log	Color/Soil Description/USCS Soil Classification	Recovery (%)	Moisture	PID (ppm)
				Medium-dense, dark brown silty gravel (FILL), moist	70	M	0
	X						
5	X	B-5-5		Stiff brown SILT (ML), moist	100	M	0
10				Boring refused at 10'			
15							
20							

Project: Chevron Gas Station	Project Number: 24-01482	Client: US Metro Bank	Boring No. B-6
Address, City, State 1750 SW Basin Street, Ephrata, WA		Drilling Contractor: B&W Standard	Drill Rig Type: Geoprobe 6600
Logged By: Carrie Beveridge	Started: 7/15/2024	Bit Type: Direct-push	Diameter: 2½ inch
Drill Crew: Russel Vaughan	Completed: 7/15/2024	Core Length: 5 feet	
Locate Ticket Number: 24280483	Backfilled: Bentonite	Groundwater Depth: N/A	Total Depth of Boring: 10'

Depth (feet)	Sample Interval	Sample ID	Graphic Log	Color/Soil Description/USCS Soil Classification	Recovery (%)	Moisture	PID (ppm)
				Medium-dense, dark brown silty gravel (FILL), moist	70	M	0
				Gray stained			
5	X X	B-6-5		Stiff brown SILT (ML), moist	100	M	0
10				Boring refused at 10'			
15							
20							

Appendix C – Laboratory Analytical Report

1750 SW Basin Street, Ephrata, Washington 98823

July 2024

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

ANALYTICAL REPORT

Tuesday, July 23, 2024

Carrie Beveridge
GEM
P.O. Box 2212
Sisters, OR 97759

RE: A4G1261 - Ephrata - [none]

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A4G1261, which was received by the laboratory on 7/16/2024 at 1:53:00PM.

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

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

Cooler Receipt Information
Acceptable Receipt Temperature is less than, or equal to, 6 degC (not frozen), or received on ice the same day as sampling.
(See Cooler Receipt Form for details)
Default Cooler 0.9 degC

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

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-1-7	A4G1261-01	Soil	07/15/24 13:45	07/16/24 13:53
B-2-10	A4G1261-02	Soil	07/15/24 14:30	07/16/24 13:53
B-3-7	A4G1261-03	Soil	07/15/24 14:40	07/16/24 13:53
B-4-20	A4G1261-04	Soil	07/15/24 15:10	07/16/24 13:53
B-5-5	A4G1261-05	Soil	07/15/24 15:40	07/16/24 13:53
B-6-5	A4G1261-06	Soil	07/15/24 16:10	07/16/24 13:53

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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-1-7 (A4G1261-01)				**Matrix: Soil**		**Batch: 24G0685**		
Diesel	ND	10.5	21.0	mg/kg dry	1	07/22/24 23:03	NWTPH-Dx	
Oil	ND	21.0	41.9	mg/kg dry	1	07/22/24 23:03	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 75 %*		*Limits: 50-150 %*	*1*	*07/22/24 23:03*	*NWTPH-Dx*	
B-2-10 (A4G1261-02)				**Matrix: Soil**		**Batch: 24G0685**		
Diesel	ND	11.4	22.7	mg/kg dry	1	07/22/24 23:24	NWTPH-Dx	
Oil	ND	22.7	45.5	mg/kg dry	1	07/22/24 23:24	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 60 %*		*Limits: 50-150 %*	*1*	*07/22/24 23:24*	*NWTPH-Dx*	
B-3-7 (A4G1261-03)				**Matrix: Soil**		**Batch: 24G0685**		
Diesel	ND	10.9	21.8	mg/kg dry	1	07/22/24 23:44	NWTPH-Dx	
Oil	ND	21.8	43.6	mg/kg dry	1	07/22/24 23:44	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 69 %*		*Limits: 50-150 %*	*1*	*07/22/24 23:44*	*NWTPH-Dx*	
B-4-20 (A4G1261-04)				**Matrix: Soil**		**Batch: 24G0685**		
Diesel	ND	10.4	20.8	mg/kg dry	1	07/23/24 00:04	NWTPH-Dx	
Oil	ND	20.8	41.5	mg/kg dry	1	07/23/24 00:04	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 50 %*		*Limits: 50-150 %*	*1*	*07/23/24 00:04*	*NWTPH-Dx*	
B-5-5 (A4G1261-05)				**Matrix: Soil**		**Batch: 24G0685**		
Diesel	ND	9.83	19.7	mg/kg dry	1	07/23/24 00:24	NWTPH-Dx	
Oil	ND	19.7	39.3	mg/kg dry	1	07/23/24 00:24	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: 74 %*		*Limits: 50-150 %*	*1*	*07/23/24 00:24*	*NWTPH-Dx*	
B-6-5 (A4G1261-06)				**Matrix: Soil**		**Batch: 24G0685**		
Diesel	ND	202	405	mg/kg dry	20	07/23/24 04:47	NWTPH-Dx	
Oil	**8130**	405	810	mg/kg dry	20	07/23/24 04:47	NWTPH-Dx	
Surrogate: o-Terphenyl (Surr)		*Recovery: %*		*Limits: 50-150 %*	*20*	*07/23/24 04:47*	*NWTPH-Dx*	*S-01*

Apex Laboratories

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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-1-7 (A4G1261-01)				**Matrix: Soil**		**Batch: 24G0582**		
Gasoline Range Organics	ND	2.96	5.91	mg/kg dry	50	07/18/24 13:27	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*109 %*	*Limits: 50-150 %*	*1*	*07/18/24 13:27*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*07/18/24 13:27*	*NWTPH-Gx (MS)*	
B-2-10 (A4G1261-02)				**Matrix: Soil**		**Batch: 24G0582**		
Gasoline Range Organics	ND	3.19	6.38	mg/kg dry	50	07/18/24 13:54	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*109 %*	*Limits: 50-150 %*	*1*	*07/18/24 13:54*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*	*1*	*07/18/24 13:54*	*NWTPH-Gx (MS)*	
B-3-7 (A4G1261-03)				**Matrix: Soil**		**Batch: 24G0582**		
Gasoline Range Organics	ND	3.07	6.14	mg/kg dry	50	07/18/24 14:21	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*109 %*	*Limits: 50-150 %*	*1*	*07/18/24 14:21*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*	*1*	*07/18/24 14:21*	*NWTPH-Gx (MS)*	
B-4-20 (A4G1261-04)				**Matrix: Soil**		**Batch: 24G0582**		
Gasoline Range Organics	ND	2.82	5.63	mg/kg dry	50	07/18/24 14:48	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*108 %*	*Limits: 50-150 %*	*1*	*07/18/24 14:48*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*07/18/24 14:48*	*NWTPH-Gx (MS)*	
B-5-5 (A4G1261-05)				**Matrix: Soil**		**Batch: 24G0582**		
Gasoline Range Organics	ND	2.71	5.41	mg/kg dry	50	07/18/24 15:15	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*110 %*	*Limits: 50-150 %*	*1*	*07/18/24 15:15*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*	*1*	*07/18/24 15:15*	*NWTPH-Gx (MS)*	
B-6-5 (A4G1261-06)				**Matrix: Soil**		**Batch: 24G0582**		
Gasoline Range Organics	ND	2.84	5.67	mg/kg dry	50	07/18/24 15:42	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery:*	*106 %*	*Limits: 50-150 %*	*1*	*07/18/24 15:42*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*	*1*	*07/18/24 15:42*	*NWTPH-Gx (MS)*	

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-1-7 (A4G1261-01)				**Matrix: Soil**		**Batch: 24G0582**		
Acetone	ND	591	1180	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Acrylonitrile	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Benzene	ND	5.91	11.8	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Bromobenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Bromochloromethane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Bromodichloromethane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Bromoform	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Bromomethane	ND	591	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
2-Butanone (MEK)	ND	296	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
n-Butylbenzene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
sec-Butylbenzene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
tert-Butylbenzene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Carbon disulfide	ND	296	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Carbon tetrachloride	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Chlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Chloroethane	ND	296	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Chloroform	ND	59.1	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Chloromethane	ND	148	296	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
2-Chlorotoluene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
4-Chlorotoluene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Dibromochloromethane	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	148	296	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Dibromomethane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2-Dichlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,3-Dichlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,4-Dichlorobenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Dichlorodifluoromethane	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1-Dichloroethane	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1-Dichloroethene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
cis-1,2-Dichloroethene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
trans-1,2-Dichloroethene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-1-7 (A4G1261-01)				**Matrix: Soil**		**Batch: 24G0582**		
1,2-Dichloropropane	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,3-Dichloropropane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
2,2-Dichloropropane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1-Dichloropropene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
cis-1,3-Dichloropropene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
trans-1,3-Dichloropropene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Ethylbenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Hexachlorobutadiene	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
2-Hexanone	ND	296	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Isopropylbenzene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
4-Isopropyltoluene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Methylene chloride	ND	296	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	296	591	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Naphthalene	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
n-Propylbenzene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Styrene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Tetrachloroethene (PCE)	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Toluene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2,3-Trichlorobenzene	ND	148	296	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2,4-Trichlorobenzene	ND	148	296	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1,1-Trichloroethane	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,1,2-Trichloroethane	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Trichloroethene (TCE)	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Trichlorofluoromethane	ND	59.1	118	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2,3-Trichloropropane	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,2,4-Trimethylbenzene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
1,3,5-Trimethylbenzene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
Vinyl chloride	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
m,p-Xylene	ND	29.6	59.1	ug/kg dry	50	07/18/24 13:27	5035A/8260D	
o-Xylene	ND	14.8	29.6	ug/kg dry	50	07/18/24 13:27	5035A/8260D	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-1-7 (A4G1261-01)				**Matrix: Soil**		**Batch: 24G0582**		
Surrogate: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*	*Limits: 80-120 %*	*1*	*07/18/24 13:27*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*07/18/24 13:27*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*96 %*	*79-120 %*	*1*	*07/18/24 13:27*	*5035A/8260D*	
B-2-10 (A4G1261-02)				**Matrix: Soil**		**Batch: 24G0582**		
Acetone	ND	638	1280	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Acrylonitrile	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Benzene	ND	6.38	12.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Bromobenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Bromochloromethane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Bromodichloromethane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Bromoform	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Bromomethane	ND	638	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
2-Butanone (MEK)	ND	319	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
n-Butylbenzene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
sec-Butylbenzene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
tert-Butylbenzene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Carbon disulfide	ND	319	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Carbon tetrachloride	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Chlorobenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Chloroethane	ND	319	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Chloroform	ND	63.8	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Chloromethane	ND	160	319	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
2-Chlorotoluene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
4-Chlorotoluene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Dibromochloromethane	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	160	319	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Dibromomethane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2-Dichlorobenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,3-Dichlorobenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,4-Dichlorobenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Dichlorodifluoromethane	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1-Dichloroethane	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-2-10 (A4G1261-02)				**Matrix: Soil**		**Batch: 24G0582**		
1,2-Dichloroethane (EDC)	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1-Dichloroethene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
cis-1,2-Dichloroethene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
trans-1,2-Dichloroethene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2-Dichloropropane	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,3-Dichloropropane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
2,2-Dichloropropane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1-Dichloropropene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
cis-1,3-Dichloropropene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
trans-1,3-Dichloropropene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Ethylbenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Hexachlorobutadiene	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
2-Hexanone	ND	319	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Isopropylbenzene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
4-Isopropyltoluene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Methylene chloride	ND	319	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	319	638	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Naphthalene	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
n-Propylbenzene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Styrene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Tetrachloroethene (PCE)	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Toluene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2,3-Trichlorobenzene	ND	160	319	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2,4-Trichlorobenzene	ND	160	319	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1,1-Trichloroethane	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,1,2-Trichloroethane	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Trichloroethene (TCE)	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Trichlorofluoromethane	ND	63.8	128	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2,3-Trichloropropane	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
1,2,4-Trimethylbenzene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-2-10 (A4G1261-02)				**Matrix: Soil**		**Batch: 24G0582**		
1,3,5-Trimethylbenzene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Vinyl chloride	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
m,p-Xylene	ND	31.9	63.8	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
o-Xylene	ND	16.0	31.9	ug/kg dry	50	07/18/24 13:54	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery: 105 %*		*Limits: 80-120 %*	*1*	*07/18/24 13:54*	*5035A/8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*07/18/24 13:54*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*07/18/24 13:54*	*5035A/8260D*	
B-3-7 (A4G1261-03)				**Matrix: Soil**		**Batch: 24G0582**		
Acetone	ND	614	1230	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Acrylonitrile	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Benzene	ND	6.14	12.3	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Bromobenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Bromochloromethane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Bromodichloromethane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Bromoform	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Bromomethane	ND	614	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
2-Butanone (MEK)	ND	307	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
n-Butylbenzene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
sec-Butylbenzene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
tert-Butylbenzene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Carbon disulfide	ND	307	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Carbon tetrachloride	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Chlorobenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Chloroethane	ND	307	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Chloroform	ND	61.4	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Chloromethane	ND	154	307	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
2-Chlorotoluene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
4-Chlorotoluene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Dibromochloromethane	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	154	307	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Dibromomethane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2-Dichlorobenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-3-7 (A4G1261-03)				**Matrix: Soil**		**Batch: 24G0582**		
1,3-Dichlorobenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,4-Dichlorobenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Dichlorodifluoromethane	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1-Dichloroethane	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1-Dichloroethene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
cis-1,2-Dichloroethene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
trans-1,2-Dichloroethene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2-Dichloropropane	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,3-Dichloropropane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
2,2-Dichloropropane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1-Dichloropropene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
cis-1,3-Dichloropropene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
trans-1,3-Dichloropropene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Ethylbenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Hexachlorobutadiene	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
2-Hexanone	ND	307	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Isopropylbenzene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
4-Isopropyltoluene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Methylene chloride	ND	307	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	307	614	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Naphthalene	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
n-Propylbenzene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Styrene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Tetrachloroethene (PCE)	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Toluene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2,3-Trichlorobenzene	ND	154	307	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2,4-Trichlorobenzene	ND	154	307	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1,1-Trichloroethane	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,1,2-Trichloroethane	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-3-7 (A4G1261-03)				**Matrix: Soil**		**Batch: 24G0582**		
Trichloroethene (TCE)	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Trichlorofluoromethane	ND	61.4	123	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2,3-Trichloropropane	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,2,4-Trimethylbenzene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
1,3,5-Trimethylbenzene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Vinyl chloride	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
m,p-Xylene	ND	30.7	61.4	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
o-Xylene	ND	15.4	30.7	ug/kg dry	50	07/18/24 14:21	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*106 %*	*Limits: 80-120 %*	*1*	*07/18/24 14:21*	*5035A/8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*07/18/24 14:21*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*07/18/24 14:21*	*5035A/8260D*	
B-4-20 (A4G1261-04)				**Matrix: Soil**		**Batch: 24G0582**		
Acetone	ND	518	1040	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Acrylonitrile	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Benzene	ND	5.18	10.4	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Bromobenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Bromochloromethane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Bromodichloromethane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Bromoform	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Bromomethane	ND	518	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
2-Butanone (MEK)	ND	259	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
n-Butylbenzene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
sec-Butylbenzene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
tert-Butylbenzene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Carbon disulfide	ND	259	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Carbon tetrachloride	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Chlorobenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Chloroethane	ND	259	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Chloroform	ND	51.8	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Chloromethane	ND	130	259	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
2-Chlorotoluene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
4-Chlorotoluene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Dibromochloromethane	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-4-20 (A4G1261-04)				**Matrix: Soil**		**Batch: 24G0582**		
1,2-Dibromo-3-chloropropane	ND	130	259	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Dibromomethane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2-Dichlorobenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,3-Dichlorobenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,4-Dichlorobenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Dichlorodifluoromethane	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1-Dichloroethane	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1-Dichloroethene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
cis-1,2-Dichloroethene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
trans-1,2-Dichloroethene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2-Dichloropropane	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,3-Dichloropropane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
2,2-Dichloropropane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1-Dichloropropene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
cis-1,3-Dichloropropene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
trans-1,3-Dichloropropene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Ethylbenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Hexachlorobutadiene	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
2-Hexanone	ND	259	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Isopropylbenzene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
4-Isopropyltoluene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Methylene chloride	ND	259	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	259	518	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Naphthalene	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
n-Propylbenzene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Styrene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Tetrachloroethene (PCE)	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Toluene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-4-20 (A4G1261-04)				**Matrix: Soil**		**Batch: 24G0582**		
1,2,3-Trichlorobenzene	ND	130	259	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2,4-Trichlorobenzene	ND	130	259	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1,1-Trichloroethane	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,1,2-Trichloroethane	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Trichloroethene (TCE)	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Trichlorofluoromethane	ND	51.8	104	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2,3-Trichloropropane	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,2,4-Trimethylbenzene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
1,3,5-Trimethylbenzene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Vinyl chloride	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
m,p-Xylene	ND	25.9	51.8	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
o-Xylene	ND	13.0	25.9	ug/kg dry	50	07/18/24 14:48	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*07/18/24 14:48*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*07/18/24 14:48*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*98 %*	*79-120 %*	*1*	*07/18/24 14:48*	*5035A/8260D*	
B-5-5 (A4G1261-05)				**Matrix: Soil**		**Batch: 24G0582**		
Acetone	ND	541	1080	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Acrylonitrile	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Benzene	ND	5.41	10.8	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Bromobenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Bromochloromethane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Bromodichloromethane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Bromoform	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Bromomethane	ND	541	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
2-Butanone (MEK)	ND	271	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
n-Butylbenzene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
sec-Butylbenzene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
tert-Butylbenzene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Carbon disulfide	ND	271	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Carbon tetrachloride	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Chlorobenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Chloroethane	ND	271	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Chloroform	ND	54.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-5-5 (A4G1261-05)				**Matrix: Soil**		**Batch: 24G0582**		
Chloromethane	ND	135	271	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
2-Chlorotoluene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
4-Chlorotoluene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Dibromochloromethane	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	135	271	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Dibromomethane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2-Dichlorobenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,3-Dichlorobenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,4-Dichlorobenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Dichlorodifluoromethane	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,1-Dichloroethane	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,1-Dichloroethene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
cis-1,2-Dichloroethene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
trans-1,2-Dichloroethene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2-Dichloropropane	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,3-Dichloropropane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
2,2-Dichloropropane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,1-Dichloropropene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
cis-1,3-Dichloropropene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
trans-1,3-Dichloropropene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Ethylbenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Hexachlorobutadiene	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
2-Hexanone	ND	271	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Isopropylbenzene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
4-Isopropyltoluene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Methylene chloride	ND	271	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	271	541	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Methyl tert-butyl ether (MTBE)	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Naphthalene	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
n-Propylbenzene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Styrene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	

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Philip Nerenberg, Lab Director

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

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-5-5 (A4G1261-05)				**Matrix: Soil**		**Batch: 24G0582**		
1,1,1,2-Tetrachloroethane	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Tetrachloroethene (PCE)	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Toluene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2,3-Trichlorobenzene	ND	135	271	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2,4-Trichlorobenzene	ND	135	271	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,1,1-Trichloroethane	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,1,2-Trichloroethane	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Trichloroethene (TCE)	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Trichlorofluoromethane	ND	54.1	108	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2,3-Trichloropropane	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,2,4-Trimethylbenzene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
1,3,5-Trimethylbenzene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Vinyl chloride	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
m,p-Xylene	ND	27.1	54.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
o-Xylene	ND	13.5	27.1	ug/kg dry	50	07/18/24 15:15	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*105 %*	*Limits: 80-120 %*	*1*	*07/18/24 15:15*	*5035A/8260D*	
Toluene-d8 (Surr)			*97 %*	*80-120 %*	*1*	*07/18/24 15:15*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*97 %*	*79-120 %*	*1*	*07/18/24 15:15*	*5035A/8260D*	
B-6-5 (A4G1261-06)				**Matrix: Soil**		**Batch: 24G0582**		
Acetone	ND	567	1130	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Acrylonitrile	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Benzene	ND	5.67	11.3	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Bromobenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Bromochloromethane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Bromodichloromethane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Bromoform	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Bromomethane	ND	567	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
2-Butanone (MEK)	ND	284	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
n-Butylbenzene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
sec-Butylbenzene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
tert-Butylbenzene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Carbon disulfide	ND	284	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-6-5 (A4G1261-06)				**Matrix: Soil**		**Batch: 24G0582**		
Carbon tetrachloride	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Chlorobenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Chloroethane	ND	284	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Chloroform	ND	56.7	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Chloromethane	ND	142	284	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
2-Chlorotoluene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
4-Chlorotoluene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Dibromochloromethane	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2-Dibromo-3-chloropropane	ND	142	284	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2-Dibromoethane (EDB)	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Dibromomethane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2-Dichlorobenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,3-Dichlorobenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,4-Dichlorobenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Dichlorodifluoromethane	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1-Dichloroethane	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2-Dichloroethane (EDC)	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1-Dichloroethene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
cis-1,2-Dichloroethene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
trans-1,2-Dichloroethene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2-Dichloropropane	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,3-Dichloropropane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
2,2-Dichloropropane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1-Dichloropropene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
cis-1,3-Dichloropropene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
trans-1,3-Dichloropropene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Ethylbenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Hexachlorobutadiene	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
2-Hexanone	ND	284	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Isopropylbenzene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
4-Isopropyltoluene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Methylene chloride	ND	284	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
4-Methyl-2-pentanone (MiBK)	ND	284	567	ug/kg dry	50	07/18/24 15:42	5035A/8260D	

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-6-5 (A4G1261-06)				**Matrix: Soil**		**Batch: 24G0582**		
Methyl tert-butyl ether (MTBE)	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Naphthalene	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
n-Propylbenzene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Styrene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1,1,2-Tetrachloroethane	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1,2,2-Tetrachloroethane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Tetrachloroethene (PCE)	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Toluene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2,3-Trichlorobenzene	ND	142	284	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2,4-Trichlorobenzene	ND	142	284	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1,1-Trichloroethane	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,1,2-Trichloroethane	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Trichloroethene (TCE)	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Trichlorofluoromethane	ND	56.7	113	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2,3-Trichloropropane	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,2,4-Trimethylbenzene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
1,3,5-Trimethylbenzene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Vinyl chloride	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
m,p-Xylene	ND	28.4	56.7	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
o-Xylene	ND	14.2	28.4	ug/kg dry	50	07/18/24 15:42	5035A/8260D	
Surrogate: 1,4-Difluorobenzene (Surr)		*Recovery:*	*104 %*	*Limits: 80-120 %*	*1*	*07/18/24 15:42*	*5035A/8260D*	
Toluene-d8 (Surr)			*98 %*	*80-120 %*	*1*	*07/18/24 15:42*	*5035A/8260D*	
4-Bromofluorobenzene (Surr)			*99 %*	*79-120 %*	*1*	*07/18/24 15:42*	*5035A/8260D*	

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Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
B-1-7 (A4G1261-01)				**Matrix: Soil**		**Batch: 24G0544**		
% Solids	**83.4**	---	1.00	%	1	07/18/24 05:33	EPA 8000D	
B-2-10 (A4G1261-02)				**Matrix: Soil**		**Batch: 24G0544**		
% Solids	**78.6**	---	1.00	%	1	07/18/24 05:33	EPA 8000D	
B-3-7 (A4G1261-03)				**Matrix: Soil**		**Batch: 24G0544**		
% Solids	**78.9**	---	1.00	%	1	07/18/24 05:33	EPA 8000D	
B-4-20 (A4G1261-04)				**Matrix: Soil**		**Batch: 24G0544**		
% Solids	**82.7**	---	1.00	%	1	07/18/24 05:33	EPA 8000D	
B-5-5 (A4G1261-05)				**Matrix: Soil**		**Batch: 24G0544**		
% Solids	**89.3**	---	1.00	%	1	07/18/24 05:33	EPA 8000D	
B-6-5 (A4G1261-06)				**Matrix: Soil**		**Batch: 24G0544**		
% Solids	**84.2**	---	1.00	%	1	07/18/24 05:33	EPA 8000D	

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ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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 24G0685 - EPA 3546 (Fuels)							**Soil**					
Blank (24G0685-BLK1)			Prepared: 07/22/24 07:21		Analyzed: 07/22/24 20:42							
NWTPH-Dx												
Diesel	ND	10.0	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	20.0	40.0	mg/kg wet	1	---	---	---	---	---	---	
Mineral Oil	ND	20.0	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 83 %*		*Limits: 50-150 %*			*Dilution: 1x*				
LCS (24G0685-BS1)			Prepared: 07/22/24 07:21		Analyzed: 07/22/24 21:02							
NWTPH-Dx												
Diesel	106	10.0	20.0	mg/kg wet	1	125	---	85	38-132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 78 %*		*Limits: 50-150 %*			*Dilution: 1x*				
Duplicate (24G0685-DUP1)			Prepared: 07/22/24 07:21		Analyzed: 07/23/24 03:47							
QC Source Sample: Non-SDG (A4G1247-01)												
Diesel	ND	9.68	19.4	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**40.1**	19.4	38.7	mg/kg dry	1	---	33.3	---	---	18	30%	
Mineral Oil	ND	19.4	38.7	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 82 %*		*Limits: 50-150 %*			*Dilution: 1x*				
Duplicate (24G0685-DUP2)			Prepared: 07/22/24 07:21		Analyzed: 07/23/24 06:28							
QC Source Sample: Non-SDG (A4G1360-01)												
Diesel	ND	9.48	19.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**43.9**	19.0	37.9	mg/kg dry	1	---	186	---	---	**124**	**30%**	Q-05
Mineral Oil	ND	19.0	37.9	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 72 %*		*Limits: 50-150 %*			*Dilution: 1x*				

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Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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 24G0582 - EPA 5035A									Soil			
Blank (24G0582-BLK1)			Prepared: 07/18/24 09:00		Analyzed: 07/18/24 11:39							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	2.50	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 104 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*105 %*		*50-150 %*			*"*				
LCS (24G0582-BS2)			Prepared: 07/18/24 09:00		Analyzed: 07/18/24 11:11							
NWTPH-Gx (MS)												
Gasoline Range Organics	24.9	2.50	5.00	mg/kg wet	50	25.0	---	100	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 101 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*102 %*		*50-150 %*			*"*				
Duplicate (24G0582-DUP1)			Prepared: 07/15/24 11:55		Analyzed: 07/18/24 18:25							
QC Source Sample: Non-SDG (A4G1205-01)												
Gasoline Range Organics	**2740**	31.0	62.1	mg/kg dry	500	---	2690	---	---	2	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 116 %*		*Limits: 50-150 %*			*Dilution: 1x*				
1,4-Difluorobenzene (Sur)			*105 %*		*50-150 %*			*"*				

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ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Blank (24G0582-BLK1)			Prepared: 07/18/24 09:00 Analyzed: 07/18/24 11:39									
5035A/8260D												
Acetone	ND	500	1000	ug/kg wet	50	---	---	---	---	---	---	
Acrylonitrile	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Benzene	ND	5.00	10.0	ug/kg wet	50	---	---	---	---	---	---	
Bromobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Bromochloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromodichloromethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Bromoform	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
Bromomethane	ND	500	500	ug/kg wet	50	---	---	---	---	---	---	
2-Butanone (MEK)	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
n-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
sec-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
tert-Butylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Carbon disulfide	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Carbon tetrachloride	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Chloroethane	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Chloroform	ND	50.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Chloromethane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
2-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Chlorotoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromochloromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromo-3-chloropropane	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dibromoethane (EDB)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Dibromomethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,4-Dichlorobenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Dichlorodifluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,2-Dichloroethene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

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ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Blank (24G0582-BLK1)			Prepared: 07/18/24 09:00 Analyzed: 07/18/24 11:39									
1,2-Dichloropropane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,3-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
2,2-Dichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
cis-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
trans-1,3-Dichloropropene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Ethylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Hexachlorobutadiene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
2-Hexanone	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Isopropylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
4-Isopropyltoluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Methylene chloride	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
4-Methyl-2-pentanone (MiBK)	ND	250	500	ug/kg wet	50	---	---	---	---	---	---	
Methyl tert-butyl ether (MTBE)	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Naphthalene	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
n-Propylbenzene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Styrene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,1,2-Tetrachloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2,2-Tetrachloroethane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Tetrachloroethene (PCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Toluene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trichlorobenzene	ND	125	250	ug/kg wet	50	---	---	---	---	---	---	
1,1,1-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
1,1,2-Trichloroethane	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
Trichlorofluoromethane	ND	50.0	100	ug/kg wet	50	---	---	---	---	---	---	
1,2,3-Trichloropropane	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,2,4-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
1,3,5-Trimethylbenzene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
Vinyl chloride	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	
m,p-Xylene	ND	25.0	50.0	ug/kg wet	50	---	---	---	---	---	---	
o-Xylene	ND	12.5	25.0	ug/kg wet	50	---	---	---	---	---	---	

Surr: 1,4-Difluorobenzene (Surr) *Recovery: 104 %* *Limits: 80-120 %* *Dilution: 1x*

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: Ephrata	
P.O. Box 2212	Project Number: [none]	Report ID:
Sisters, OR 97759	Project Manager: Carrie Beveridge	A4G1261 - 07 23 24 1549

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A								Soil				
Blank (24G0582-BLK1)				Prepared: 07/18/24 09:00 Analyzed: 07/18/24 11:39								
Surr: Toluene-d8 (Surr)			*Recovery: 99 %*	*Limits: 80-120 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*98 %*	*79-120 %*			*"*					
LCS (24G0582-BS1)				Prepared: 07/18/24 09:00 Analyzed: 07/18/24 10:44								
5035A/8260D												
Acetone	2000	500	1000	ug/kg wet	50	2000	---	100	80-120%	---	---	
Acrylonitrile	1020	50.0	100	ug/kg wet	50	1000	---	102	80-120%	---	---	
Benzene	1080	5.00	10.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Bromobenzene	1040	12.5	25.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
Bromochloromethane	1170	25.0	50.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
Bromodichloromethane	1280	25.0	50.0	ug/kg wet	50	1000	---	**128**	**80-120%**	---	---	Q-56
Bromoform	1520	50.0	100	ug/kg wet	50	1000	---	**152**	**80-120%**	---	---	Q-56
Bromomethane	1130	500	500	ug/kg wet	50	1000	---	113	80-120%	---	---	
2-Butanone (MEK)	2120	250	500	ug/kg wet	50	2000	---	106	80-120%	---	---	
n-Butylbenzene	1020	25.0	50.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
sec-Butylbenzene	1060	25.0	50.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
tert-Butylbenzene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Carbon disulfide	1120	250	500	ug/kg wet	50	1000	---	112	80-120%	---	---	
Carbon tetrachloride	1250	25.0	50.0	ug/kg wet	50	1000	---	**125**	**80-120%**	---	---	Q-56
Chlorobenzene	1080	12.5	25.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
Chloroethane	1470	250	500	ug/kg wet	50	1000	---	**147**	**80-120%**	---	---	Q-56
Chloroform	1160	50.0	50.0	ug/kg wet	50	1000	---	116	80-120%	---	---	
Chloromethane	976	125	250	ug/kg wet	50	1000	---	98	80-120%	---	---	
2-Chlorotoluene	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
4-Chlorotoluene	1030	25.0	50.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Dibromochloromethane	1410	50.0	100	ug/kg wet	50	1000	---	**141**	**80-120%**	---	---	Q-56
1,2-Dibromo-3-chloropropane	1080	125	250	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,2-Dibromoethane (EDB)	1170	25.0	50.0	ug/kg wet	50	1000	---	117	80-120%	---	---	
Dibromomethane	1210	25.0	50.0	ug/kg wet	50	1000	---	**121**	**80-120%**	---	---	Q-56
1,2-Dichlorobenzene	1050	12.5	25.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,3-Dichlorobenzene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,4-Dichlorobenzene	1030	12.5	25.0	ug/kg wet	50	1000	---	103	80-120%	---	---	
Dichlorodifluoromethane	1080	50.0	100	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,1-Dichloroethane	1120	12.5	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
LCS (24G0582-BS1)			Prepared: 07/18/24 09:00		Analyzed: 07/18/24 10:44							
1,2-Dichloroethane (EDC)	1120	12.5	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
1,1-Dichloroethene	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
cis-1,2-Dichloroethene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
trans-1,2-Dichloroethene	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,2-Dichloropropane	1110	12.5	25.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
1,3-Dichloropropane	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
2,2-Dichloropropane	1320	25.0	50.0	ug/kg wet	50	1000	---	**132**	**80-120%**	---	---	Q-56
1,1-Dichloropropene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
cis-1,3-Dichloropropene	1240	25.0	50.0	ug/kg wet	50	1000	---	**124**	**80-120%**	---	---	Q-56
trans-1,3-Dichloropropene	1260	25.0	50.0	ug/kg wet	50	1000	---	**126**	**80-120%**	---	---	Q-56
Ethylbenzene	1060	12.5	25.0	ug/kg wet	50	1000	---	106	80-120%	---	---	
Hexachlorobutadiene	1050	50.0	100	ug/kg wet	50	1000	---	105	80-120%	---	---	
2-Hexanone	1820	250	500	ug/kg wet	50	2000	---	91	80-120%	---	---	
Isopropylbenzene	1010	25.0	50.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
4-Isopropyltoluene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
Methylene chloride	1070	250	500	ug/kg wet	50	1000	---	107	80-120%	---	---	
4-Methyl-2-pentanone (MiBK)	2020	250	500	ug/kg wet	50	2000	---	101	80-120%	---	---	
Methyl tert-butyl ether (MTBE)	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Naphthalene	892	50.0	100	ug/kg wet	50	1000	---	89	80-120%	---	---	
n-Propylbenzene	1010	12.5	25.0	ug/kg wet	50	1000	---	101	80-120%	---	---	
Styrene	1070	25.0	50.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
1,1,1,2-Tetrachloroethane	1280	12.5	25.0	ug/kg wet	50	1000	---	**128**	**80-120%**	---	---	Q-56
1,1,2,2-Tetrachloroethane	1110	25.0	50.0	ug/kg wet	50	1000	---	111	80-120%	---	---	
Tetrachloroethene (PCE)	1100	12.5	25.0	ug/kg wet	50	1000	---	110	80-120%	---	---	
Toluene	1040	25.0	50.0	ug/kg wet	50	1000	---	104	80-120%	---	---	
1,2,3-Trichlorobenzene	1010	125	250	ug/kg wet	50	1000	---	101	80-120%	---	---	
1,2,4-Trichlorobenzene	946	125	250	ug/kg wet	50	1000	---	95	80-120%	---	---	
1,1,1-Trichloroethane	1180	12.5	25.0	ug/kg wet	50	1000	---	118	80-120%	---	---	
1,1,2-Trichloroethane	1120	12.5	25.0	ug/kg wet	50	1000	---	112	80-120%	---	---	
Trichloroethene (TCE)	1090	12.5	25.0	ug/kg wet	50	1000	---	109	80-120%	---	---	
Trichlorofluoromethane	1430	50.0	100	ug/kg wet	50	1000	---	**143**	**80-120%**	---	---	Q-56
1,2,3-Trichloropropane	1080	25.0	50.0	ug/kg wet	50	1000	---	108	80-120%	---	---	
1,2,4-Trimethylbenzene	1050	25.0	50.0	ug/kg wet	50	1000	---	105	80-120%	---	---	
1,3,5-Trimethylbenzene	1090	25.0	50.0	ug/kg wet	50	1000	---	109	80-120%	---	---	

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Philip Nerenberg, Lab Director

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

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							Soil					
LCS (24G0582-BS1)			Prepared: 07/18/24 09:00		Analyzed: 07/18/24 10:44							
Vinyl chloride	1070	12.5	25.0	ug/kg wet	50	1000	---	107	80-120%	---	---	
m,p-Xylene	2160	25.0	50.0	ug/kg wet	50	2000	---	108	80-120%	---	---	
o-Xylene	1020	12.5	25.0	ug/kg wet	50	1000	---	102	80-120%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 101 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*101 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*95 %*		*79-120 %*				*"*			
Duplicate (24G0582-DUP1)			Prepared: 07/15/24 11:55		Analyzed: 07/18/24 18:25							
QC Source Sample: Non-SDG (A4G1205-01)												
Acetone	ND	6210	12400	ug/kg dry	500	---	ND	---	---	---	30%	
Acrylonitrile	ND	621	1240	ug/kg dry	500	---	ND	---	---	---	30%	
Benzene	**180**	62.1	124	ug/kg dry	500	---	174	---	---	4	30%	
Bromobenzene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
Bromochloromethane	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Bromodichloromethane	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Bromoform	ND	621	1240	ug/kg dry	500	---	ND	---	---	---	30%	
Bromomethane	ND	6210	6210	ug/kg dry	500	---	ND	---	---	---	30%	
2-Butanone (MEK)	ND	3100	6210	ug/kg dry	500	---	ND	---	---	---	30%	
n-Butylbenzene	**6220**	310	621	ug/kg dry	500	---	5860	---	---	6	30%	M-02
sec-Butylbenzene	**6950**	310	621	ug/kg dry	500	---	6300	---	---	10	30%	
tert-Butylbenzene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Carbon disulfide	ND	3100	6210	ug/kg dry	500	---	ND	---	---	---	30%	
Carbon tetrachloride	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Chlorobenzene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
Chloroethane	ND	3100	6210	ug/kg dry	500	---	ND	---	---	---	30%	
Chloroform	ND	621	621	ug/kg dry	500	---	ND	---	---	---	30%	
Chloromethane	ND	1550	3100	ug/kg dry	500	---	ND	---	---	---	30%	
2-Chlorotoluene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
4-Chlorotoluene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Dibromochloromethane	ND	621	1240	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dibromo-3-chloropropane	ND	1550	3100	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dibromoethane (EDB)	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Dibromomethane	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichlorobenzene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	

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Philip Nerenberg

Philip Nerenberg, Lab Director

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Duplicate (24G0582-DUP1)			Prepared: 07/15/24 11:55 Analyzed: 07/18/24 18:25									
QC Source Sample: Non-SDG (A4G1205-01)												
1,3-Dichlorobenzene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,4-Dichlorobenzene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
Dichlorodifluoromethane	ND	621	1240	ug/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloroethane	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichloroethane (EDC)	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloroethene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
cis-1,2-Dichloroethene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
trans-1,2-Dichloroethene	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,2-Dichloropropane	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,3-Dichloropropane	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
2,2-Dichloropropane	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
1,1-Dichloropropene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
cis-1,3-Dichloropropene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
trans-1,3-Dichloropropene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Ethylbenzene	**5780**	155	310	ug/kg dry	500	---	5380	---	---	7	30%	
Hexachlorobutadiene	ND	621	1240	ug/kg dry	500	---	ND	---	---	---	30%	
2-Hexanone	ND	3100	6210	ug/kg dry	500	---	ND	---	---	---	30%	
Isopropylbenzene	**3810**	310	621	ug/kg dry	500	---	3430	---	---	10	30%	
4-Isopropyltoluene	**3690**	310	621	ug/kg dry	500	---	3410	---	---	8	30%	M-02
Methylene chloride	ND	3100	6210	ug/kg dry	500	---	ND	---	---	---	30%	
4-Methyl-2-pentanone (MiBK)	ND	6210	6210	ug/kg dry	500	---	ND	---	---	---	30%	
Methyl tert-butyl ether (MTBE)	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
Naphthalene	**6270**	621	1240	ug/kg dry	500	---	6050	---	---	4	30%	
n-Propylbenzene	**8280**	155	310	ug/kg dry	500	---	7680	---	---	8	30%	
Styrene	ND	310	621	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,1,2-Tetrachloroethane	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,2,2-Tetrachloroethane	ND	3100	3100	ug/kg dry	500	---	ND	---	---	---	30%	R-02
Tetrachloroethene (PCE)	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
Toluene	**3830**	310	621	ug/kg dry	500	---	3510	---	---	9	30%	
1,2,3-Trichlorobenzene	ND	1550	3100	ug/kg dry	500	---	ND	---	---	---	30%	
1,2,4-Trichlorobenzene	ND	1550	3100	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,1-Trichloroethane	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
1,1,2-Trichloroethane	ND	3100	3100	ug/kg dry	500	---	ND	---	---	---	30%	R-02

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Duplicate (24G0582-DUP1)			Prepared: 07/15/24 11:55 Analyzed: 07/18/24 18:25									
QC Source Sample: Non-SDG (A4G1205-01)												
Trichloroethene (TCE)	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
Trichlorofluoromethane	ND	621	1240	ug/kg dry	500	---	ND	---	---	---	30%	
1,2,3-Trichloropropane	ND	1240	1240	ug/kg dry	500	---	ND	---	---	---	30%	R-02
1,2,4-Trimethylbenzene	**42700**	310	621	ug/kg dry	500	---	39600	---	---	8	30%	
1,3,5-Trimethylbenzene	**14400**	310	621	ug/kg dry	500	---	13000	---	---	10	30%	
Vinyl chloride	ND	155	310	ug/kg dry	500	---	ND	---	---	---	30%	
m,p-Xylene	**28200**	310	621	ug/kg dry	500	---	26000	---	---	8	30%	
o-Xylene	**18400**	155	310	ug/kg dry	500	---	17100	---	---	8	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 105 %*	*Limits: 80-120 %*			*Dilution: 1x*					
Toluene-d8 (Surr)			*95 %*	*80-120 %*			*"*					
4-Bromofluorobenzene (Surr)			*103 %*	*79-120 %*			*"*					
Matrix Spike (24G0582-MS1)			Prepared: 07/15/24 11:15 Analyzed: 07/18/24 16:37									
QC Source Sample: Non-SDG (A4G1255-06RE1)												
5035A/8260D												
Acetone	1600	387	774	ug/kg wet	50	1860	ND	86	36-164%	---	---	
Acrylonitrile	803	38.7	77.4	ug/kg wet	50	929	ND	86	65-134%	---	---	
Benzene	902	3.87	7.74	ug/kg wet	50	929	ND	97	77-121%	---	---	
Bromobenzene	811	9.67	19.3	ug/kg wet	50	929	ND	87	78-121%	---	---	
Bromochloromethane	949	19.3	38.7	ug/kg wet	50	929	ND	102	78-125%	---	---	
Bromodichloromethane	1000	19.3	38.7	ug/kg wet	50	929	ND	108	75-127%	---	---	Q-54i
Bromoform	1090	38.7	77.4	ug/kg wet	50	929	ND	117	67-132%	---	---	Q-54e
Bromomethane	1040	387	387	ug/kg wet	50	929	ND	112	53-143%	---	---	
2-Butanone (MEK)	1690	193	387	ug/kg wet	50	1860	ND	91	51-148%	---	---	
n-Butylbenzene	849	19.3	38.7	ug/kg wet	50	929	ND	91	70-128%	---	---	
sec-Butylbenzene	898	19.3	38.7	ug/kg wet	50	929	ND	97	73-126%	---	---	
tert-Butylbenzene	841	19.3	38.7	ug/kg wet	50	929	ND	91	73-125%	---	---	
Carbon disulfide	962	193	387	ug/kg wet	50	929	ND	104	63-132%	---	---	
Carbon tetrachloride	1030	19.3	38.7	ug/kg wet	50	929	ND	111	70-135%	---	---	Q-54g
Chlorobenzene	844	9.67	19.3	ug/kg wet	50	929	ND	91	79-120%	---	---	
Chloroethane	1510	193	387	ug/kg wet	50	929	ND	**163**	**59-139%**	---	---	Q-54d
Chloroform	962	38.7	38.7	ug/kg wet	50	929	ND	104	78-123%	---	---	Q-01
Chloromethane	820	96.7	193	ug/kg wet	50	929	ND	88	50-136%	---	---	

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Philip Nerenberg, Lab Director

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

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Matrix Spike (24G0582-MS1)			Prepared: 07/15/24 11:15		Analyzed: 07/18/24 16:37							
QC Source Sample: Non-SDG (A4G1255-06RE1)												
2-Chlorotoluene	834	19.3	38.7	ug/kg wet	50	929	ND	90	75-122%	---	---	
4-Chlorotoluene	826	19.3	38.7	ug/kg wet	50	929	ND	89	72-124%	---	---	
Dibromochloromethane	1010	38.7	77.4	ug/kg wet	50	929	ND	109	74-126%	---	---	Q-54b
1,2-Dibromo-3-chloropropane	697	96.7	193	ug/kg wet	50	929	ND	75	61-132%	---	---	
1,2-Dibromoethane (EDB)	875	19.3	38.7	ug/kg wet	50	929	ND	94	78-122%	---	---	
Dibromomethane	939	19.3	38.7	ug/kg wet	50	929	ND	101	78-125%	---	---	Q-54
1,2-Dichlorobenzene	800	9.67	19.3	ug/kg wet	50	929	ND	86	78-121%	---	---	
1,3-Dichlorobenzene	840	9.67	19.3	ug/kg wet	50	929	ND	90	77-121%	---	---	
1,4-Dichlorobenzene	808	9.67	19.3	ug/kg wet	50	929	ND	87	75-120%	---	---	
Dichlorodifluoromethane	965	38.7	77.4	ug/kg wet	50	929	ND	104	29-149%	---	---	
1,1-Dichloroethane	932	9.67	19.3	ug/kg wet	50	929	ND	100	76-125%	---	---	
1,2-Dichloroethane (EDC)	911	9.67	19.3	ug/kg wet	50	929	ND	98	73-128%	---	---	
1,1-Dichloroethene	940	9.67	19.3	ug/kg wet	50	929	ND	101	70-131%	---	---	
cis-1,2-Dichloroethene	889	9.67	19.3	ug/kg wet	50	929	ND	96	77-123%	---	---	
trans-1,2-Dichloroethene	913	9.67	19.3	ug/kg wet	50	929	ND	98	74-125%	---	---	
1,2-Dichloropropane	911	9.67	19.3	ug/kg wet	50	929	ND	98	76-123%	---	---	
1,3-Dichloropropane	838	19.3	38.7	ug/kg wet	50	929	ND	90	77-121%	---	---	
2,2-Dichloropropane	1070	19.3	38.7	ug/kg wet	50	929	ND	115	67-133%	---	---	Q-54a
1,1-Dichloropropene	947	19.3	38.7	ug/kg wet	50	929	ND	102	76-125%	---	---	
cis-1,3-Dichloropropene	913	19.3	38.7	ug/kg wet	50	929	ND	98	74-126%	---	---	Q-54f
trans-1,3-Dichloropropene	922	19.3	38.7	ug/kg wet	50	929	ND	99	71-130%	---	---	Q-54h
Ethylbenzene	852	9.67	19.3	ug/kg wet	50	929	ND	92	76-122%	---	---	
Hexachlorobutadiene	758	38.7	77.4	ug/kg wet	50	929	ND	82	61-135%	---	---	
2-Hexanone	1300	193	387	ug/kg wet	50	1860	ND	70	53-145%	---	---	
Isopropylbenzene	852	19.3	38.7	ug/kg wet	50	929	ND	92	68-134%	---	---	
4-Isopropyltoluene	889	19.3	38.7	ug/kg wet	50	929	ND	96	73-127%	---	---	
Methylene chloride	841	193	387	ug/kg wet	50	929	ND	90	70-128%	---	---	
4-Methyl-2-pentanone (MiBK)	1500	193	387	ug/kg wet	50	1860	ND	81	65-135%	---	---	
Methyl tert-butyl ether (MTBE)	864	19.3	38.7	ug/kg wet	50	929	ND	93	73-125%	---	---	
Naphthalene	623	38.7	77.4	ug/kg wet	50	929	ND	67	62-129%	---	---	
n-Propylbenzene	828	9.67	19.3	ug/kg wet	50	929	ND	89	73-125%	---	---	
Styrene	786	19.3	38.7	ug/kg wet	50	929	ND	85	76-124%	---	---	
1,1,1,2-Tetrachloroethane	991	9.67	19.3	ug/kg wet	50	929	ND	107	78-125%	---	---	Q-54i

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Matrix Spike (24G0582-MS1)			Prepared: 07/15/24 11:15		Analyzed: 07/18/24 16:37							
QC Source Sample: Non-SDG (A4G1255-06RE1)												
1,1,2,2-Tetrachloroethane	809	19.3	38.7	ug/kg wet	50	929	ND	87	70-124%	---	---	
Tetrachloroethene (PCE)	872	9.67	19.3	ug/kg wet	50	929	ND	94	73-128%	---	---	
Toluene	807	19.3	38.7	ug/kg wet	50	929	ND	87	77-121%	---	---	
1,2,3-Trichlorobenzene	706	96.7	193	ug/kg wet	50	929	ND	76	66-130%	---	---	
1,2,4-Trichlorobenzene	699	96.7	193	ug/kg wet	50	929	ND	75	67-129%	---	---	
1,1,1-Trichloroethane	999	9.67	19.3	ug/kg wet	50	929	ND	108	73-130%	---	---	
1,1,2-Trichloroethane	867	9.67	19.3	ug/kg wet	50	929	ND	93	78-121%	---	---	
Trichloroethene (TCE)	896	9.67	19.3	ug/kg wet	50	929	ND	96	77-123%	---	---	
Trichlorofluoromethane	5680	38.7	77.4	ug/kg wet	50	929	ND	**612**	**62-140%**	---	---	Q-54c
1,2,3-Trichloropropane	791	19.3	38.7	ug/kg wet	50	929	ND	85	73-125%	---	---	
1,2,4-Trimethylbenzene	858	19.3	38.7	ug/kg wet	50	929	ND	92	75-123%	---	---	
1,3,5-Trimethylbenzene	883	19.3	38.7	ug/kg wet	50	929	ND	95	73-124%	---	---	
Vinyl chloride	950	9.67	19.3	ug/kg wet	50	929	ND	102	56-135%	---	---	
m,p-Xylene	1740	19.3	38.7	ug/kg wet	50	1860	ND	94	77-124%	---	---	
o-Xylene	829	9.67	19.3	ug/kg wet	50	929	ND	89	77-123%	---	---	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*				*Dilution: 1x*			
Toluene-d8 (Surr)			*97 %*		*80-120 %*				*"*			
4-Bromofluorobenzene (Surr)			*97 %*		*79-120 %*				*"*			
Matrix Spike Dup (24G0582-MSD1)			Prepared: 07/15/24 11:15		Analyzed: 07/18/24 17:04							
QC Source Sample: Non-SDG (A4G1255-06RE1)												
Acetone	1670	387	774	ug/kg wet	50	1860	ND	90	36-164%	4	30%	
Acrylonitrile	838	38.7	77.4	ug/kg wet	50	929	ND	90	65-134%	4	30%	
Benzene	916	3.87	7.74	ug/kg wet	50	929	ND	99	77-121%	1	30%	
Bromobenzene	817	9.67	19.3	ug/kg wet	50	929	ND	88	78-121%	0.8	30%	
Bromochloromethane	966	19.3	38.7	ug/kg wet	50	929	ND	104	78-125%	2	30%	
Bromodichloromethane	1010	19.3	38.7	ug/kg wet	50	929	ND	109	75-127%	0.8	30%	Q-54i
Bromoform	1100	38.7	77.4	ug/kg wet	50	929	ND	119	67-132%	2	30%	Q-54e
Bromomethane	1030	387	387	ug/kg wet	50	929	ND	111	53-143%	1	30%	
2-Butanone (MEK)	1690	193	387	ug/kg wet	50	1860	ND	91	51-148%	0.2	30%	
n-Butylbenzene	891	19.3	38.7	ug/kg wet	50	929	ND	96	70-128%	5	30%	
sec-Butylbenzene	928	19.3	38.7	ug/kg wet	50	929	ND	100	73-126%	3	30%	
tert-Butylbenzene	884	19.3	38.7	ug/kg wet	50	929	ND	95	73-125%	5	30%	

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Matrix Spike Dup (24G0582-MSD1)			Prepared: 07/15/24 11:15		Analyzed: 07/18/24 17:04							
QC Source Sample: Non-SDG (A4G1255-06RE1)												
Carbon disulfide	977	193	387	ug/kg wet	50	929	ND	105	63-132%	2	30%	
Carbon tetrachloride	1040	19.3	38.7	ug/kg wet	50	929	ND	112	70-135%	1	30%	Q-54g
Chlorobenzene	866	9.67	19.3	ug/kg wet	50	929	ND	93	79-120%	3	30%	
Chloroethane	1430	193	387	ug/kg wet	50	929	ND	**154**	**59-139%**	6	30%	Q-54d
Chloroform	981	38.7	38.7	ug/kg wet	50	929	ND	106	78-123%	2	30%	Q-01
Chloromethane	859	96.7	193	ug/kg wet	50	929	ND	92	50-136%	5	30%	
2-Chlorotoluene	862	19.3	38.7	ug/kg wet	50	929	ND	93	75-122%	3	30%	
4-Chlorotoluene	848	19.3	38.7	ug/kg wet	50	929	ND	91	72-124%	3	30%	
Dibromochloromethane	1020	38.7	77.4	ug/kg wet	50	929	ND	110	74-126%	1	30%	Q-54b
1,2-Dibromo-3-chloropropane	708	96.7	193	ug/kg wet	50	929	ND	76	61-132%	2	30%	
1,2-Dibromoethane (EDB)	888	19.3	38.7	ug/kg wet	50	929	ND	96	78-122%	2	30%	
Dibromomethane	961	19.3	38.7	ug/kg wet	50	929	ND	103	78-125%	2	30%	Q-54
1,2-Dichlorobenzene	817	9.67	19.3	ug/kg wet	50	929	ND	88	78-121%	2	30%	
1,3-Dichlorobenzene	870	9.67	19.3	ug/kg wet	50	929	ND	94	77-121%	3	30%	
1,4-Dichlorobenzene	823	9.67	19.3	ug/kg wet	50	929	ND	89	75-120%	2	30%	
Dichlorodifluoromethane	967	38.7	77.4	ug/kg wet	50	929	ND	104	29-149%	0.3	30%	
1,1-Dichloroethane	948	9.67	19.3	ug/kg wet	50	929	ND	102	76-125%	2	30%	
1,2-Dichloroethane (EDC)	921	9.67	19.3	ug/kg wet	50	929	ND	99	73-128%	1	30%	
1,1-Dichloroethene	947	9.67	19.3	ug/kg wet	50	929	ND	102	70-131%	0.8	30%	
cis-1,2-Dichloroethene	910	9.67	19.3	ug/kg wet	50	929	ND	98	77-123%	2	30%	
trans-1,2-Dichloroethene	937	9.67	19.3	ug/kg wet	50	929	ND	101	74-125%	3	30%	
1,2-Dichloropropane	934	9.67	19.3	ug/kg wet	50	929	ND	101	76-123%	3	30%	
1,3-Dichloropropane	845	19.3	38.7	ug/kg wet	50	929	ND	91	77-121%	0.9	30%	
2,2-Dichloropropane	1080	19.3	38.7	ug/kg wet	50	929	ND	117	67-133%	2	30%	Q-54a
1,1-Dichloropropene	956	19.3	38.7	ug/kg wet	50	929	ND	103	76-125%	0.9	30%	
cis-1,3-Dichloropropene	930	19.3	38.7	ug/kg wet	50	929	ND	100	74-126%	2	30%	Q-54f
trans-1,3-Dichloropropene	940	19.3	38.7	ug/kg wet	50	929	ND	101	71-130%	2	30%	Q-54h
Ethylbenzene	865	9.67	19.3	ug/kg wet	50	929	ND	93	76-122%	2	30%	
Hexachlorobutadiene	810	38.7	77.4	ug/kg wet	50	929	ND	87	61-135%	7	30%	
2-Hexanone	1340	193	387	ug/kg wet	50	1860	ND	72	53-145%	3	30%	
Isopropylbenzene	894	19.3	38.7	ug/kg wet	50	929	ND	96	68-134%	5	30%	
4-Isopropyltoluene	933	19.3	38.7	ug/kg wet	50	929	ND	100	73-127%	5	30%	
Methylene chloride	865	193	387	ug/kg wet	50	929	ND	93	70-128%	3	30%	

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ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALITY CONTROL (QC) SAMPLE RESULTS

Volatile Organic Compounds by EPA 8260D

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24G0582 - EPA 5035A							**Soil**					
Matrix Spike Dup (24G0582-MSD1)			Prepared: 07/15/24 11:15 Analyzed: 07/18/24 17:04									
QC Source Sample: Non-SDG (A4G1255-06RE1)												
4-Methyl-2-pentanone (MiBK)	1550	193	387	ug/kg wet	50	1860	ND	83	65-135%	3	30%	
Methyl tert-butyl ether (MTBE)	885	19.3	38.7	ug/kg wet	50	929	ND	95	73-125%	2	30%	
Naphthalene	661	38.7	77.4	ug/kg wet	50	929	ND	71	62-129%	6	30%	
n-Propylbenzene	848	9.67	19.3	ug/kg wet	50	929	ND	91	73-125%	2	30%	
Styrene	807	19.3	38.7	ug/kg wet	50	929	ND	87	76-124%	3	30%	
1,1,1,2-Tetrachloroethane	994	9.67	19.3	ug/kg wet	50	929	ND	107	78-125%	0.3	30%	Q-54i
1,1,2,2-Tetrachloroethane	818	19.3	38.7	ug/kg wet	50	929	ND	88	70-124%	1	30%	
Tetrachloroethene (PCE)	880	9.67	19.3	ug/kg wet	50	929	ND	95	73-128%	0.9	30%	
Toluene	820	19.3	38.7	ug/kg wet	50	929	ND	88	77-121%	2	30%	
1,2,3-Trichlorobenzene	757	96.7	193	ug/kg wet	50	929	ND	81	66-130%	7	30%	
1,2,4-Trichlorobenzene	735	96.7	193	ug/kg wet	50	929	ND	79	67-129%	5	30%	
1,1,1-Trichloroethane	1020	9.67	19.3	ug/kg wet	50	929	ND	109	73-130%	2	30%	Q-01
1,1,2-Trichloroethane	875	9.67	19.3	ug/kg wet	50	929	ND	94	78-121%	0.9	30%	
Trichloroethene (TCE)	915	9.67	19.3	ug/kg wet	50	929	ND	99	77-123%	2	30%	
Trichlorofluoromethane	2330	38.7	77.4	ug/kg wet	50	929	ND	**250**	**62-140%**	**84**	**30%**	Q-54c
1,2,3-Trichloropropane	813	19.3	38.7	ug/kg wet	50	929	ND	88	73-125%	3	30%	
1,2,4-Trimethylbenzene	886	19.3	38.7	ug/kg wet	50	929	ND	95	75-123%	3	30%	
1,3,5-Trimethylbenzene	908	19.3	38.7	ug/kg wet	50	929	ND	98	73-124%	3	30%	
Vinyl chloride	969	9.67	19.3	ug/kg wet	50	929	ND	104	56-135%	2	30%	
m,p-Xylene	1780	19.3	38.7	ug/kg wet	50	1860	ND	96	77-124%	2	30%	
o-Xylene	851	9.67	19.3	ug/kg wet	50	929	ND	92	77-123%	3	30%	
Surr: 1,4-Difluorobenzene (Surr)			*Recovery: 103 %*		*Limits: 80-120 %*			*Dilution: 1x*				
Toluene-d8 (Surr)			*95 %*		*80-120 %*			*"*				
4-Bromofluorobenzene (Surr)			*96 %*		*79-120 %*			*"*				

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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 24G0544 - Total Solids (Dry Weight) - 2022								Soil				
Duplicate (24G0544-DUP1)			Prepared: 07/17/24 10:30		Analyzed: 07/18/24 05:33							
QC Source Sample: Non-SDG (A4G1247-01)												
% Solids	**91.2**	---	1.00	%	1	---	91.7	---	---	0.5	10%	
Duplicate (24G0544-DUP2)			Prepared: 07/17/24 10:30		Analyzed: 07/18/24 05:33							
QC Source Sample: Non-SDG (A4G1247-02)												
% Solids	**95.7**	---	1.00	%	1	---	95.5	---	---	0.2	10%	
Duplicate (24G0544-DUP3)			Prepared: 07/17/24 18:34		Analyzed: 07/18/24 05:33							
QC Source Sample: Non-SDG (A4G1292-01)												
% Solids	**92.9**	---	1.00	%	1	---	93.0	---	---	0.03	10%	

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

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

GEM	Project: Ephrata	
P.O. Box 2212	Project Number: [none]	Report ID:
Sisters, OR 97759	Project Manager: Carrie Beveridge	A4G1261 - 07 23 24 1549

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: 24G0685							
A4G1261-01	Soil	NWTPH-Dx	07/15/24 13:45	07/22/24 07:21	11.44g/5mL	10g/5mL	0.87
A4G1261-02	Soil	NWTPH-Dx	07/15/24 14:30	07/22/24 07:21	11.2g/5mL	10g/5mL	0.89
A4G1261-03	Soil	NWTPH-Dx	07/15/24 14:40	07/22/24 07:21	11.61g/5mL	10g/5mL	0.86
A4G1261-04	Soil	NWTPH-Dx	07/15/24 15:10	07/22/24 07:21	11.65g/5mL	10g/5mL	0.86
A4G1261-05	Soil	NWTPH-Dx	07/15/24 15:40	07/22/24 07:21	11.4g/5mL	10g/5mL	0.88
A4G1261-06	Soil	NWTPH-Dx	07/15/24 16:10	07/22/24 07:21	11.74g/5mL	10g/5mL	0.85

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: 24G0582							
A4G1261-01	Soil	NWTPH-Gx (MS)	07/15/24 13:45	07/15/24 13:45	6.1g/5mL	5g/5mL	0.82
A4G1261-02	Soil	NWTPH-Gx (MS)	07/15/24 14:30	07/15/24 14:30	6.34g/5mL	5g/5mL	0.79
A4G1261-03	Soil	NWTPH-Gx (MS)	07/15/24 14:40	07/15/24 14:40	6.59g/5mL	5g/5mL	0.76
A4G1261-04	Soil	NWTPH-Gx (MS)	07/15/24 15:10	07/15/24 15:10	6.59g/5mL	5g/5mL	0.76
A4G1261-05	Soil	NWTPH-Gx (MS)	07/15/24 15:40	07/15/24 15:40	5.82g/5mL	5g/5mL	0.86
A4G1261-06	Soil	NWTPH-Gx (MS)	07/15/24 16:10	07/15/24 16:10	6.28g/5mL	5g/5mL	0.80

Volatile Organic Compounds by EPA 8260D

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24G0582							
A4G1261-01	Soil	5035A/8260D	07/15/24 13:45	07/15/24 13:45	6.1g/5mL	5g/5mL	0.82
A4G1261-02	Soil	5035A/8260D	07/15/24 14:30	07/15/24 14:30	6.34g/5mL	5g/5mL	0.79
A4G1261-03	Soil	5035A/8260D	07/15/24 14:40	07/15/24 14:40	6.59g/5mL	5g/5mL	0.76
A4G1261-04	Soil	5035A/8260D	07/15/24 15:10	07/15/24 15:10	7.31g/5mL	5g/5mL	0.68
A4G1261-05	Soil	5035A/8260D	07/15/24 15:40	07/15/24 15:40	5.82g/5mL	5g/5mL	0.86
A4G1261-06	Soil	5035A/8260D	07/15/24 16:10	07/15/24 16:10	6.28g/5mL	5g/5mL	0.80

Percent Dry Weight

Prep: Total Solids (Dry Weight) - 2022

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24G0544							

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Philip Nerenberg, Lab Director

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

ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

SAMPLE PREPARATION INFORMATION

Percent Dry Weight

Prep: Total Solids (Dry Weight) - 2022

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A4G1261-01	Soil	EPA 8000D	07/15/24 13:45	07/17/24 10:30			NA
A4G1261-02	Soil	EPA 8000D	07/15/24 14:30	07/17/24 10:30			NA
A4G1261-03	Soil	EPA 8000D	07/15/24 14:40	07/17/24 10:30			NA
A4G1261-04	Soil	EPA 8000D	07/15/24 15:10	07/17/24 10:30			NA
A4G1261-05	Soil	EPA 8000D	07/15/24 15:40	07/17/24 10:30			NA
A4G1261-06	Soil	EPA 8000D	07/15/24 16:10	07/17/24 10:30			NA

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Philip Nerenberg

Philip Nerenberg, Lab Director

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Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

QUALIFIER DEFINITIONS

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

Apex Laboratories

M-02	Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
Q-01	Spike recovery and/or RPD is outside acceptance limits.
Q-05	Analyses are not controlled on RPD values from sample and duplicate concentrations that are below 5 times the reporting level.
Q-54	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +1%. The results are reported as Estimated Values.
Q-54a	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +12%. The results are reported as Estimated Values.
Q-54b	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +21%. The results are reported as Estimated Values.
Q-54c	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +23%. The results are reported as Estimated Values.
Q-54d	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +27%. The results are reported as Estimated Values.
Q-54e	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +32%. The results are reported as Estimated Values.
Q-54f	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +4%. The results are reported as Estimated Values.
Q-54g	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +5%. The results are reported as Estimated Values.
Q-54h	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +6%. The results are reported as Estimated Values.
Q-54i	Daily Continuing Calibration Verification recovery for this analyte failed the +/-20% criteria listed in EPA method 8260/8270 by +8%. The results are reported as Estimated Values.
Q-56	Daily CCV/LCS recovery for this analyte was above the +/-20% criteria listed in EPA 8260. Samples that are ND (Non-Detect) are not impacted.
R-02	The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
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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P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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'.

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

QC Source:

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

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

Miscellaneous Notes:

" --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

" *** " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

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Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks:

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to one half of the Reporting Limit (RL).
Blank results for gravimetric analyses are evaluated to the Reporting Level, not to half of the Reporting Level.
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.
For further details, please request a copy of this document.
-Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.
'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level, if results are not reported to the MDL.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

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

Soil and Sediment Samples:

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

Sampling and Preservation Notes:

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

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

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

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

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

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

Philip Nerenberg

Philip Nerenberg, Lab Director

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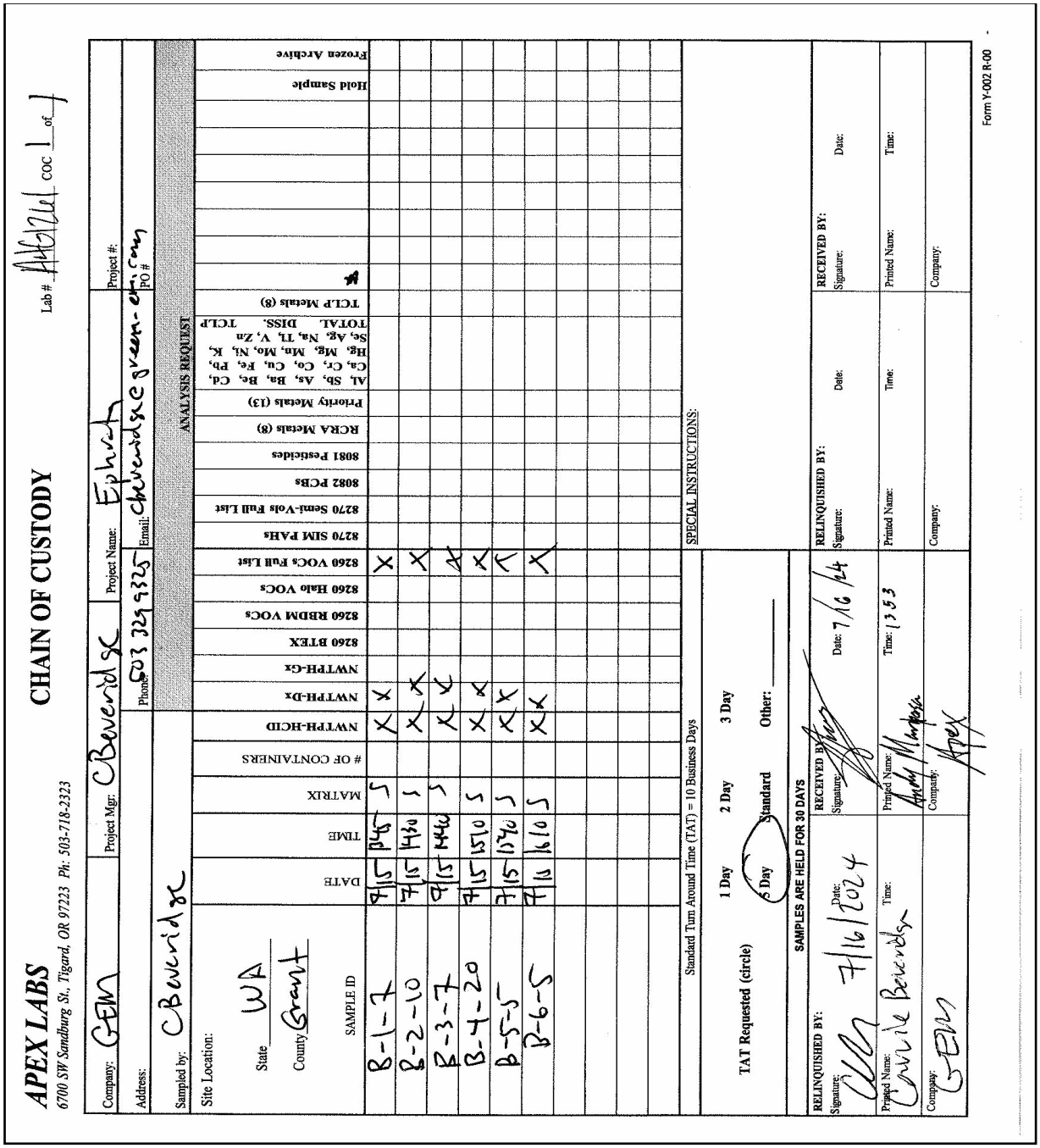

APEX LABS
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

CHAIN OF CUSTODY

Lab # A4G1261 COC 1 of 1

Company: GEM | Project Mgr: CBeveridge | Project Name: Ephrata | Project #:
Address: | Phone: 503 329 9325 | Email: cbeveridge@gem-env.com | PO #
Sampled by: CBeveridge
Site Location: State WA County Grant

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)	pH	Hold Sample	Frozen Archive
B-1-7	7/15	845	S	5	X	X					X											
B-2-10	7/15	1420	S	5	X	X					X											
B-3-7	7/15	1440	S	5	X	X					X											
B-4-20	7/15	1510	S	5	X	X					X											
B-5-5	7/15	1540	S	5	X	X					X											
B-6-5	7/11	1610	S	5	X	X					X											

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day 2 Day 3 Day 5 Day Standard Other: ____
SAMPLES ARE HELD FOR 30 DAYS

SPECIAL INSTRUCTIONS:

RELINQUISHED BY: Signature: Date: 7/16/2024
RECEIVED BY: Signature: Date: 7/16/24
Printed Name: Carrie Beveridge Time:
Printed Name: Time: 1353
Company: GEM
Company: Apex

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

Form Y-002 R-00

Apex Laboratories

Philip Nerenberg

Philip Nerenberg, Lab Director

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ANALYTICAL REPORT

GEM	Project: **Ephrata**	
P.O. Box 2212	Project Number: **[none]**	**Report ID:**
Sisters, OR 97759	Project Manager: **Carrie Beveridge**	**A4G1261 - 07 23 24 1549**

APEX LABS COOLER RECEIPT FORM

Client: GEM Element WO#: A4 G1261

Project/Project #: Ephrata

Delivery Info:

Date/time received: 7/16/24 @ 1353 By: AJM

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

From USDA Regulated Origin? Yes ____ No Y

Cooler Inspection Date/time inspected: 7/16/24 @ 1502 By: AAW

Chain of Custody included? Yes Y No ____

Signed/dated by client? Yes Y No ____

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

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	0.9						
Custody seals? (Y/N)	N						
Received on ice? (Y/N)	Y						
Temp. blanks? (Y/N)	Y						
Ice type: (Gel/Real/Other)	Gel/Real						
Condition (In/Out):	In						

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

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

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 7/16/24 @ 1950 By: JS

All samples intact? Yes Y No ____ Comments: ____

Bottle labels/COCs agree? Yes Y No ____ Comments: ____

COC/container discrepancies form initiated? Yes ____ No Y

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

Do VOA vials have visible headspace? Yes ____ No ____ NA Y

Comments ____

Water samples: pH checked: Yes ____ No ____ NA Y pH appropriate? Yes ____ No ____ NA Y pH ID: ____

Comments: ____

Labeled by: JS Witness: Y Cooler Inspected by: JS

Form Y-003 R-02

Apex Laboratories

Philip Nerenberg

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