FINAL

Phase II Environmental Assessment Report

930 West 3rd Street, Tillamook, Oregon 97141

Prepared for

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terraphase engineering

Contents

Tables

Figures

Appendices

Acronyms and Abbreviations

µg/L	micrograms per liter
Apex	Apex Analytical Laboratory
bgs	below ground surface
CHA	CHA Consulting, Inc.
County	Tillamook County
Client	Maker Development Studio, LLC
ESA	environmental site assessment
greater parcel	The properties at 910, 920, and 930 3rd Street (also referred to as Netarts Highway 131), Tillamook, Oregon
HOT	heating oil tank
mg/kg	milligrams per kilogram
ODEQ	Oregon Department of Environmental Quality
PAHs	polycyclic aromatic hydrocarbons
parcel	southeastern portion of Tillamook County Assessor's tax lot number 1S10250000400
PCP	pentachlorophenol
PID	photoionization detector
ppm	parts per million
QA	quality assurance
QAPP	*Generic Quality Assurance Project Plan for Brownfield Community-Wide Assessment*
QC	quality control
RBC	risk-based concentrations
REC	recognized environmental conditions
RL	reporting limit
Site	the property at 930 West 3rd Street, Tillamook, Oregon 97141
SL	screening level
SSQAPP	*Site-Specific Quality Assurance Project Plan*
Terraphase	Terraphase Engineering Inc.
TPH	total petroleum hydrocarbons
TPH-d	TPH as diesel
TPH-g	TPH as gasoline
TPH-mo	TPH as motor oil
USEPA	United States Environmental Protection Agency

Signatures and Certification

All geologic information, conclusions, and recommendations in this document have been prepared under the responsible charge of an Oregon State Registered Geologist.

May 6, 2025

James R. Farrow, RG
Principal Hydrogeologist

Date

May 6, 2025

Don Malkemus, RG
Associate Hydrogeologist

Date

1 Introduction

Terraphase Engineering Inc. (Terraphase) has prepared this *Phase II Environmental Site Assessment Report* on behalf of Maker Development Studio, LLC (Client) for the property at 930 West 3rd Street, Tillamook, Oregon 97141 (the "Site"; Figure 1). In 2024, Terraphase completed a Phase II Environmental Site Assessment (ESA) under contract with CHA Consulting (CHA) on behalf of Tillamook County (County), for the properties at 910, 920, and 930 3rd Street (also referred to as Netarts Highway 131), Tillamook, Oregon ("greater parcel"; Figure 2).

The Phase II ESA was conducted to assess environmental conditions at the Site in advance of redevelopment. The scope of work was based on the findings of a November 2023 Phase I ESA for the parcel (Terraphase 2023). At the time of the Phase I ESA, the greater parcel represented an approximately 49.08-acre land parcel identified as Tillamook County Assessor's tax lot number 1S10250000400. The Site being considered for redevelopment is a 3.19-acre lot at the southeastern end of the greater parcel and is identified as Tillamook County Assessor's tax lot number 1S10250000403 (parcel). The Site was segregated from the greater parcel in January 2024. The Phase I and II ESAs were conducted under a United States Environmental Protection Agency (USEPA) Brownfield development grant (USEPA Cooperative Agreement 02J0601-0). All field work was conducted in accordance with the USEPA-approved *Generic Quality Assurance Project Plan for Brownfield Community-Wide Assessment* (QAPP [CHA 2023]) and the *Site-Specific Quality Assurance Project Plan* (SSQAPP [CHA 2024]).

Following implementation of the field work, a report was submitted to the County documenting the work completed and associated findings. This document has been amended from the original Phase II ESA report at the request of the Client to incorporate redevelopment plans and include an assessment of risk to future receptors associated with the planned residential redevelopment.

1.1 Background

The Site was developed for agriculture since at least 1953. A residence was constructed in the southeastern corner of the Site in 1955 with elevation equivalent to West 3rd Street. A heating oil tank (HOT) was reportedly used at the residence. In the mid-1970s, fill material including rocks, logs, and decaying matter from a local Hampton log yard was placed on remaining approximately 3.5 acres of the Site to bring it to street grade. The approximate extent of fill is depicted on Figure 2. As the elevated portion of the Site expanded to the north and west, the expanded areas were no longer used for agricultural purposes. The greater parcel has been used primarily as agricultural land, except for areas near the residential structure and a campground in the northeastern portion of the parcel. Areas of the greater parcel adjacent to the Trask River to the west have been used for public fishing (Terraphase 2023).

Previous environmental investigations at the Site include the following, based on interviews with the property owner during the 2023 Phase I ESA:

- In 2019, two soil borings (B-1 and B-2) were reportedly advanced to a depth of 50 feet on the southern portion of the parcel. Approximately 10 feet of fill material was encountered in both borings. The report was not provided to Terraphase.

- Approximately 3 to 5 years ago, further subsurface investigation was reportedly conducted on the fill area. Soil, soil gas, and groundwater samples were reportedly collected and analyzed from multiple borings and test pits. Elevated concentrations of metals were encountered in soil samples and methane was detected in soil gas. The report was not provided to Terraphase.

During the November 2023 Phase I ESA, Terraphase identified the following environmental concerns on the Site warranting further investigation:

- **Fill Area**: Reported contamination of soil and soil vapor, and potential contamination of groundwater from undocumented fill material consisting of lumber yard debris and rocks that was added to the southern portion of the parcel in the 1970s was considered a recognized environmental condition (REC) and a data gap. Contaminants of concern include methane gas, metals, total petroleum hydrocarbons (TPHs), and polycyclic aromatic hydrocarbons (PAHs).
- **Former HOT:** Potential contamination of soil from the former aboveground HOT historically used by the residence was considered a REC and a data gap. Contaminants of concern include TPHs.

The following environmental concerns were identified in the Phase I ESA for the greater parcel but are not applicable to the Site:

- **Drum Storage:** Potential contamination of soil from the storage of drums by the Trask River Bridge immediately adjacent to the southwestern corner of the parcel was considered an environmental concern. Contaminants of concern include TPHs, organochlorine pesticides, and metals.
- **Agricultural Chemicals:** Potential contamination of soil from agricultural use of fertilizers and chemicals was considered a potential environmental concern. Contaminants of concern include organochlorine pesticides.

1.2 Objective

The objective of the Phase II ESA was to investigate the following environmental conditions and data gaps specific to the Site:

- The presence and extent of contamination in the soil, soil vapor, and groundwater from fill material is unknown. Sampling and analysis of the soil, soil vapor, and groundwater was conducted to identify environmental concerns associated with the fill material.
- The presence of contamination in the soil from the former HOT historically used by the residence is unknown. Sampling and analysis of the soil was conducted to assess potential impacts associated with the former HOT.

The end goal of delineating the extent and presence of contamination is to facilitate the proposed development of the Site as residential housing in compliance with OAR 340-122.[1]

[1] "Division 122 Hazardous Substance Remedial Action Rules," OAR 340-122, https://oregon.public.law/rules/oar_chapter_340_division_122.

1.3 Proposed Development

It is our understanding that the Client intends to redevelop the Site with a new multifamily residential complex. Based on provided conceptual Site plan drawings prepared by West of West, dated July 17, 2024, the planned redevelopment will include two 3-story, 18-unit, multifamily residential buildings, a leasing office building, a mail/support structure, new paved access drives, paved parking areas, a playground and outdoor gym, a community garden, a recreation field, and new support infrastructure. The footprint of the planned housing is shown on Figure 2, and the majority of the buildings will not be constructed in the fill area described in Section 1.1.

At the time of this report, Terraphase has not received any structural plans for the proposed complex, but we anticipate the planned buildings will be composed of wood framing and slab-on-grade floors.

1.4 Site Description

The Site is on the north side of West 3rd Street and approximately 300 feet east of the Trask River, approximately 1 mile west of downtown Tillamook (Figure 1). The residential building located in the extreme southeast of the Site is planned for demolition prior to development. An agricultural area with irrigated ditches is adjacent to the Site, to the north. A portion of the parcel that includes a barn used for dairy cows is adjacent to the Site to the west, between the Site and the Trask River. Adventist Health Hospital is adjacent to the Site to the east. Residences and a water treatment plant are south of the Site, across West 3rd Street (Figure 2).

1.5 Topography and Surface Water

The Site is approximately 18 feet above mean sea level. The local topography is generally flat other than a steep slope that separates the Site from the agricultural area to the north. The nearest surface water to the Site is the irrigation trench between the Site and the agricultural area. The trench is hydraulically connected to the Hoquarton Slough approximately 1,900 feet northwest of the Site. The Trask River is 300 feet east of the Site.

1.6 Geology and Hydrogeology

Based on information accessed via the United States Geological Survey website,[2] the Site is underlain by Quaternary fluvial and estuarine deposits, which consists of unconsolidated, alluvial clay, silt, sand, and gravel, as well as tidal flat mud, sand, and peat (Wells et al. 1994). According to soil data accessed on the U.S. Department of Agriculture Natural Resources Conservation Service soil survey website[3] and the EDR report (included in the 2023 Phase I ESA), the soils in the eastern portion of the Site primarily consist of estuarine silt loams, which are generally very poorly drained, with slow infiltration rates and frequent

[2] https://ngmdb.usgs.gov/mapview

[3] https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

risk of flooding. The soil in the western portion of the parcel (along the Trask River) consists of alluvial silt loam, which are generally well drained with frequent risk of flooding.

Two soil borings (B-1 and B-2) were previously advanced to 50 feet below ground surface (bgs) along the southern portion of the Site by GeoDesign in August 2019. The borings encountered approximately 10 feet of fill material underlain by sand and gravel to the total depth explored.

In November 2024, Terraphase conducted a geotechnical investigation at the Site at the request of CHA on behalf of the County. The investigation consisted of advancing 11 borings to depths between 21.5 and 61.5 feet bgs (B-1 through B-11; Figure 3). Material encountered included sand and gravel fill in the southeastern portion of the Site to between 5 and 15 feet bgs, underlain by silt and silty gravel to 47 feet bgs, underlain by weathered siltstone and sandstone to the total depth explored. Fill with abundant wood debris was encountered in other areas of the Site underlying approximately 2 feet of sand to between 6.5 and 18.5 feet bgs. Woody fill was encountered in borings B-2 through B-5 and B-9 through B-11 (Figure 3).

Groundwater was encountered between 8 and 10 feet bgs during the Phase II ESA, and between 4.5 and 10 feet bgs during the geotechnical investigation. Groundwater likely flows north to northwest toward the low-lying agricultural area and the Trask River. Based on review of well logs available on the Oregon Water Resources Department website, groundwater levels in the agricultural area north of the Site are likely 3 to 4 feet bgs.

2 Scope of Work

The Phase II ESA was conducted on May 24 and June 7, 2024. The scope of the Phase II ESA is described below.

2.1 Pre-Field Work

Terraphase prepared a site-specific *Health and Safety Plan* that specifies personal protective equipment and procedures for the sampling work. Terraphase contacted Oregon One-Call on May 15, 2024, to identify the location of underground public utilities within the vicinity of the proposed boring locations. As an additional precaution, Terraphase contracted Pacific Geophysics, Inc., of Portland, Oregon, to identify underground private utilities prior to drilling.

2.2 Soil-Vapor, Soil, and Groundwater Sampling

The following subsections describe soil vapor, soil, and groundwater sample collection procedures.

2.2.1 Soil-Vapor Sampling

On May 24, 2024, Terraphase supervised Holocene Drilling Inc. of Puyallup, Washington in the installation of four temporary soil-vapor wells within the fill area at the Site (3S-SV-1 through 3S-SV-4) using a track-mounted direct-push drilling rig (Figure 2).

At each boring location a 1-inch stainless-steel screen was installed at 4.5 feet bgs, and sand was placed in the bottom 1 foot of the borehole, such that it extended 6 inches above and below the stainless-steel screen. Bentonite was placed above the sand to 1-foot bgs. One foot of unhydrated bentonite was placed above the sand and the remaining bentonite was hydrated in 6-inch lifts with distilled water. Portland cement was placed from 1-foot bgs to the ground surface. The stainless-steel screen was affixed with a length of 0.25-inch Teflon tubing extending from the screen to the surface. The Teflon tubing was capped, and the soil-vapor points were protected.

On June 7, Terraphase returned to the Site to collect soil-vapor samples. Prior to vapor sample collection, an initial leak-check test was completed to assess the seal of the sample apparatus and fittings. With the valves at the sample canister and soil-vapor point both in the closed position, a gas-tight syringe was used to apply a vacuum to the sampling apparatus of at least 10 inches of mercury. The valve between the tee and the purging device was then closed to observe whether the vacuum was maintained in the sampling apparatus between the soil-vapor point and the sample canister. After completing the leak-check test, a clear shroud (plastic bag) was placed around the top of the soil-vapor point and the sample apparatus. The inside of the shroud was enriched with helium to a minimum concentration of 10 percent, which was measured using a portable helium detector. The vapor points were purged at a rate of approximately 150 milliliters per minute. As a quantitative leak check, the effluent of the purging device was monitored for helium using a portable helium detector. Three well volumes were purged. The well volume calculation included the sample tubing and an estimated pore space for the un-hydrated bentonite and sand pack.

After purging, soil-vapor samples were collected using laboratory-supplied Summa™ canisters fitted with a vacuum gauge and a flow-regulation device sized to allow sample collection at a flow rate of approximately 150 milliliters per minute. Prior to sampling, the initial sample canister vacuum measurements were recorded on the field forms. The valve was then opened on the sample canister, and the start time of the sample collection was recorded on the field forms (Appendix A). The vacuum on the canister was monitored during sample collection, and the flow rate was verified from the rate of change in the canister vacuum. The helium concentration inside the shroud was measured regularly during sampling, and the measured concentrations were recorded on the field forms. The sample canister valve was shut off when the residual vacuum in the canister was approximately 5 inches of mercury. The final vacuum was recorded on the field forms.

Soil-vapor samples were collected from borings 3S-SV-1 and 3S-SV-4 in accordance with Terraphase standard operating procedures. Soil-vapor samples were not collected from 3S-SV-2 and 3S-SV-3 due to water observed in the tubing while purging.

Samples were submitted to Eurofins Airtoxics LLC in Folsom, California, and analyzed under a 10-day turn-around time for methane, carbon dioxide, carbon monoxide, oxygen, and helium using ASTM Method D-1946. Quality assurance (QA)/quality control (QC) samples were collected in accordance with the QAPP.

2.2.2 Soil Boring Sampling

On May 24, 2024, Terraphase supervised Holocene Drilling Inc. of Puyallup, Washington in the advancement of four soil borings at the Site (3S-SBFA-1 through 3S-SBFA-4) to depths ranging from 15 to 20 feet bgs, approximately 4 to 13.5 feet below the depth of the fill, using a track-mounted direct-push drilling rig. Borings were advanced in the area of fill within the southeastern portion of the Site (Figure 2). Soil boring logs are included in Appendix B.

The direct-push rig was equipped with a hydraulic ram and percussion hammer to push a 5-foot-long stainless-steel core barrel sampler into the subsurface to retrieve continuous soil cores. The core barrel contained an acetate sleeve liner. Once the core barrel was extracted from the ground, the liner was removed and cut open with a stainless-steel blade. No air, mud, or water was introduced during the drilling process.

Continuous soil samples were examined in the field under the supervision of a Terraphase Oregon Registered Geologist. The soil was described in general accordance with Unified Soil Classification System nomenclature and recorded on soil boring logs. The soil was screened in the field for visible (e.g., staining, sheen) or olfactory indications of contamination, and a photoionization detector (PID) was used to monitor for the presence of volatile organic compounds. The PID was calibrated using isobutylene prior to use. Soil samples retained for chemical analysis were selected based on field evidence of contamination (visual, olfactory, PID results). However, where contamination was not evident, two soil samples were retained from within the fill, above the apparent water table, with sample intervals dependent on sample recovery.

Samples retained for chemical analysis were transferred from the plastic sleeves to laboratory-supplied sample containers using clean, new nitrile gloves. Samples collected for analysis of TPH as gasoline (TPH-g) were placed in hermetically sealed glass vials containing methanol for sample preservation in accordance with USEPA Method 5035. Each sample collected for chemical analysis was labeled with the borehole number, sample depth, and time and date of collection. Sample containers were placed in resealable plastic bags within an ice-chilled cooler immediately following collection and were transported to Apex Analytical Laboratory (Apex) of Tigard, Oregon, under chain-of-custody procedures. Soil samples were analyzed for the following:

- TPH in accordance with NWTPH-HCID
- TPH quantification by NWTPH-Gx or NWTPH-Dx with Acid/Silica Gel Cleanup, depending on the results of the NWTPH-HCID analysis
- Priority Pollutant Metals in accordance with USEPA Method 6020B
- PAHs, including pentachlorophenol (PCP), in accordance with USEPA Method 8270E.

Following sample collection, a perforated polyvinyl chloride well with polyethylene tubing affixed to a 4-gas meter with methane, oxygen, hydrogen sulfide, and carbon dioxide sensors was placed in each boring above the apparent water table. Methane measurements were recorded on field forms at approximately 2.5-foot intervals between the water table and ground surface.

2.2.3 Surface Soil Sampling (HOT)

On May 24, 2024, Terraphase collected a surface soil sample from the area of the former aboveground HOT located behind the residence in the southeastern portion of the Site (3S-SBHOT-1) at a depth of 0 to 1 feet bgs using a trowel. Field notes including descriptions of soils encountered are provided as Appendix A. The soil was screened in the field for visible (e.g., staining, sheen) or olfactory indications of contamination.

The soil sample was transferred from the trowel to laboratory-supplied glass containers using clean, new nitrile gloves. Samples collected for analysis of TPH-g were placed in hermetically sealed glass vials containing methanol for sample preservation in accordance with USEPA Method 5035. The sample was labeled with the sample number, sample depth, and time and date of collection. Sample containers were placed in resealable plastic bags within an ice-chilled cooler immediately following collection and submitted for analysis of TPH using method NWTPH-HCID.

2.2.4 Groundwater Sample Collection

After gas monitoring was conducted in borings 3S-SBFA-3 and 3S-SBFA-4, a dedicated, temporary, 1-inch-diameter polyvinyl chlorinated well with a 0.010-inch factory-slotted screen was placed in each well for groundwater sample collection. The temporary wells had screened intervals of 11 to 16 feet bgs in boring 3S-SBFA-3 and 13 to 18 feet bgs in boring 3S-SBFA-4. Groundwater sampling logs are included in Appendix A.

A post-drilling static water level measurement was recorded before sampling using a clean electronic sounder. Low-flow purging techniques were used for groundwater sampling. A Horiba multi-parameter meter with a flow-through cell was used to measure groundwater parameters including pH, temperature, electrical conductivity, dissolved oxygen, oxidation reduction potential, and turbidity. The multi-parameter meter was calibrated using supplier-provided standard calibration solutions prior to use. Groundwater level and parameter readings were collected at least every 5 minutes during purging. Once parameters stabilized, a groundwater grab sample was collected from the temporary well through dedicated 3/8-inch, low-density polyethylene tubing using a peristaltic pump. Groundwater was transferred directly from the disposable tubing into laboratory-supplied containers. Sample containers were labeled, logged on a chain-of-custody form, placed in resealable plastic bags, stored in an ice-chilled cooler, and transported under chain-of-custody procedures to Apex. The groundwater samples were analyzed for the following:

- TPH in accordance with NWTPH-HCID
- TPH quantification using NWTPH-Gx or NWTPH-Dx with Acid/Silica Gel Cleanup, depending on the results of the NWTPH-HCID analysis
- Priority Pollutant Metals (dissolved) in accordance with USEPA Method 6020B
- PAHs, including PCP, in accordance with USEPA Method 8270E.

2.2.5 Equipment Decontamination and Quality Assurance/ Quality Control

Decontamination of non-disposable sampling and downhole drilling equipment was completed between each sampling location to prevent the introduction of extraneous material into samples and potential cross-contamination as a QA/QC measure. Downhole drilling equipment and non-disposable sampling equipment (the electronic sounder) were decontaminated by washing with a non-phosphate detergent.

An equipment blank was collected following decontamination of the direct-push downhole tooling by pouring laboratory-supplied deionized water across the drilling shoe directly into laboratory-supplied sample bottles. Equipment blank samples consist of reagent water collected from a rinse of sampling equipment after the decontamination procedure has been performed. The purpose of equipment blank samples is to confirm the effectiveness of equipment decontamination procedures in place to minimize cross-contamination between sample collection. The samples were submitted to Apex under standard chain-of-custody procedures and analyzed for the same constituents as the soil samples.

Duplicate samples were collected for each sample matrix (soil vapor, soil, and groundwater) and within each area of concern and submitted for the same analyses as the corresponding primary sample. Duplicate samples provide data to assess precision of the field sampling procedure and contract laboratory. However, variability in field duplicate sample results can be an indicator of matrix variability and heterogeneity. Due to a leak detected within the laboratory-supplied “T” fitting required for duplicate sampling, a replicate, rather than duplicate, soil-vapor sample was collected from 3S-SV-1. The soil duplicate samples were collected from boring 3S-SBFA-3 and from soil sample 3S-SBHOT-1. The groundwater duplicate sample was collected from 3S-SBFA-3.

2.3 Borehole Abandonment

After sample collection, the temporary wells were removed, and the boreholes were backfilled with bentonite chips to a depth of 1-foot bgs. The upper 1 foot of each borehole was filled with soil to match the surrounding ground surface.

2.4 Screening Criteria

Soil and groundwater results were compared to established screening levels (SLs) to assess potential risk to human health and likely disposal requirements during construction.

Soil vapor results were compared to:

- The acute and chronic risk-based concentrations (RBCs) for the residential receptor scenario vapor intrusion pathway as measured in soil vapor (ODEQ 2024) for hydrogen sulfide, which provides information on potential vapor intrusion exposure.

- A methane concentration of 1.25 percent. OAR-122-0040(3)[4] states "*In the event of a release of methane from a historic solid waste landfill, removal or remedial actions shall be implemented to prevent concentrations of methane exceeding or likely to exceed 1.25% by volume in confined spaces and structures*."

Soil results were compared to:

- The RBCs for the residential and construction worker receptor scenarios for the soil ingestion, dermal contact, and inhalation pathway (Oregon Department of Environmental Quality [ODEQ] 2023), which provides information for potential direct exposure to contaminants.
- The RBC for the residential receptor scenario for leaching to the groundwater pathway (ODEQ 2023), which assesses potential risk to drinking water from contaminated soil.
- Clean fill SLs (ODEQ 2019), which inform the necessity for off-site soil disposal. Where metals were analyzed, results were compared to the Coast Range Province background levels.

Groundwater results were compared to:

- The RBC for the construction worker receptor scenario for the groundwater in an excavation pathway (ODEQ 2023), which provides information on potential worker exposure to contaminants during construction.
- The RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway (ODEQ 2023). Drinking water is not considered a likely exposure pathway; however, the drinking water criteria are often the standard compliance criteria for cleanup sites, and they provide context for evaluating contaminant concentrations (i.e., concentrations below drinking water RBCs are generally low).
- The acute and chronic Ecological RBCs for freshwater protection of aquatic life (ODEQ 2021).

Screening criteria, where established, are provided in the tables for comparison purposes.

2.5 Investigation-Derived Waste

Investigation-derived waste consisting of soil cuttings and decontamination water was temporarily stored in a 55-gallon drum. The drum was labeled with its contents and Terraphase's contact information.

ACT Enviro, of Clackamas, Oregon, is scheduled to transport the drum on July 24, 2024, for non-hazardous waste disposal at Waste Management's Hillsboro, Oregon landfill in compliance with ODEQ/USEPA requirements.

[4] https://oregon.public.law/rules/oar_340-122-0040

3 Results

This section summarizes the results of the field investigation.

3.1 Lithology and Field Observations

Encountered lithology generally consisted of 1 to 2 feet of gravel cover overlying well-graded, silty, sandy gravel to silty sand with abundant wood debris (fill) to depths ranging from 6.5 to 16 feet bgs. Silt and elastic silt were observed underlying the fill in borings 3S-SBFA-1, 3S-SBFA-3, and 3S-SBFA-4 to the final exploration depths (15 and 20 feet bgs). The fill in boring 3S-SBFA-2 was underlain by silt with sand to a depth of 11 feet bgs, and silty gravel with sand to sandy gravel with silt to the final exploration depths (20 feet bgs). Wood debris was observed in the fill and the underlying fine-grained materials in borings 3S-SBFA-1, 3S-SBFA-3, and 3S-SBFA-4. Native soils encountered are consistent with the fluvial and estuarine deposits mapped at the Site (Wells et al. 1994).

Groundwater was encountered between 8 and 11 feet bgs, with post-drilling static water levels between 6.4 and 10.5 feet bgs. Groundwater was shallowest (encountered at 6.4 feet bgs) at boring 3S-SBFA-1, located in the southwestern portion of the fill area.

PID measurements were taken in 1-foot intervals, and all PID measurements were 0.0 parts per million (ppm). Methane measurements ranged from 3.19 to 51.70 percent, all of which are above the 1.25 percent criteria, with maximum measurements between 5 and 11 feet bgs in boring 3S-SBFA-3. Hydrogen sulfide measurements ranged from 1 to 21 ppm, with maximum measurements between 5 and 7.5 feet bgs in boring 3S-SBFA-3. All hydrogen sulfide measurements were above the chronic vapor intrusion RBC for the residential scenario of 70 micrograms per cubic meter ($\mu g/m^3$; equivalent to 0.7 ppm) as measured in soil vapor. All hydrogen sulfide measurements in borings 3S-SBFA-2 through 3S-SBFA-4 were above the acute vapor intrusion RBC for the residential scenario of 3,300 $\mu g/m^3$ (equivalent to 3.3 ppm) as measured in soil vapor. Carbon monoxide measurements ranged from 0 to 62 ppm, with the highest measurement at boring 3S-SBFA-2 at 10 feet bgs. Except for boring 3S-SBFA-1, in which carbon monoxide measurements were generally low, carbon monoxide measurements were highest with depth and decreased closer to the ground surface.

No visual or olfactory evidence of contamination was observed in any of the borings. Lithology, encountered groundwater, and PID results are recorded on the boring logs (Appendix B). Appendix B also includes the boring logs from the November 2024 geotechnical investigation. Methane, hydrogen sulfide, and carbon monoxide measurements are included in field notes (Appendix A).

3.2 Soil-Vapor Results

Analytical results from the soil-vapor samples are presented in Table 1 and on Figure 3. The complete laboratory analytical reports are included as Appendix C.

Methane and carbon dioxide were detected at concentrations of 38% and 22%, respectively, in both the primary and replicate soil-vapor samples collected from 3S-SV-1 and at concentrations of 68% and 23%, respectively, in the soil-vapor sample collected from 3S-SV-4. Oxygen was detected at concentrations of

1.1%, 1.0%, and 0.62% in the primary and replicate samples collected from 3S-SV-1 and the sample collected from 3S-SV-4, respectively. Carbon monoxide was not detected above laboratory reporting limits (RLs) which ranged from 100 to 210 ppm, higher than the carbon monoxide field measurements.

3.3 Soil Results

Analytical results from the soil samples are presented in Table 2 and on Figure 4. The complete laboratory analytical reports are included as Appendix C. The following compounds were detected:

- **Fill Area:**
  - **Metals:** Chromium, copper, lead, nickel, and zinc were detected above laboratory RLs in all soil samples. Beryllium was detected above laboratory RLs in all soil samples except for the primary and duplicate samples collected in boring 3S-SBFA-3 at 1 to 3.5 feet bgs. All concentrations were below respective ODEQ RBCs and clean fill SLs. Arsenic was detected in the sample collected from boring 3S-SBFA-2 at 5 to 7 feet bgs at a concentration of 4.20 milligrams per kilogram (mg/kg), which is above the ODEQ RBC for the residential receptor scenario for the soil ingestion, dermal contact, and inhalation pathway of 0.43 mg/kg, but which is below the clean fill screening level of 12 mg/kg, and therefore, most likely reflects background arsenic. Selenium was detected in soil samples collected from borings 3S-SBFA-1, 3S-SBFA-2, and 3S-SBFA-3 at concentrations of 1.67 mg/kg at 5 to 8 feet bgs, 3.15 mg/kg at 5 to 7 feet bgs, and 1.98 at 5 to 8 feet bgs, respectively, which are above the ODEQ clean fill screening level of 1.5 mg/kg. Several laboratory RLs for antimony, mercury, selenium, and silver were above the ODEQ clean fill SLs, and all laboratory RLs for arsenic were above the ODEQ RBC for the residential receptor scenario for the soil ingestion, dermal contact, and inhalation pathway.
  - **PAHs:** The PAHs 1-methylnapthalene, 2-methylnapthalene, acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzofuran, fluoranthene, fluorene, indeno(1,2,3-c,d)pyrene, naphthalene, phenanthrene, and pyrene were detected above laboratory RLs in one or more soil samples, with most detections in the samples collected from boring 3S-SBFA-2 at 1.5 to 3 feet bgs, boring 3S-SBFA-3 at 1.0 to 3.5 feet bgs, and boring 3S-SBFA-4 at 2 to 3 feet bgs. Benzo(a)pyrene was detected in samples collected from boring 3S-SBFA-2 at 1.5 to 3 feet bgs and boring 3S-SBFA-4 at 2 to 3 feet bgs and 5 to 8 feet bgs at concentrations above the ODEQ RBC for the residential receptor scenario for the soil ingestion, dermal contact, and inhalation pathway and the ODEQ clean fill screening level of 0.11 mg/kg. Naphthalene was detected at concentrations exceeding the ODEQ RBC for the residential receptor scenario for the leaching to groundwater pathway and the ODEQ clean fill screening level of 0.077 mg/kg in all samples except for those collected from boring 3S-SBFA-3 at 1 to 3.5 and 5 to 8 feet bgs. Other detections above laboratory RLs were below the respective ODEQ RBCs and clean fill SLs. PCP was not detected above laboratory RLs.
  - **TPHs:** TPH-g was detected above laboratory RLs in the sample collected from boring 3S-SBFA-4 at 5 to 8 feet bgs at a concentration of 30.3 mg/kg, which is slightly below the ODEQ RBC for the residential receptor scenario for the leaching to groundwater pathway and the ODEQ clean fill screening level of 31 mg/kg. Several laboratory RLs for TPH-g were above the ODEQ RBC for the

residential receptor scenario for the leaching to groundwater pathway. TPH as motor oil (TPH-mo) was detected above laboratory RLs in all samples, with maximum concentrations detected in boring 3S-SBFA-1 at 1 to 3 feet bgs at 1,350 mg/kg, which is below SLs. All TPH-mo detections were flagged by the laboratory as elevated due to the presence of individual analyte peaks within the quantitation range and not reflective of a fuel pattern. TPH as diesel (TPH-d) was not detected above laboratory RLs. TPH and PAHs are associated with naturally occurring organics and wood waste decomposition, and do not necessarily indicate a chemical release.

- **Former HOT Area:**
  - **TPHs:** TPH-g, TPH-d, and TPH-mo were not detected above laboratory RLs.

No soil sample results exceeded the construction worker scenario RBCs. The clean fill screening level exceedances of selenium and PAHs indicate that the soils in the fill areas would require off-site disposal during construction, unless a beneficial use determination is granted by ODEQ.

3.4 Groundwater

Analytical results from the groundwater samples are presented in Table 3 and on Figure 5. The complete laboratory analytical reports are included as Appendix C. A summary of the groundwater sampling results is provided below:

- **Metals:** Nickel and zinc were detected above laboratory RLs in all groundwater samples, with maximum concentrations of 10.4 and 7.86 micrograms per liter (µg/L) in the samples collected from boring 3S-SBFA-3, which are below applicable RBCs. Arsenic was detected in the primary and duplicate samples collected from boring 3S-SBFA-3 at concentrations of 1.34 and 1.40 µg/L, respectively, which are above the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway of 0.052 µg/L. The laboratory reporting limit for arsenic in the sample collected from 3S-SBFA-4 (1.00 µg/L) was above the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway. Lead was detected in the duplicate sample collected from boring 3S-SBFA-3 at a concentration of 1.33 µg/L, which is above the chronic Ecological RBC for protection of freshwater aquatic life of 0.54 µg/L.
- **PAHs:** The PAHs 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, acenaphthylene, dibenzofuran, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene were detected in the groundwater sample collected from boring 3S-SBFA-4, with concentrations of naphthalene (2.90 µg/L) above the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway of 0.17 µg/L. All other detected concentrations were below applicable ODEQ RBCs, where established. There were no PAH detections in samples collected from boring 3S-SBFA-3. Several laboratory RLs for benzo(a)pyrene and PCP were above the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway. No PAH concentrations exceeded Ecological RBCs.
- **TPHs:** TPH-mo was detected above laboratory RLs in the primary and duplicate groundwater samples collected from boring 3S-SBFA-3 at concentrations of 7,360 and 4,720 µg/L, respectively, which are above the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway of 300 µg/L and the chronic Ecological RBC for protection of freshwater

aquatic life of 630 µg/L. The initial TPH-HCID water sample detections were flagged by the laboratory as elevated due to the presence of individual analyte peaks within the quantitation range and not reflective of a fuel pattern; however, the follow-up NWTPH-Dx detections were not flagged. Apex commented that this difference is discretionary per chemist and does not indicate that the NWTPH-Dx detections are representative of fuel. TPH and PAHs are associated with naturally occurring organics and wood waste decomposition, and do not necessarily indicate a chemical release.

3.5 QA/QC Results

The laboratory analyses were reviewed by Terraphase as a check of overall quality in accordance with the QAPP (CHA 2023) and SSQAPP (CHA 2024). The data quality check process included a review of chain-of-custody forms, holding times, laboratory analytical reports, method blanks, surrogate recoveries, matrix spike, matrix spike duplicates, and method detection limits. The laboratory data validation reports are included as Appendix D. The Terraphase project manager reviewed all field notes and forms to ensure adherence to field data collection protocols. Notable QA/QC information includes the following:

- Field data collection procedures and documentation were consistent with the QAPP and SSQAPP and suitable for decision making.
- All laboratory data are considered usable and support the Phase II ESA objectives.
- Several laboratory flags related to laboratory QC issues were reported. A review of the flags suggests that none had a significant impact on the conclusion of the Phase II ESA. Flags are included in the tables and discussed in the data validation reports (Appendix D).
- Chromium, copper, lead, and nickel were detected in the equipment blank. However, concentrations were greater than 5 times the estimated equipment blank concentration. Therefore, no results were qualified.

4 Beneficial Water Use Determination

Terraphase conducted a streamlined beneficial water use determination in general accordance with state guidance (ODEQ 2017) to assess groundwater use at the Site. For purposes of the beneficial use determination, the locality of the facility is considered the Site.

4.1.1 Drinking Water Supply

The City of Tillamook supplies drinking water to the on-site residential building and surrounding areas and would be the water supply for the proposed development. No water wells are intended to be installed as part of the development. The Tillamook water supply is primarily from Killiam and Fawcett Creeks more than 10 miles southeast of the Site. Three wells, between 5,000 and 10,000 feet from the Site, provide backup water supply.

4.1.2 Well Survey

Terraphase conducted a search for water-supply wells located within a 1-mile radius of the Site using the OWRD's online well query tool. Thirteen water wells were listed with depths between 69 and 157 feet bgs. The wells were installed between 1952 and 2024, and are listed as domestic, irrigation, livestock, industrial or municipal (Figure 1; Appendix E). All wells are more than 0.25 miles from the Site,[5] except for one domestic water owned by Julia Stillman (precise location and construction details unknown). Wells targeted regional groundwater between 38 and 131 feet below grade and had static water between 0.5 and 11 feet below grade.

Based on the Phase I ESA prepared by Terraphase in 2024, no wells are reported to have been installed at the Site and groundwater at the greater parcel is likely to be tidally influenced, particularly in proximity to the Trask River and Hoquartan Slough (Terraphase 2024).

4.1.3 Water Rights

According to the OWRD's Water Rights Information page,[6] no water rights permits are associated with the Site. Water rights are held by Harold Beeler and Alfred Marlof both to the southwest of the Site (Irrigation), with points of diversion on Hoquarten Slough and the Trask River, respectively, downstream of the Site.

4.1.4 Development Trends and Patterns

The Site is located adjacent to but outside the Tillamook City Limit and within the Tillamook urban growth boundary[7]. The Site is zoned as multiple use residential (Tillamook County Land Use Ordinance [LUO] R-O[8]), which allows for residential development such as that planned for the Site. The remainder of the greater parcel is zoned as open-space (LUO O-S). The adjacent property to the east is zoned as public and semi-public (LUO P) and has a "healthcare overlay

According to the 2012 Tillamook Comprehensive Plan,[9] the Site is planned for residential development. The current population of the City of Tillamook is approximately 5,196 people.[10] The city forecasts an approximately 22 percent increase in population over the city's population in 2010 by 2030. Residential and commercial developments are to be focused on areas within the UGB, whereas agricultural and industrial developments are to be focused in areas outside of the UGB.

[5] All well locations are based on the OWRD mapping system, which maps each well at the center of its respective PLSS section as listed on the well log and therefore, are considered estimated. Some well logs provide additional details of the location of the well, and these well locations were adjusted accordingly, as shown in Figure 1.

[6] https://apps.wrd.state.or.us/apps/gis/wr/Default.aspx?snp_id=82302

[7] https://www.tillamookcounty.gov/commdev/page/land-use-ordinance-luo-zoning-ordinance

[8] https://www.tillamookcounty.gov/commdev/page/land-use-ordinance-luo-zoning-ordinance

[9] https://www.tillamookor.gov/council/page/comprehensive-plan

[10] https://www.census.gov/quickfacts/fact/table/tillamookcityoregon,US/PST045224

4.1.5 Surface Water Recharge

The nearest surface water to the Site is the irrigation trench between the Site and the agricultural area. The trench is hydraulically connected to the Hoquarton Slough approximately 1,900 feet northwest of the Site. The Trask River is 300 feet east of the Site. An Oregon Department of State Lands delineated wetland is located on a portion of the low-lying agricultural area north of the Site.[11] Shallow groundwater likely discharges to the irrigation ditch and/or wetland. The Trask River flows into Tillamook Bay, approximately 2 miles northwest of the Site. The Trask River is reportedly "fresh" at the Site (OAR 141-85-264).[12] The brackish-freshwater interface is located at the confluence between the Trask River and Tillamook Bay. It is unlikely that the irrigation ditch is used as a drinking water supply.

4.1.6 Summary

Terraphase did not identify past, current, or future use of the shallow groundwater at the Site as drinking water. Shallow groundwater likely flows to the north and discharges into the irrigation ditch and adjacent wetland. Therefore, shallow groundwater has beneficial ecological use.

5 Risk Screening Evaluation

The following sections describe a conceptual understanding of the nature of contamination at the Site and its potential to cause adverse risk to human and ecological health. Figure 3 presents a conceptual site model of potentially complete and incomplete pathways for contaminant exposure.

5.1 Soil

Fill from a log yard was placed on the Site in the 1970s. The fill contains wood waste, soil, and gravel. Samples of the fill material indicate the presence of PAHs and selenium above regional background. Currently, at least 2 feet of sandy gravel or silty sand cover the wood waste fill. Concentrations of benzo(a)pyrene were above the residential scenario soil ingestion, dermal contact, and inhalation pathway and concentrations of naphthalene were above the residential scenario soil leaching to groundwater pathway. Potentially complete pathways for soil include construction or excavation worker exposure during redevelopment or post-development construction or utility work (Figure 6). No detected concentrations exceed ODEQ RBCs for the construction worker scenario. No residential exposure is expected as long as the gravel or sand cap above the wood waste fill remains in place. As discussed in Section 4, shallow groundwater is not used for drinking water and is unlikely to be used for drinking water in the future. Therefore, there is no current or anticipated future risk from soil.

[11] https://maps.dsl.state.or.us/swi/

[12] "Salinity Data and Maps," OAR 141-85-264, https://www.oregon.gov/dsl/wetlands-waters/Documents/salinity_maps.pdf.

5.2 Groundwater

Groundwater contamination at the Site results from infiltration precipitation leaching contaminants from wood waste fill. Shallow groundwater at the Site is not used for drinking water; however, it likely flows to the lower topography area to the north, which contains drainage ditches in connection to the Hoquarton Slough. Potentially complete exposure pathways include groundwater and surface water root uptake for plants and dermal contact, ingestion, and inhalation of surface water by invertebrates, birds, mammals, and aquatic life after the groundwater has discharged to surface water (Figure 6).

Detected concentrations of naphthalene, oil-range TPH, and arsenic were above the residential scenario RBC for the ingestion and inhalation from tap water pathway; however, drinking water is not considered a complete pathway. No concentrations exceed the construction and excavation worker scenario RBCs for the groundwater in an excavation pathway. Concentrations of oil-range TPH in the primary and duplicate groundwater sample from boring 3S-SBFA-3 were above the chronic Ecological RBC for protection of freshwater aquatic life; however the TPH and PAH detections are likely related to wood waste. These compounds are not readily soluble and the grab-groundwater samples were not filtered for these analytes which suggests that particulate matter may have been included in the water sample. Lead was detected in the duplicate sample from boring 3S-SBFA-3 at a concentration of 1.33 µg/L, above the chronic Ecological RBC for protection of freshwater aquatic life of 0.54 µg/L; however, it was not detected in the primary sample or the sample collected from boring 3S-SBFA-4, suggesting the magnitude and extent of lead contamination is limited. Therefore, as long as shallow water is not used for drinking water, the groundwater impacts do not represent a current or future risk to human health or the environment.

5.3 Soil Vapor

Bacterial decomposition of wood waste consumes oxygen and produces methane, hydrogen sulfide, carbon dioxide, and carbon monoxide gases as byproducts. Methane was detected in soil gas samples at concentrations of up to 68 percent and measured in-situ at concentrations up to 51.70 percent. Hydrogen sulfide was measured in-situ at concentrations of up to 21 ppm. All methane concentrations were above the OAR-122-0040(3) action level and all hydrogen sulfide measurements were above the residential scenario chronic RBC for vapor intrusion as measured in soil gas. All hydrogen sulfide measurements in three of the four borings were also above the residential scenario acute RBC for vapor intrusion as measured in soil gas. There are currently no structures built within the wood waste fill, therefore, there is no current risk associated with the presence of methane and hydrogen sulfide. Vapor intrusion of these compounds will present a risk to Site occupants after redevelopment unless the wood waste fill is removed or proper mitigation systems are installed, monitored, and maintained.

6 Conclusions

On May 24 and June 7, 2024, Terraphase conducted a Phase II ESA at the Site consisting of the collection of soil vapor, soil, and groundwater samples. The following conclusions are presented:

- **Geology:** The lithology encountered during soil sampling generally consisted of well-graded, silty, sandy gravel to silty sand with abundant wood debris (fill) to depths ranging from 6.5 to 16 feet bgs underlain by native silt, elastic silt, and silty and sandy gravel to the maximum depths explored, 20 feet bgs. The area of fill is shown in Figures 2 through 5.
- **Hydrogeology:** Groundwater was encountered between 8 and 11 feet bgs with the shallowest post-drilling static water level observed at 6.4 feet bgs at boring 3S-SBFA-1.
- **Fill Area:**
  - Methane and carbon dioxide were detected at concentrations of 38% and 22%, respectively, in the primary and replicate soil-vapor samples collected from 3S-SV-1 and at concentrations of 68% and 23%, respectively, in the soil-vapor sample collected from 3S-SV-4. Oxygen was detected at concentrations ranging from 0.62% to 1.1%. Carbon monoxide was not detected above laboratory RLs. Methane, carbon dioxide, hydrogen sulfide, oxygen, and carbon monoxide were measured in borings at concentrations up to 51.70 percent, 45.05 percent, 21 ppm, 20.22 percent, and 62 ppm, respectively. Methane and hydrogen sulfide concentrations are above screening criteria.
  - Metals were detected in all soil samples, with arsenic concentrations in boring 3S-SBFA-2 at 5 to 7 feet bgs exceeding the ODEQ RBC for the residential receptor scenario for the soil ingestion, dermal contact, and inhalation pathway, and selenium concentrations in borings 3S-SBFA-1 at 5 to 8 feet bgs, 3S-SBFA-2 at 5 to 6 feet bgs, and 3S-SBFA-3 at 5 to 8 feet bgs exceeding the ODEQ clean fill screening level. Other metals, including beryllium, chromium, copper, lead, nickel, and zinc, were detected at concentrations below the respective SLs.
  - PAHs were detected in one or more soil samples, with most detections in the samples collected from boring 3S-SBFA-2 at 1.5 to 3 feet bgs, boring 3S-SBFA-3 at 1.0 to 3.5 feet bgs, and boring 3S-SBFA-4 at 2 to 3 feet bgs. Benzo(a)pyrene concentrations exceeded the ODEQ RBC for the residential receptor scenario for the soil ingestion, dermal contact, and inhalation pathway in samples collected from boring 3S-SBFA-2 at 1.5 to 3 feet bgs, and boring 3S-SBFA-4 at 2 to 3 feet bgs and 5 to 8 feet bgs. Naphthalene concentrations exceeded the ODEQ RBC for the residential receptor scenario for the leaching to groundwater pathway in all samples except for those collected from boring 3S-SBFA-3 at 1 to 3.5 and 5 to 8 feet bgs.
  - TPH-g was detected at a concentration slightly below the ODEQ RBC for the residential receptor scenario for the leaching to groundwater pathway and the clean fill screening level in the sample collected from boring 3S-SBFA-4 at 5 to 8 feet bgs. TPH-mo was detected above laboratory RLs in all samples, with maximum concentrations in boring 3S-SBFA-1 at 1 to 3 feet bgs.
  - Groundwater analytical results indicate the presence of metals, with arsenic concentrations exceeding the ODEQ RBC for the residential receptor scenario for the soil ingestion and inhalation from tap water pathway in the samples collected from boring 3S-SBFA-3. Other metals, including lead, nickel, and zinc, were detected at concentrations below the respective ODEQ RBCs, where established.

  - PAHs in groundwater were detected at concentrations below ODEQ RBCs in the groundwater sample collected from boring 3S-SBFA-4. There were no PAH detections above laboratory RLs in samples collected from boring 3S-SBFA-3.
  - TPH-mo was detected above the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tap water pathway in the groundwater samples collected from boring 3S-SBFA-3. All other concentrations of TPH-g, TPH-d, and TPH-mo were below laboratory RLs.
- **HOT Area:** TPH-g, TPH-d, and TPH-mo were not detected above laboratory RLs.
- **Beneficial Use of Shallow Groundwater:** Shallow groundwater likely discharges to the irrigation ditch north of the Site which is connected to Hoquarton Slough and therefore has beneficial ecological use. No other beneficial use was determined. Drinking water within the vicinity of the Site is supplied by municipal water (City of Tillamook) and irrigation water is provided by surface water diversion. Therefore, drinking water is not considered a complete exposure pathway.
- **Ecological or Human Health Risk**:
  - **Soil:** No human-health or ecological risk is associated with soil at the Site, provided the wood waste fill material remains covered.
  - **Groundwater:** There are no current or future ecological or human health risks associated with groundwater at the Site provided it is not used for drinking water.
  - **Soil Vapor**: No current risk is associated with soil vapor at the Site. The potential for methane and hydrogen sulfide vapor intrusion represents a risk to future commercial and residential receptors if construction occurs on the footprint of the wood waste fill.

7 Recommendations

The following recommendations are provided based on the conclusions of the Phase II ESA:

- Due to significant methane and hydrogen sulfide concentrations in soil vapor, the soil in the fill area within the footprint of building construction should either be excavated and removed, or a vapor mitigation system should be installed in future buildings within the footprint of the fill to mitigate the potential for vapor intrusion into buildings.
- PAH-impacted fill should be capped to reduce exposure. If the fill is disturbed, it should be characterized and removed from the Site as non-hazardous waste.
- Based on the presence of metals, PAHs, and TPH, groundwater should not be used as a drinking water source.
- No further Site characterization is recommended for the Site prior to the development of a portion of the Site by the Client into residential housing. Remedial activities should be conducted during Site redevelopment as suggested above to protect future Site occupants from exposures identified.

- A Contaminated Media Management Plan should be prepared to assist with management of disturbed soil and satisfy the requirements of a stormwater construction permit (1200C, if determined to be required).

8 References

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Tables

Table 1
Soil-Vapor Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

Location Code	Field ID	Sample Depth (ft-bgs)	Date	Helium	Oxygen	Methane	Carbon Dioxide	Carbon Monoxide	Hydrogen Sulfide
				%	%	%	%	%/ppm[1]	ppm
3S-SBFA-1	Field Measurement	2.5	5/24/2024	NM	**16.13**	**12.06**	**5.18**	**8**	**3**
		5	5/24/2024	NM	**20.22**	**3.54**	**1.10**	0	**1**
3S-SBFA-2	Field Measurement	2.5	5/24/2024	NM	**16.82**	**11.27**	**7.66**	**2**	**11**
		5	5/24/2024	NM	**6.76**	**21.76**	**19.91**	**19**	**17**
		7.5	5/24/2024	NM	**2.66**	**23.17**	**21.70**	**57**	**19**
		10	5/24/2024	NM	**1.12**	**23.70**	**21.54**	**62**	**5**
3S-SBFA-3	Field Measurement	2.5	5/24/2024	NM	**19.37**	**3.19**	**3.07**	**3**	**12**
		5	5/24/2024	NM	**5.92**	**42.81**	**36.77**	**50**	**21**
		7.5	5/24/2024	NM	**1.55**	**51.70**	**45.02**	**56**	**21**
		10	5/24/2024	NM	**0.47**	**51.70**	**45.05**	**58**	**17**
3S-SBFA-4	Field Measurement	2.5	5/24/2024	NM	**18.62**	**6.59**	**2.33**	**4**	**14**
		5	5/24/2024	NM	**17.25**	**9.83**	**5.87**	**23**	**17**
		7.5	5/24/2024	NM	**12.90**	**18.47**	**9.53**	**49**	**18**
3S-SV-01	3S-SV-1	4.5	06/07/2024	<0.096	**1.1**	**38**	**22**	<0.019	NM
	3S-SV-1-REP	4.5	06/07/2024	<0.10	**1.0**	**38**	**22**	<0.021	NM
3S-SV-04	3S-SV-4	4.5	06/07/2024	<0.10	**0.62**	**68**	**23**	<0.021	NM

Note:
Detected concentrations are **bold-faced**
< = analyte not detected at or above laboratory reporting limit
[1] percent for laboratory analysis and ppm for field measurement
ft-bgs = feet below ground surface
ppm = parts per million
NM = not measured

Table 2
Soil Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

				Metal													PAHs						
				Antimony	Arsenic	Beryllium	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene
Location Code	**Sample Depth (ft-bgs)**	**Field ID**	**Date**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ODEQ Clean Fill (Coast Range Province)				0.55	12	2.8	0.54	240	100	34	0.11	160	1.5	0.41	5.4	140	0.36	11	0.25	120	6.8	0.73	0.11
ODEQ RBC - 2023 - Soil - Ingestion, Dermal Contact, and Inhalation - Construction Worker				-	*15*	*700*	*350*	-	*14,000*	*800*	*110*	*7,000*	-	*1,800*	-	-	-	-	*21,000*	-	*110,000*	*170*	*17*
ODEQ RBC - 2023 - Soil - Ingestion, Dermal Contact, and Inhalation - Residential				-	0.43	160	78	-	3,100	400	23	1,500	-	390	-	-	-	-	4,700	-	23,000	1.1	0.11
ODEQ RBC - 2023 - Soil - Leaching to GW - Residential				-	-	-	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	1.6	4.4
3S-SBFA-01	1 - 3	3S-SBFA-1-1.0-3.0	05/24/2024	<2.11	<2.11	**0.422**	<0.422	**6.31**	**16.4**	**4.54**	<0.169	**6.43**	<2.11	<0.422	<0.422	**57.8**	<0.15	<0.15	<0.0752	**0.152 D**	<0.0752	<0.0752	<0.113
	5 - 8	3S-SBFA-1-5.0-8.0	05/24/2024	<1.59	<1.59	**0.487**	<0.319	**6.42**	**15.6**	**3.99**	<0.127	**7.04**	**1.67**	<0.319	<0.319	**48.9**	<0.0852	<0.0852	<0.0427	**0.0564 D**	<0.0427	<0.0427	<0.0639
3S-SBFA-02	1.5 - 3	3S-SBFA-2-1.5-3.0	05/24/2024	<2.24	<2.24	**0.527**	<0.448	**8.77**	**20.9**	**8.22**	<0.179	**9.76**	<2.24	<0.448	<0.448	**72.4**	**0.122 D**	**0.162 D**	**0.17 D**	**0.785 D**	**0.173 D**	**0.0996 D**	**0.139 D**
	5 - 7	3S-SBFA-2-5.0-7.0	05/24/2024	<2.14	**4.20**	**0.821**	<0.429	**52.0**	**59.1**	**25.9**	<0.172	**43.6**	**3.15**	<0.429	<0.429	**98.6**	<0.135	<0.135	<0.0677	**0.0769 D**	<0.0677	<0.0677	<0.101
3S-SBFA-03	1 - 3.5	3S-SBFA-3-1.0-3.5	05/24/2024	<2.17	<2.17	<0.433	<0.433	**8.03**	**19.0**	**4.81**	<0.173	**11.4**	<2.17	<0.433	<0.433	**75.2**	<0.159	<0.159	<0.0798	<0.0798	<0.0798	<0.0798	<0.12
		3S-SBFA-3-1.0-3.5-DUP	05/24/2024	<2.14	<2.14	<0.427	<0.427	**7.24**	**21.0**	**5.08**	<0.171	**7.09**	<2.14	<0.427	<0.427	**64.9**	<0.11	<0.11	**0.0964 D**	**0.29 D**	**0.139 D**	**0.0598 D**	**0.0943 D**
	5 - 8	3S-SBFA-3-5.0-8.0	05/24/2024	<1.75	<1.75	**0.505**	<0.349	**20.5**	**32.3**	**5.10**	<0.140	**17.0**	**1.98**	<0.349	<0.349	**61.0**	<0.113	<0.113	<0.0567	<0.0567	<0.0567	<0.0567	<0.0849
3S-SBFA-04	2 - 3	3S-SBFA-4-2.0-3.0	05/24/2024	<1.38	<1.38	**0.289**	<0.275	**4.22**	**12.9**	**3.68**	<0.110	**4.58**	<1.38	<0.275	<0.275	**44.3**	<0.0986	<0.0986	**0.0650 D**	**0.265 D**	**0.11 D**	**0.117 D**	**0.207 D**
	5 - 8	3S-SBFA-4-5.0-8.0	05/24/2024	<2.02	<2.02	**0.445**	<0.405	**8.92**	**19.8**	**6.15**	<0.162	**9.51**	<2.02	<0.405	<0.405	**57.4**	<0.138	<0.138	<0.0692	<0.0692	<0.0692	<0.0692	**0.134 D**
3S-SBHOT-01	0 - 1	3S-SBHOT-1-0.0-1.0	05/24/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		3S-SBHOT-1-0.0-1.0-DUP	05/24/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 2
Soil Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

				PAHs													TPH		
				Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pentachlorophenol	Pyrene	TPH as Gasoline	TPH as Diesel	TPH as Motor Oil
Location Code	**Sample Depth (ft-bgs)**	**Field ID**	**Date**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
ODEQ Clean Fill (Coast Range Province)				1.1	25	11	3.1	0.11	0.002	10	3.7	1.1	0.077	5.5	0.066	10	31	1,100	2,800
ODEQ RBC - 2023 - Soil - Ingestion, Dermal Contact, and Inhalation - Construction Worker				*170*	-	*1,700*	*17,000*	*17*	-	*10,000*	*14,000*	*170*	*580*	-	*34*	*7,500*	*9,700*	*4,600*	*11,000*
ODEQ RBC - 2023 - Soil - Ingestion, Dermal Contact, and Inhalation - Residential				1.1	-	11	110	0.11	-	2,400	3,100	1.1	5.3	-	1	1,800	1,200	1,100	2,800
ODEQ RBC - 2023 - Soil - Leaching to GW - Residential				-	-	-	-	-	-	-	-	-	0.077	-	0.066	-	31	9,500	-
3S-SBFA-01	1 - 3	3S-SBFA-1-1.0-3.0	05/24/2024	<0.113	<0.0752	<0.113	<0.0752	<0.0752	**0.108 D**	**0.249 D**	<0.0752	<0.0752	**0.48 D**	**0.419 D**	<0.752	**0.207 D**	<41.0	<37.7	**1,350 F-03**
	5 - 8	3S-SBFA-1-5.0-8.0	05/24/2024	<0.0639	<0.0427	<0.0639	<0.0427	<0.0427	<0.0427	**0.0882 D**	**0.0484 D Q-42**	<0.0427	**0.163 D**	**0.219 D**	<0.427	**0.0796 D**	<31.2	<28.8	**547 F-03**
3S-SBFA-02	1.5 - 3	3S-SBFA-2-1.5-3.0	05/24/2024	**0.17 D**	<0.0560	<0.0839	**0.131 D**	<0.0560	**0.427 D**	**0.727 D**	**0.114 D**	<0.0560	**2.98 D**	**1.4 D**	<0.56	**0.557 D**	<28.4	<38.0	**1,120 F-03**
	5 - 7	3S-SBFA-2-5.0-7.0	05/24/2024	<0.101	<0.0677	<0.101	<0.0677	<0.0677	<0.0677	**0.186 D**	<0.0677	<0.0677	**0.166 D**	**0.288 D**	<0.677	**0.153 D**	<38.1	<35.8	**925 F-03**
3S-SBFA-03	1 - 3.5	3S-SBFA-3-1.0-3.5	05/24/2024	<0.12	<0.0798	<0.12	<0.0798	<0.0798	<0.0798	<0.0798	<0.0798	<0.0798	<0.159	<0.0798	<0.798	<0.0798	<43.6	<40.2	**407 F-03**
		3S-SBFA-3-1.0-3.5-DUP	05/24/2024	**0.0910 D**	<0.0550	<0.0824	**0.0769 D**	<0.0550	**0.123 D**	**0.413 D**	**0.399 D**	<0.0550	**1.12 D**	**0.946 D**	<0.55	**0.385 D**	<41.3	<37.5	**1,300 F-03**
	5 - 8	3S-SBFA-3-5.0-8.0	05/24/2024	<0.0849	<0.0567	<0.0849	<0.0567	<0.0567	<0.0567	**0.0575 D**	<0.0567	<0.0567	<0.113	**0.102 D**	<0.567	**0.0621 D**	<30.3	<28.5	**522 F-03**
3S-SBFA-04	2 - 3	3S-SBFA-4-2.0-3.0	05/24/2024	**0.234 D**	**0.121 D**	**0.0838 D**	**0.149 D**	<0.0494	**0.218 D**	**0.495 D**	<0.0494	**0.119 D**	**1.43 D**	**0.736 D**	<0.494	**0.359 D**	<25.6	<24.9	**567 F-03**
	5 - 8	3S-SBFA-4-5.0-8.0	05/24/2024	**0.17 D**	**0.0858 D**	<0.104	**0.107 D**	<0.0692	<0.0692	**0.181 D**	<0.0692	**0.0730 D**	**0.345 D**	**0.264 D**	<0.692	**0.152 D**	**30.3 F-03**	<34.9	**540 F-03**
3S-SBHOT-01	0 - 1	3S-SBHOT-1-0.0-1.0	05/24/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	<31.9	<79.9	<160
		3S-SBHOT-1-0.0-1.0-DUP	05/24/2024	-	-	-	-	-	-	-	-	-	-	-	-	-	<31.2	<77.9	<156

Note:
Detected concentrations are **bold-faced**
< = analyte not detected at or above laboratory reporting limit
- = not available
D = Reported result is from a dilution
F-03 = The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
ft-bgs = feet below ground surface
mg/kg = milligrams per kilogram
ODEQ = Oregon Department of Environmental Quality
PAHs = polycyclic aromatic hydrocarbons
Q-42 = Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
RBC = Risk-Based Concentration

Table 3
Groundwater Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

				Metal								
				Antimony	Arsenic	Beryllium	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel
Location Code	**Sample Depth (ft-bgs)**	**Field ID**	**Date**	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ODEQ RBC - 2023 - Groundwater in Excavation - Construction and Excavation Worker				-	6,300	270,000	130,000	-	5,400,000	-	-	-
ODEQ RBC - 2023 - Groundwater - Ingestion and Inhalation from Tapwater - Residential				-	0.052	40	20	-	800	15	6	400
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Chronic				190	150	11	0.094	11[1]	1.4	0.54	0.012	16
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Acute				900	340	93	0.49	16[1]	2.3	14	1.4	140
3S-SBFA-03	11 - 16	3S-SBFA-3-GW-11-16	05/24/2024	<1.00	**1.34**	<0.200	<0.200	<2.00	<2.00	<0.200	<0.0800	**10.4**
		3S-SBFA-3-GW-11-16-DUP	05/24/2024	<1.00	**1.40**	<0.200	<0.200	<2.00	<2.00	**1.33**	<0.0800	**9.28**
3S-SBFA-04	13 - 18	3S-SBFA-4-GW-13-18	05/24/2024	<1.00	<1.00	<0.200	<0.200	<2.00	<2.00	<0.200	<0.0800	**6.14**

Table 3
Groundwater Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

				Metal				TPH			PAHs		
				Selenium	Silver	Thallium	Zinc	TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene
Location Code	**Sample Depth (ft-bgs)**	**Field ID**	**Date**	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ODEQ RBC - 2023 - Groundwater in Excavation - Construction and Excavation Worker				-	1,100,000	-	-	14,000	-	-	-	-	-
ODEQ RBC - 2023 - Groundwater - Ingestion and Inhalation from Tapwater - Residential				-	100	-	-	110	100	300	-	-	510
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Chronic				4.6	0.1	6	36	440	640	640	6.1	4.7	15
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Acute				20	0.3	54	36	-	-	-	110	42	19
3S-SBFA-03	11 - 16	3S-SBFA-3-GW-11-16	05/24/2024	<1.00	<0.200	<0.200	**7.14**	<100	<190	**7,360**	<0.0471	<0.0471	<0.0235
		3S-SBFA-3-GW-11-16-DUP	05/24/2024	<1.00	<0.200	<0.200	**7.86**	<100	<217	**4,720**	<0.0388	<0.0388	<0.0194
3S-SBFA-04	13 - 18	3S-SBFA-4-GW-13-18	05/24/2024	<1.00	<0.200	<0.200	**5.45**	<104	<260	<260	**0.103**	**0.0791**	**0.253**

Table 3
Groundwater Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

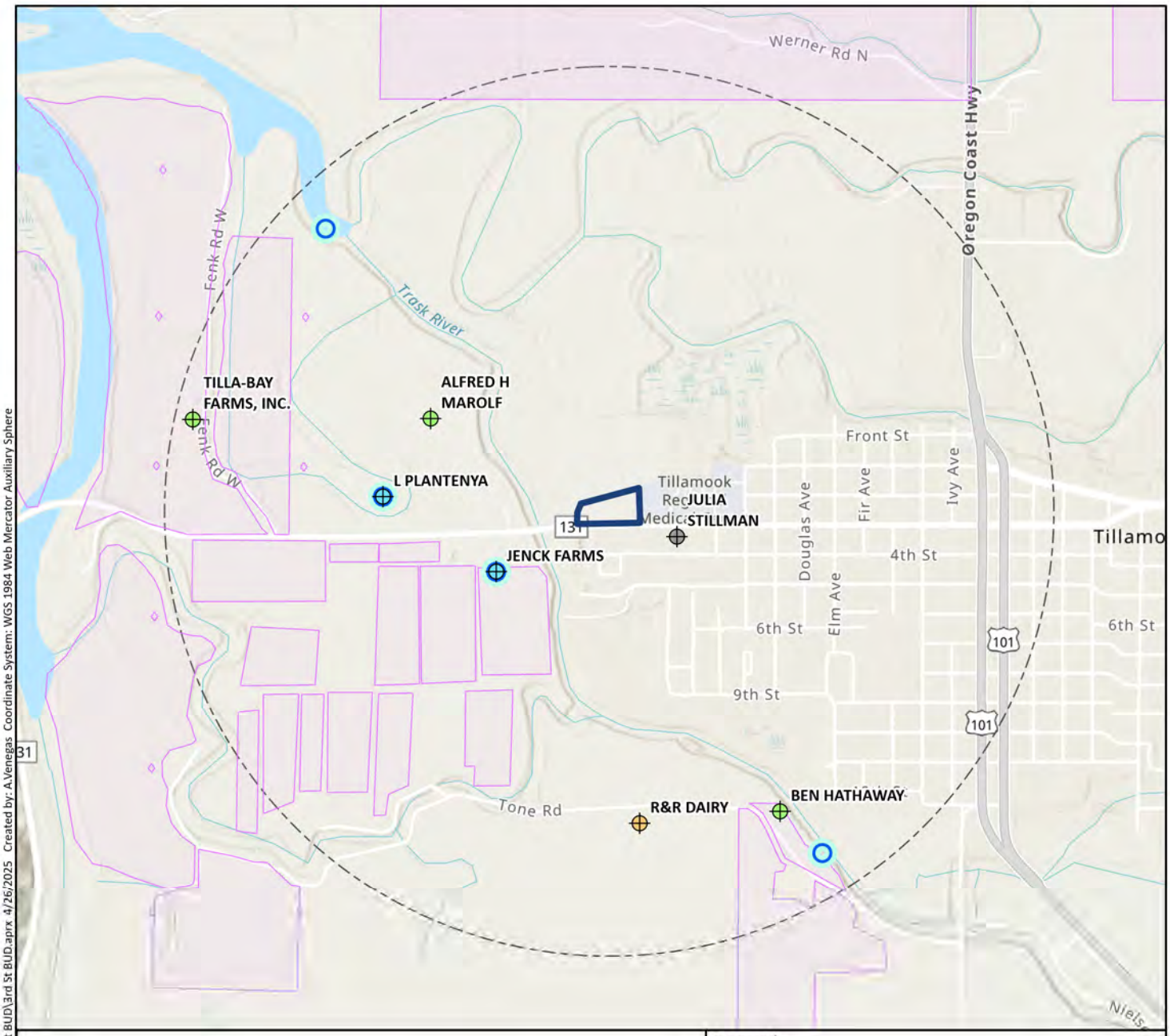
				PAHs							
				Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene
Location Code	**Sample Depth (ft-bgs)**	**Field ID**	**Date**	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ODEQ RBC - 2023 - Groundwater in Excavation - Construction and Excavation Worker				-	-	-	-	-	-	-	-
ODEQ RBC - 2023 - Groundwater - Ingestion and Inhalation from Tapwater - Residential				-	-	0.03	0.025	0.25	-	-	-
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Chronic				13	0.02	4.7	0.06	2.6	0.012	0.06	4.7
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Acute				120	0.18	42	0.54	23	0.19	1.3	42
3S-SBFA-03	11 - 16	3S-SBFA-3-GW-11-16	05/24/2024	<0.0235	<0.0235	<0.0235	<0.0353	<0.0353	<0.0235	<0.0353	<0.0235
		3S-SBFA-3-GW-11-16-DUP	05/24/2024	<0.0194	<0.0194	<0.0194	<0.0291	<0.0291	<0.0194	<0.0291	<0.0194
3S-SBFA-04	13 - 18	3S-SBFA-4-GW-13-18	05/24/2024	**0.307**	<0.0206	<0.0206	<0.0309	<0.0309	<0.0206	<0.0309	<0.0206

Table 3
Groundwater Analytical Results
Phase II Environmental Assessment Report
910 West 3rd Street Property

				PAHs								
				Dibenz(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pentachlorophenol	Pyrene
Location Code	**Sample Depth (ft-bgs)**	**Field ID**	**Date**	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
ODEQ RBC - 2023 - Groundwater in Excavation - Construction and Excavation Worker				-	-	-	-	-	500	-	53	-
ODEQ RBC - 2023 - Groundwater - Ingestion and Inhalation from Tapwater - Residential				0.025	-	-	280	-	0.17	-	0.044	110
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Chronic				0.012	4	0.8	19	0.012	21	2.3	6.7	4.6
ODEQ Eco RBC - 2021 - Freshwater Protection of Aquatic Life -Acute				0.28	36	3.7	110	0.27	170	31	8.7	42
3S-SBFA-03	11 - 16	3S-SBFA-3-GW-11-16	05/24/2024	<0.0235	<0.0235	<0.0235	<0.0235	<0.0235	<0.0471	<0.0235	<0.235	<0.0235
		3S-SBFA-3-GW-11-16-DUP	05/24/2024	<0.0194	<0.0194	<0.0194	<0.0194	<0.0194	<0.0388	<0.0194	<0.194	<0.0194
3S-SBFA-04	13 - 18	3S-SBFA-4-GW-13-18	05/24/2024	<0.0206	**0.128**	**0.0814**	**0.0354**	<0.0206	**2.90**	**0.154**	<0.206	**0.0592**

Note:
Detected concentrations are **bold-faced**
< = analyte not detected at or above laboratory reporting limit
µg/L = micrograms per Liter
- = not available
1 CrIV toxicity.
EB = Equipment Blank
ft-bgs = feet below ground surface
ODEQ = Oregon Department of Environmental Quality
PAHs = polycyclic aromatic hydrocarbons
RBC = Risk-Based Concentration
TPH = total petroleum hydrocarbons

Figures



Notes:
- Well locations and water rights from Oregon Water Resources Department databases.
- All locations are approximate.

Service Layer Credits: World Topographic Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community
World Hillshade: Esri, NASA, NGA, USGS, FEMA

0 1,000 2,000 4,000 Feet

1 inch = 2,000 feet

N

Legend

Water Wells
- Domestic Water Well
- Irrigation Water Well
- Livestock Water Well
- Other Water Well

Water Right - Point of Diversion
Water Right - Point of Use
1-Mile Radius
Site Location/Locality of the Facility

SAFETY FIRST

terraphase engineering

CLIENT: Maker Development Studios LLC

PROJECT: 930 West 3rd Street Property
930 3rd Street, Tillamook, Oregon

PROJECT NUMBER: O067.001.002

Site Location

FIGURE 1

File: N:\GIS\Prj\O067.001_930 W 3rd St Dev_Maker Dev Studios\Pro Project\.002 GW BUD\3rd St BUD\3rd St BUD.aprx 4/26/2025 Created by: A.Venegas Coordinate System: WGS 1984 Web Mercator Auxiliary Sphere

Legend

- Soil Sample
- Soil and Groundwater Samples
- Soil and Soil Vapor Samples
- Soil, Soil Vapor, and Groundwater Samples
- Surface Soil Sample
- Geotechnical Boring Location
- GeoDesign Boring Locations (Oregon Water Resources Department)
- Area of Wood Waste Fill

Proposed Development

- Building
- Paved Area
- Site Boundary

Notes:

- All locations are approximate.
- Proposed development based on conceptual site plan drawings prepared by West of West, dated July 17, 2024.

Aerial Imagery Source: Nearmap (June 3, 2023)

0 30 60 120 Feet

1 inch = 60 feet

N

SAFETY FIRST

terraphase engineering

CLIENT: Maker Development Studios LLC

PROJECT: 930 West 3rd Street Property
930 3rd Street, Tillamook, Oregon

PROJECT NUMBER: O067.001.002

Site Map

FIGURE 2

File: N:\GIS\Prj\O067.001_930 W 3rd St Dev_Maker Dev Studios\MXDs\{20250426} Figure 2 - Site Map.mxd 4/26/2025 Created by: ALV Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet

Boring	3S-SBFA-1		
Sample	**3S-SV-1**	**3S-SV-1-REP**	**N/A**
Date	6/7/2024		5/24/2024
Depth	4.5		2.5-5
Analyte	Laboratory (%)		Field (ppm)
Methane	**38**	**38**	**12.06**
Hydrogene Sulfide	NM	NM	**3**
Oxygen	**1.1**	**1**	**20.22**
Carbon Dioxide	**22**	**22**	**5.18**
Carbon Monoxide	<0.019	<0.021	**8**

Boring	3S-SBFA-3
Date	5/24/2024
Depth	2.5-10
Analyte	Field (ppm)
Methane	**51.70**
Hydrogene Sulfide	**21**
Oxygen	**19.37**
Carbon Dioxide	**45.05**
Carbon Monoxide	**58**

Boring	3S-SBFA-2
Date	5/24/2024
Depth	2.5-10
Analyte	Field (ppm)
Methane	**23.70**
Hydrogene Sulfide	**19**
Oxygen	**16.82**
Carbon Dioxide	**21.70**
Carbon Monoxide	**62**

Boring	3S-SBFA-4	
Sample	**3S-SV-4**	**N/A**
Date	6/7/2024	5/24/2024
Depth	4.5	2.5-7.5
Analyte	Laboratory (%)	Field (ppm)
Methane	**68**	**18.47**
Hydrogene Sulfide	NM	**18**
Oxygen	**0.62**	**18.62**
Carbon Dioxide	**23**	**9.53**
Carbon Monoxide	<0.021	**49**

Proposed Retention Pond

Proposed Community Garden

Proposed Playground & Outdoor Gym

Proposed Parcel B

Proposed Parcel A

3rd Street (Netarts Highway 131)

Existing Residence (930 3rd St.)

Legend

- Soil Vapor Sample
- Soil Boring with Soil Vapor Field Measurements
- Area of Wood Waste Fill

Proposed Development

- Building
- Paved Area
- Site Boundary

Notes:

- All locations are approximate.
- All results are shown in micrograms per cubic meter.
- **Bold text** indicates a detection above laboratory reporting limits.
- NM = not measured
- Results shown are highest field measured concentrations, in addition to laboratory analytical results for soil vapor samples 3S-SV-01 and 3S-SV-04, collected from borings 3S-SBFA-1 and 3S-SBFA-4, respectively.
- Proposed development based on conceptual site plan drawings prepared by West of West, dated July 17, 2024.

Aerial Imagery Source: Nearmap (June 3, 2023)

0 30 60 120 Feet

1 inch = 60 feet

N

SAFETY FIRST

terraphase engineering

CLIENT: Maker Development Studios LLC

PROJECT: 930 West 3rd Street Property
930 3rd Street, Tillamook, Oregon

PROJECT NUMBER: O067.001.002

Soil Vapor Sampling Results

FIGURE 3

File: N:\GIS\Pr\[\O067.001_930 W 3rd St Dev_Maker Dev Studios\MXDs\[20250426] Figure 3 - Soil Vapor Sampling Results.mxd 4/26/2025 Created by: ALV Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet

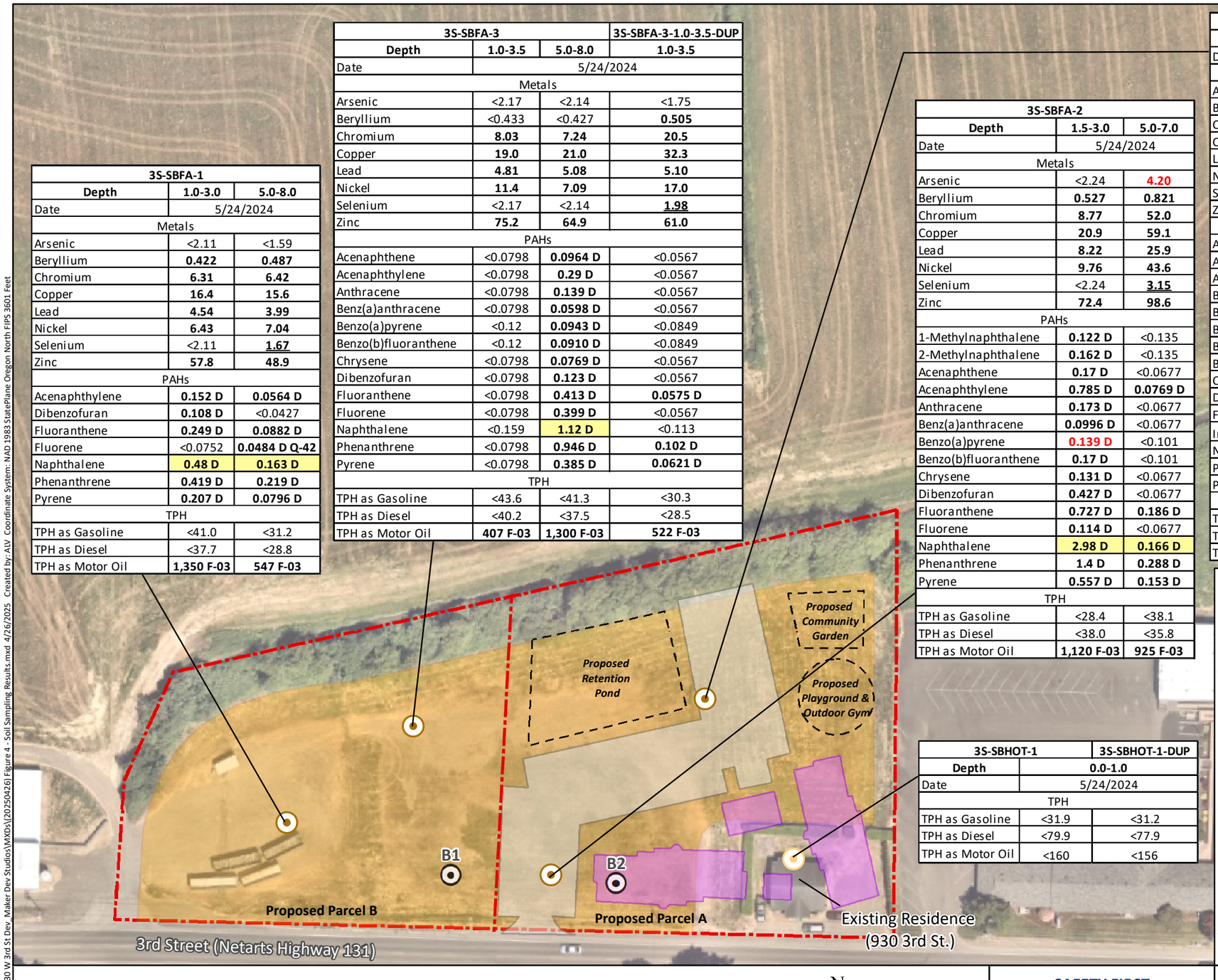
3S-SBFA-1		
Depth	**1.0-3.0**	**5.0-8.0**
Date	5/24/2024	
Metals		
Arsenic	<2.11	<1.59
Beryllium	**0.422**	**0.487**
Chromium	**6.31**	**6.42**
Copper	**16.4**	**15.6**
Lead	**4.54**	**3.99**
Nickel	**6.43**	**7.04**
Selenium	<2.11	**1.67**
Zinc	**57.8**	**48.9**
PAHs		
Acenaphthylene	**0.152 D**	**0.0564 D**
Dibenzofuran	**0.108 D**	<0.0427
Fluoranthene	**0.249 D**	**0.0882 D**
Fluorene	<0.0752	**0.0484 D Q-42**
Naphthalene	**0.48 D**	**0.163 D**
Phenanthrene	**0.419 D**	**0.219 D**
Pyrene	**0.207 D**	**0.0796 D**
TPH		
TPH as Gasoline	<41.0	<31.2
TPH as Diesel	<37.7	<28.8
TPH as Motor Oil	**1,350 F-03**	**547 F-03**

3S-SBFA-3			3S-SBFA-3-1.0-3.5-DUP
Depth	**1.0-3.5**	**5.0-8.0**	**1.0-3.5**
Date	5/24/2024		
Metals			
Arsenic	<2.17	<2.14	<1.75
Beryllium	<0.433	<0.427	**0.505**
Chromium	**8.03**	**7.24**	**20.5**
Copper	**19.0**	**21.0**	**32.3**
Lead	**4.81**	**5.08**	**5.10**
Nickel	**11.4**	**7.09**	**17.0**
Selenium	<2.17	<2.14	**1.98**
Zinc	**75.2**	**64.9**	**61.0**
PAHs			
Acenaphthene	<0.0798	**0.0964 D**	<0.0567
Acenaphthylene	<0.0798	**0.29 D**	<0.0567
Anthracene	<0.0798	**0.139 D**	<0.0567
Benz(a)anthracene	<0.0798	**0.0598 D**	<0.0567
Benzo(a)pyrene	<0.12	**0.0943 D**	<0.0849
Benzo(b)fluoranthene	<0.12	**0.0910 D**	<0.0849
Chrysene	<0.0798	**0.0769 D**	<0.0567
Dibenzofuran	<0.0798	**0.123 D**	<0.0567
Fluoranthene	<0.0798	**0.413 D**	**0.0575 D**
Fluorene	<0.0798	**0.399 D**	<0.0567
Naphthalene	<0.159	**1.12 D**	<0.113
Phenanthrene	<0.0798	**0.946 D**	**0.102 D**
Pyrene	<0.0798	**0.385 D**	**0.0621 D**
TPH			
TPH as Gasoline	<43.6	<41.3	<30.3
TPH as Diesel	<40.2	<37.5	<28.5
TPH as Motor Oil	**407 F-03**	**1,300 F-03**	**522 F-03**

3S-SBFA-2		
Depth	**1.5-3.0**	**5.0-7.0**
Date	5/24/2024	
Metals		
Arsenic	<2.24	**4.20**
Beryllium	**0.527**	**0.821**
Chromium	**8.77**	**52.0**
Copper	**20.9**	**59.1**
Lead	**8.22**	**25.9**
Nickel	**9.76**	**43.6**
Selenium	<2.24	**3.15**
Zinc	**72.4**	**98.6**
PAHs		
1-Methylnaphthalene	**0.122 D**	<0.135
2-Methylnaphthalene	**0.162 D**	<0.135
Acenaphthene	**0.17 D**	<0.0677
Acenaphthylene	**0.785 D**	**0.0769 D**
Anthracene	**0.173 D**	<0.0677
Benz(a)anthracene	**0.0996 D**	<0.0677
Benzo(a)pyrene	**0.139 D**	<0.101
Benzo(b)fluoranthene	**0.17 D**	<0.101
Chrysene	**0.131 D**	<0.0677
Dibenzofuran	**0.427 D**	<0.0677
Fluoranthene	**0.727 D**	**0.186 D**
Fluorene	**0.114 D**	<0.0677
Naphthalene	**2.98 D**	**0.166 D**
Phenanthrene	**1.4 D**	**0.288 D**
Pyrene	**0.557 D**	**0.153 D**
TPH		
TPH as Gasoline	<28.4	<38.1
TPH as Diesel	<38.0	<35.8
TPH as Motor Oil	**1,120 F-03**	**925 F-03**

3S-SBFA-4		
Depth	**2.0-3.0**	**5.0-8.0**
Date	5/24/2024	
Metals		
Arsenic	<1.38	<2.02
Beryllium	**0.289**	**0.445**
Chromium	**4.22**	**8.92**
Copper	**12.9**	**19.8**
Lead	**3.68**	**6.15**
Nickel	**4.58**	**9.51**
Selenium	<1.38	<2.02
Zinc	**44.3**	**57.4**
PAHs		
Acenaphthene	**0.0650 D**	<0.0692
Acenaphthylene	**0.265 D**	<0.0692
Anthracene	**0.11 D**	<0.0692
Benz(a)anthracene	**0.117 D**	<0.0692
Benzo(a)pyrene	**0.207 D**	**0.134 D**
Benzo(b)fluoranthene	**0.234 D**	**0.17 D**
Benzo(g,h,i)perylene	**0.121 D**	**0.0858 D**
Benzo(k)fluoranthene	**0.0838 D**	<0.104
Chrysene	**0.149 D**	**0.107 D**
Dibenzofuran	**0.218 D**	<0.0692
Fluoranthene	**0.495 D**	**0.181 D**
Indeno(1,2,3-c,d)pyrene	**0.119 D**	**0.0730 D**
Naphthalene	**1.43 D**	**0.345 D**
Phenanthrene	**0.736 D**	**0.264 D**
Pyrene	**0.359 D**	**0.152 D**
TPH		
TPH as Gasoline	<25.6	**30.3 F-03**
TPH as Diesel	<24.9	<34.9
TPH as Motor Oil	**567 F-03**	**540 F-03**

3S-SBHOT-1	3S-SBHOT-1-DUP
Depth	**0.0-1.0**
Date	5/24/2024
TPH	
TPH as Gasoline	<31.9	<31.2
TPH as Diesel	<79.9	<77.9
TPH as Motor Oil	<160	<156



Legend
- Soil Sample
- Surface Soil Sample
- GeoDesign Boring Locations (Oregon Water Resources Department)
- Area of Wood Waste Fill

Proposed Development
- Building
- Paved Area
- Site Boundary

Notes:
- All locations are approximate.
- All results are shown in milligrams per kilogram.
- All depths are feet below ground surface.
- **Bold text** indicates a detection above laboratory reporting limits.
- Red text indicates an exceedance of ODEQ RBC for the residential receptor scenario for the soil ingestion, dermal contact, and inhalation pathway.
- Highlighted text indicates an exceedance of the ODEQ RBC for the residential receptor scenario for the leaching to groundwater pathway.
- Underlined text indicates an exceedance of the ODEQ clean fill screening level.
- PAHs shown only where concentrations are above laboratory reporting limits.
- Proposed development based on conceptual site plan drawings prepared by West of West, dated July 17, 2024.

Abbreviations:
D = Reported result is from a dilution
F-03 = The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
Q-42 = Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits.
PAHs = Polycyclic Aromatic Hydrocarbons
TPHs - Total Petroleum Hydrocarbons
UST = Underground Storage Tank

Aerial Imagery Source: Nearmap (June 3, 2023)

0 40 80 160 Feet
1 inch = 80 feet

N

SAFETY FIRST

terraphase engineering

CLIENT: Maker Development Studios LLC

PROJECT: 930 West 3rd Street Property
930 3rd Street, Tillamook, Oregon

PROJECT NUMBER: O067.001.002

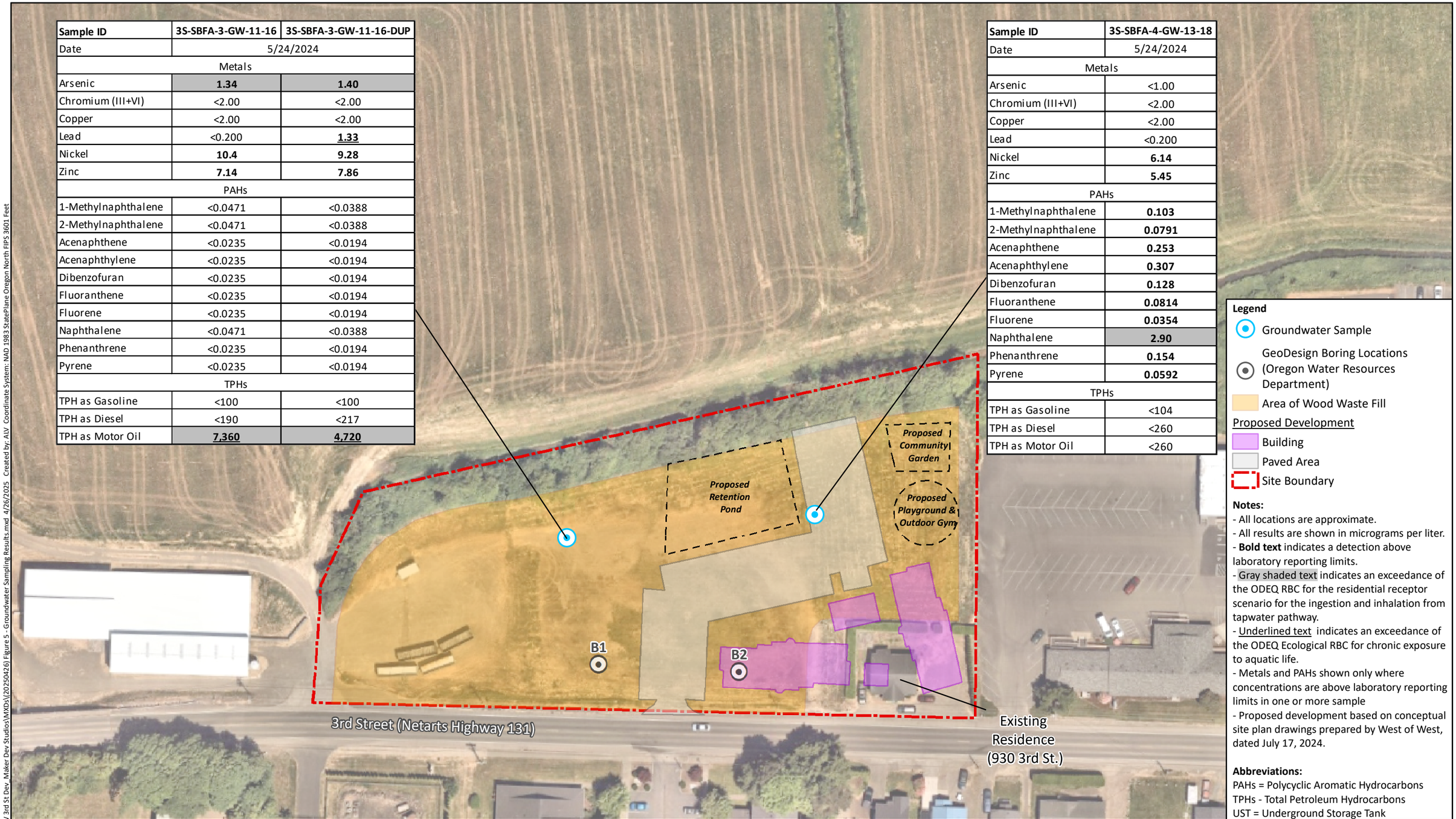
Soil Sampling Results

FIGURE 4

File: N:\GIS\Prj\O067.001_930 W 3rd St Dev_Maker Dev Studios\MXDs\(20250426) Figure 4 - Soil Sampling Results.mxd 4/26/2025 Created by: AlV Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet

Sample ID	3S-SBFA-3-GW-11-16	3S-SBFA-3-GW-11-16-DUP
Date	5/24/2024	
Metals		
Arsenic	**1.34**	**1.40**
Chromium (III+VI)	<2.00	<2.00
Copper	<2.00	<2.00
Lead	<0.200	**1.33**
Nickel	**10.4**	**9.28**
Zinc	**7.14**	**7.86**
PAHs		
1-Methylnaphthalene	<0.0471	<0.0388
2-Methylnaphthalene	<0.0471	<0.0388
Acenaphthene	<0.0235	<0.0194
Acenaphthylene	<0.0235	<0.0194
Dibenzofuran	<0.0235	<0.0194
Fluoranthene	<0.0235	<0.0194
Fluorene	<0.0235	<0.0194
Naphthalene	<0.0471	<0.0388
Phenanthrene	<0.0235	<0.0194
Pyrene	<0.0235	<0.0194
TPHs		
TPH as Gasoline	<100	<100
TPH as Diesel	<190	<217
TPH as Motor Oil	**7,360**	**4,720**

Sample ID	3S-SBFA-4-GW-13-18
Date	5/24/2024
Metals	
Arsenic	<1.00
Chromium (III+VI)	<2.00
Copper	<2.00
Lead	<0.200
Nickel	**6.14**
Zinc	**5.45**
PAHs	
1-Methylnaphthalene	**0.103**
2-Methylnaphthalene	**0.0791**
Acenaphthene	**0.253**
Acenaphthylene	**0.307**
Dibenzofuran	**0.128**
Fluoranthene	**0.0814**
Fluorene	**0.0354**
Naphthalene	**2.90**
Phenanthrene	**0.154**
Pyrene	**0.0592**
TPHs	
TPH as Gasoline	<104
TPH as Diesel	<260
TPH as Motor Oil	<260



Legend

- Groundwater Sample
- GeoDesign Boring Locations (Oregon Water Resources Department)
- Area of Wood Waste Fill

Proposed Development

- Building
- Paved Area
- Site Boundary

Notes:

- All locations are approximate.
- All results are shown in micrograms per liter.
- **Bold text** indicates a detection above laboratory reporting limits.
- Gray shaded text indicates an exceedance of the ODEQ RBC for the residential receptor scenario for the ingestion and inhalation from tapwater pathway.
- Underlined text indicates an exceedance of the ODEQ Ecological RBC for chronic exposure to aquatic life.
- Metals and PAHs shown only where concentrations are above laboratory reporting limits in one or more sample
- Proposed development based on conceptual site plan drawings prepared by West of West, dated July 17, 2024.

Abbreviations:

PAHs = Polycyclic Aromatic Hydrocarbons
TPHs - Total Petroleum Hydrocarbons
UST = Underground Storage Tank

Aerial Imagery Source: Nearmap (June 3, 2023)

0 40 80 160 Feet

1 inch = 80 feet

N

SAFETY FIRST

terraphase engineering

CLIENT: Maker Development Studios LLC

PROJECT: 930 West 3rd Street Property
930 3rd Street, Tillamook, Oregon

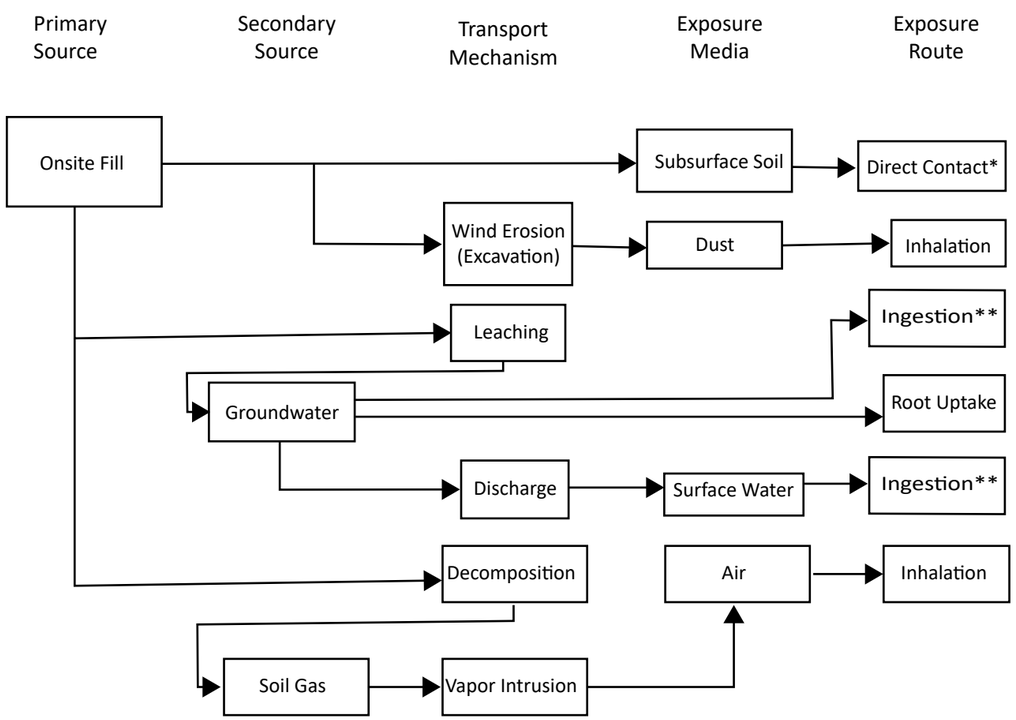
PROJECT NUMBER: O067.001.002

Groundwater Sampling Results

FIGURE 5

File: N:\GIS\Prj\O067.001_930 W 3rd St Dev_Maker Dev Studios\MXDs\(20250426) Figure 5 - Groundwater Sampling Results.mxd 4/26/2025 Created by: ALV Coordinate System: NAD 1983 StatePlane Oregon North FIPS 3601 Feet

Pathways



Receptors

Residential		Occupational		Construction/ Excaavation Worker		Trespasser		Plants		Invertebrates		Birds		Mammals		Aquatic Life	
—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	○	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	○	○	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	○	○	○	○	○	○	○	○
—	○	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Current	Future	Current	Future	Current	Future	Current	Future	Current	Future	Current	Future	Current	Future	Current	Future	Current	Future

Notes:

* "Direct Contact" includes incidential ingestion, dermal contact, and inhalation from soil.

** "Ingestion" includes dermal contact and inhalation from tap water or surface water.

○ Potentially complete pathway

— Incomplete pathway

SAFETY FIRST	CLIENT: Maker Development Studios LLC	**Conceptual Site Model**
terraphase engineering	PROJECT: Phase II ESA 930 West 3rd Street Tillamook, OR	
	PROJECT NUMBER: O067.001.002	**FIGURE 6**

Appendix A

Field Notes

terraphase engineering

Daily Field Log

Site: Tillamook Brownfields

Tillamook County,Oregon

Project Number: O053

By: Adrienne Venegas

Date	05/24/2024	Contractor	Holocene
Staff On-Site	Adrienne Venegas	Crew	Tyler and Casey
Staff From Time	06:09	From Time	
Staff To Time		To Time	
Weather	Cloudy	Tailgate Meeting?	YES
Equipment		Remarks	

Work Summary

Time	Notes
06:09	TEI on site at Wheeler to continue collecting groundwater sample after allowing to recharge for ~10 hrs.
06:30	WS-SB-GW-2 complete. WS-SB-GW-4 needs half of unpreserved 1L amber.
06:35	Off site
08:40	TEI and Holocene and Dana on site at 3rd St. Discuss plan and TGM
09:04	Prepping for drilling. Property owner on site to discuss investigation and intended brownfield area
09:39	Set up at SBFA-4

Picture taken at: 09:39

Caption: Set up at SBFA-4

Latitude: 45.4568575440744

Longitude: -123.8568124653061

09:55	Collecting agricultural samples

Picture taken at: 10:00

Caption: Area of 3S-SBA-COMP-1

Latitude: 45.46301438720722

Longitude: -123.8654327915819

Time	Notes
	 Picture taken at: 10:11 Caption: Soils encountered in field - loose to medium dense, silty sand, fine to coarse grained (predominantly fine), low plasticity silt, with trace to some gravel (0-5%) Latitude: 45.46307245512901 Longitude: -123.8651908654601
	 Picture taken at: 11:16 Caption: Area of 3S-SBA-COMP-2 Latitude: 45.45772870825012 Longitude: -123.8582042428213
	 Picture taken at: 11:30 Caption: Area of 3S-SBA-COMP-3 Latitude: 45.45770757063356 Longitude: -123.860255542957
12:30	Assisting with groundwater samples.
	 Picture taken at: 13:29 Caption: Sheen observed when purging 3S-SBFA-4-GW-13-18 Latitude: 45.45687449497861 Longitude: -123.8567437445564
13:29	Sampling 3S-SBFA-4-GW-13-18

Time	Notes
15:13	Sampling 3S-SBFA-3-GW-11-16 and DUP
17:13	TEI off site

Daily Field Log

Site: Tillamook Brownfields

Tillamook County,Oregon

Project Number: O053

By: Don Malkemus

Date	05/24/2024	Contractor	Holocene Drilling
Staff On-Site	Adrienne Venegas, Don Malkemus	Crew	Casey Newman, Tyler Sagon
Staff From Time	06:30	From Time	08:30
Staff To Time	17:30	To Time	16:09
Weather	Partly Sunny	Tailgate Meeting?	YES
Equipment	6011 DT	Remarks	

Work Summary

Drill, conduct methane monitoring, collect soil and groundwater samples

Time	Notes
06:30	Begin loading equipment
06:40	Calibrate meters. PID: Pre calibration 0.0 post calibration 0.0. Post calibration 100.0
07:05	Optimal gas meter zeroed in ambient air. Reading 0.00 CH4, 0.02 CO2, 20.91 O2, 0 ppm H2S, 0 CO, and 79.08 N2
08:21	Onsite
08:35	Holocene, HEG onsite. Health and safety tailgate
08:46	Begin unloading, set up on 3S-SBFA-4
09:09	Don Aufdemauer onsite. Points out the former AST location. Points out the property line, effectively severing the farmland from the project.
09:35	Start drilling 3S-SBFA-4

Picture taken at: 09:36

Caption: 3S-SBFA-4

Latitude: 45.45678913173698

Longitude: -123.8566730726703

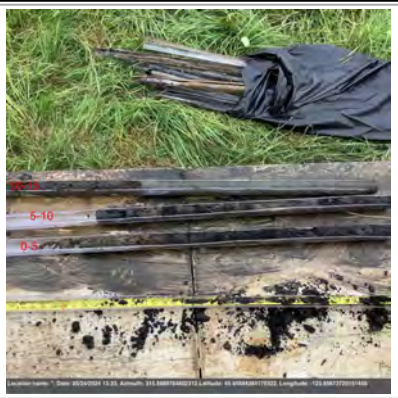
Time	Notes
	 Picture taken at: 10:06 Caption: 3S-SBFA-4. 7.5 feet bgs methane. Max was 23.46 percent Latitude: 45.45684651707144 Longitude: -123.8567725945973
	 Picture taken at: 10:08 Caption: 3S-SBFA-4. 5 feet bgs methane. Latitude: 45.45686440993489 Longitude: -123.8567921645564
	 Picture taken at: 10:08 Caption: 3S-SBFA-4. 2.5 feet bgs methane. Latitude: 45.45685228843793 Longitude: -123.8567580873682
10:09	Water is at 8.2 feet bgs. Collect downhole methane measurements at 2.5, 5, and 7.5 feet bgs
	 Picture taken at: 10:12 Caption: 3S-SBFA-4 Latitude: 45.45689382936401 Longitude: -123.856782543746
10:30	Start drilling 3S-SBFA-3

Time	Notes
	 Picture taken at: 10:43 Caption: 3S-SBFA-3 Latitude: 45.45662604087894 Longitude: -123.8574044321651
	 Picture taken at: 10:54 Caption: 3S-SBFA-3 Latitude: 45.4568853662304 Longitude: -123.8567519776254
10:59	Water in 3S-SBFA-3 at 10.5 feet. Conduct methane monitoring at 10, 7.5, 5, and 2.5 feet bgs. Build temporary well screened from 11-16 feet bgs
	 Picture taken at: 11:00 Caption: 3S-SBFA-3. 10 feet bgs Latitude: 45.45676118660056 Longitude: -123.8575660956508
	 Picture taken at: 11:00 Caption: 3S-SBFA-3. 7.5 feet bgs Latitude: 45.45678327261779 Longitude: -123.8575668406238

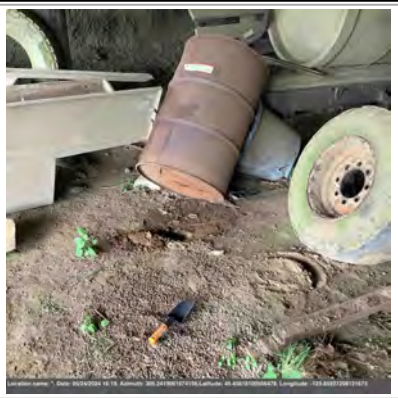
Time	Notes
	 Picture taken at: 11:01 Caption: 3S-SBFA-3. 5 feet bgs Latitude: 45.45676940382918 Longitude: -123.8575439826822
	 Picture taken at: 11:03 Caption: 3S-SBFA-3. 2.5 feet bgs Latitude: 45.4567760724842 Longitude: -123.8575988237527
11:29	Start drilling 3S-SBFA-2
	 Picture taken at: 11:30 Caption: 3S-SBFA-2 Latitude: 45.45630039543116 Longitude: -123.8577137616857
	 Picture taken at: 12:09 Caption: 3S-SBFA-2 Latitude: 45.45688312092165 Longitude: -123.8568049676571
12:28	Groundwater at 10.3. Conduct methane monitoring in 3S-SBFA-2 at 10, 7.5, 5, and 2.5 ft bgs.

Time	Notes
	 Picture taken at: 12:28 Caption: 3S-SBFA-2. 10 ft bgs max 24.13 Latitude: 45.45651815186637 Longitude: -123.8572290037527
	 Picture taken at: 12:29 Caption: 3S-SBFA-2. 7.5 ft bgs Latitude: 45.45650128772323 Longitude: -123.8571816655371
	 Picture taken at: 12:30 Caption: 3S-SBFA-2. 5 ft bgs. Latitude: 45.45648496318232 Longitude: -123.8572008669693
	 Picture taken at: 12:31 Caption: 3S-SBFA-2. 2.5 ft bgs Latitude: 45.45647963011418 Longitude: -123.857161362916
12:45	Begin drilling 3S-SBFA-1. No recovery in upper 10 feet bgs. Move over ~3 feet and readvance

Time	Notes
	 Picture taken at: 12:57 Caption: Drilling 3S-SBFA-1, moved away from the road to help estimate fill depth between 3S-SBFA-2 and 3S-SBFA-3 Latitude: 45.45648253874616 Longitude: -123.8570736235777
13:18	Water level in 3S-SBFA-1 in 6.45. Conduct methane monitoring at 2.5 and 5 feet bgs.
	 Picture taken at: 13:27 Caption: 3S-SBFA-1. 5 feet bgs. Max was 6.07. Latitude: 45.45649903592372 Longitude: -123.8578108935208
	 Picture taken at: 13:29 Caption: 3S-SBFA-1. 2.5 feet bgs. Max was 12.14 Latitude: 45.45658629364176 Longitude: -123.8579334017147
13:31	Holocene advances, builds 3S-SV-1. Sand 4-5. 1 inch stainless steel screen at 4.5. Dry bentonite granuals 3-4, hydrated bentonite granuals 1-2, Portland cement 0-1.

Time	Notes
	 Picture taken at: 13:33 Caption: 3S-SBFA-1 Latitude: 45.45684284170322 Longitude: -123.8567372015146
	 Picture taken at: 14:14 Caption: 3S-SV-1 Latitude: 45.45644200424089 Longitude: -123.8578033453073
14:12	Holocene install 3S-SV-3. Sand 4-5. 1 inch stainless steel screen at 4.5. Dry bentonite granuals 3-4, hydrated bentonite granuals 1-2, Portland cement 0-1.
	 Picture taken at: 14:16 Caption: 3S-SV-3 Latitude: 45.45681186423284 Longitude: -123.8575050734616
14:18	Holocene installs 3S-SV-4. Sand 4-5. 1 inch stainless steel screen at 4.5. Dry bentonite granuals 3-4, hydrated bentonite granuals 1-2, Portland cement 0-1.

Time	Notes
	 Picture taken at: 14:31 Caption: 3S-SV-4 Latitude: 45.45685887863805 Longitude: -123.8566763458302
14:30	Holocene installs 3S-SV-2. Sand 4-5. 1 inch stainless steel screen at 4.5. Dry bentonite granuals 3-4, hydrated bentonite granuals 1-2, Portland cement 0-1.  Picture taken at: 15:25 Caption: 3S-SV-2 Latitude: 45.45653689163753 Longitude: -123.8572020030716
15:26	Collect equipment blank, abandon soil borings
16:07	Collect sample at former AST, at location indicated by Don Aufdemauer. Soil is black silt. No evidence of contamination.  Picture taken at: 16:07 Caption: Sample 3S-SBHOT-1 Latitude: 45.45672576558516 Longitude: -123.8565560798675
16:18	Holocene offsite. Collect samples near drums under Trask River bridge . Soil is brown silt. No evidence of contamination.

Time	Notes
	 Picture taken at: 16:19 Caption: Sample 3S-SBDRUM-1 Latitude: 45.45618109556478 Longitude: -123.8593720812167
	 Picture taken at: 16:32 Caption: Sample 3S-SBDRUM-2 Latitude: 45.4561053836836 Longitude: -123.8596090404259
17:15	Offsite

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Daily Field Log

Site: Tillamook Brownfields

Tillamook County,Oregon

Project Number: O053

By: Adrienne Venegas

Date	06/07/2024	Contractor	
Staff On-Site	Aditya Manohar, Adrienne Venegas	Crew	
Staff From Time	07:00	From Time	
Staff To Time	19:47	To Time	
Weather	Sunny	Tailgate Meeting?	YES
Equipment		Remarks	

Work Summary

Time	Notes
15:47	Arrived at 3rd St
15:56	Set up at 3S-SV-1.
16:12	Leak detected in 3S-SV-1. Setting up at 3S-SV-3.
16:31	Water in tubing at 3S-SV-3. Pumped for 5 minutes. Not sampled.
16:36	Testing for water at 3S-SV-2. Water observed in tubing.
16:39	Testing for water at 3S-SV-4. No water observed in tubing. Setting up for sampling. Leak detected. Discussed with Don - continuing sampling regardless.
17:39	Setting up at 3S-SV-1. Leak detected. Discussed with Don - continuing sampling regardless.
18:19	Leak test with t-manifold for duplicate sampling unsuccessful. Taking primary and replicate sample instead.
18:58	Packing up, reviewing COCs and samples
19:47	TEI off site

Picture taken at: 16:35

Caption:

Latitude: 45.45646333333333

Longitude: 123.8571083333333

Low-Flow Groundwater Sampling Field Log

Well ID:	35SBFA-3
Date:	5-24-2024

Site Name:	3rd St
Field Personnel:	Arrienne V.

Sample ID:	35-SBFA-3-6MW11-16
Weather:	

Well depth:		feet
Well diameter:	1"	inches
Total depth:		ft BTOC
Well cap condition:		
Well casing condition:		

Depth to top of screen:	11	ft BTOC
Depth to bottom of screen:	16	ft BTOC
Depth to water, pre-installation:	See log	ft BTOC
Pump intake depth:		ft BTOC
PID/FID reading:		ppm

analyte/method	container/preservative

Time	pH (SU)		Conductivity (mS/cm)		Dissolved Oxygen (mg/L)		Turbidity (NTU)		Temperature (degrees C)		ORP* (mV)	Volume Pumped (mL)	Pumping Rate (ml/min)	Depth to water (ft ~~BTOC~~ BGS)
	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading			
1444	6.20	NA	2.48	NA	1.02	NA	426	NA	15.27	NA	-77	200	200	15.78
1449	6.20	0.0	2.54	0.06	0.46	0.56	270		15.19	0.08	-84	1200	200	15.79
1454	6.20	0.0	2.56	0.02	0.45	0.01	234	36	15.10	0.09	-87	2200	200	15.80
1459	6.20	0.0	2.57	0.01	0.42	0.03	206	28	15.01	0.09	-88	3200	200	15.80
1504	6.20	0.0	2.58	0.01	0.42	0.00	177	29	14.90	0.11	-90	4200	200	15.76
1509	6.20	0.0	2.60	0.02	0.40	0.02	161	16	14.85	0.05	-92	5200	200	15.77
Stability parameters:	± 0.1 SU		± 3%		± 10%		± 15%		± 0.5 °C		* ORP is not required stability parameter			

1531

organic odor + sheen, black water, very turbid

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Low-Flow Groundwater Sampling Field Log

Well ID:	3S-SBFA-4
Date:	5-24-2024

Site Name:	3rd St
Field Personnel:	Adrienne V.

Sample ID:	3S-SBFA-4-13-18-GW-
Weather:	cloudy ~60°F

Well depth:		feet
Well diameter:	1"	inches
Total depth:		ft BTOC
Well cap condition:		
Well casing condition:		

Depth to top of screen:	13	ft BTOC
Depth to bottom of screen:	18	ft BTOC
Depth to water, pre-installation:	8.2	ft BTOC
Pump intake depth:		ft BTOC
PID/FID reading:		ppm

analyte/method	container/preservative

Time	pH (SU)		Conductivity (mS/cm)		Dissolved Oxygen (mg/L)		Turbidity (NTU)		Temperature (degrees C)		ORP* (mV)	Volume Pumped (mL)	Pumping Rate (ml/min)	Depth to water (ft BTOC)
	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading	Change	Reading			
1252	6.27	NA	2.00	NA	0.70	NA	278	NA	15.93	NA	-95	300	100	12.73
1257	6.28	0.01	2.04	0.04	0.67	0.03	315	+37	15.86	0.07	-101	500	100	12.95
1302	6.28	0.00	2.04	0.00	0.59	0.08	165	-150	15.46	0.40	-107	1100	100	12.90
1307	6.28	0.00	2.02	0.02	0.52	0.07	120	-45	15.85	0.39	-110	1600	100	12.98
1312	6.28	0.00	2.03	0.01	0.58	0.06	72.7	-47.3	15.82	0.03	-111	2100	100	12.95
1317	6.28	0.00	2.05	0.02	0.60	0.02	58.5	14.2	15.43	0.39	-111	2600	100	12.97
1322	6.28	0.00	2.05	0.00	0.57	0.03	45.8	12.7	15.57	0.14	-111	3100	100	12.98
1327	6.28	0.00	2.04	0.01	0.55	0.02	43.8	2.0	15.58	0.01	-111	3600	100	12.95
Stability parameters:	± 0.1 SU		± 3%		± 10%		± 15%		± 0.5 °C		* ORP is not required stability parameter			

Organic odor, sheen, black water

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PID Calibration Log

Site Name: 910 West 3rd Street Property				Project Number: O053.007.003				
Site Location: 910, 920, and 930 3rd Street, Tillamook, Oregon								
Cal Gas: Isobutylene (100 ppm)								
Calibration								
Date:	**Time**	**PID Type**	**Unit ID #**	**Zero Reading (ppm)**	**Cal Gas Reading (ppm)**	**Recal Req'd (Y/N)**	**Recal Reading (ppm)**	**Initials**
5/24/2024	7:00	MiniRae 3000	N/A	0.0	100.0	N	N/A	DAM

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Soil Gas Field Log

Site: Tillamook Brownfields
Tillamook County

Project Number.: O053

Default Site Location

Sampler: Adrienne Venegas|Aditya Manohar **Weather:** Sunny

Sample ID	Sample Date	Manifold #	Canister #	Start Pressure	End Pressure	Volume Purged	Comments
3S-SV-1	06/07/2024	26791	1L2200	5	30	2568 mL	Well Volume 1: helium 13.9% in shroud 10.0% from pump Leak detected. Discussed with Don - continuing sampling regardless. Well Volume 2: helium 27.1% in shroud 10.7% from pump Well Volume 3: helium 19.3% in shroud 10.6% from pump

Leak Check Start Time	Leak Check Start Pressure	Leak Check End Pressure	Leak Check End Time	Satisfy Leak Check?
15:56	12.5	12.5	15:58	YES

Field Readings

Time	Time Elapsed	Helium Percentage	Suma Pressure (in HG)	Remarks
18:37		26.9	30	
18:38		25.4	26	
18:39		23.7	21	
18:40		21.2	15	
18:41		18.9	12	
18:42		18	7.5	
18:43		16.0	6	
18:44	7 minutes	13.2	5	

Photos

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Soil Gas Field Log

Site: Tillamook Brownfields
Tillamook County

Project Number.: O053

Default Site Location

Sampler: Aditya Manohar|Adrienne Venegas **Weather:** Sunny

Sample ID	Sample Date	Manifold #	Canister #	Start Pressure	End Pressure	Volume Purged	Comments
3S-SV-1-REP	06/07/2024	25203	1L4435	28	5	2568 mL	Leak test with t-manifold unsuccessful. Discussed with Don - Taking replicate sample instead. See 3S-SV-1 for purge notes

Leak Check Start Time	Leak Check Start Pressure	Leak Check End Pressure	Leak Check End Time	Satisfy Leak Check?
17:58	13	13	18:00	YES

Field Readings

Time	Time Elapsed	Helium Percentage	Suma Pressure (in HG)	Remarks
18:46		25.0	28	
18:47		23.8	24.0	
18:48		21.2	18.5	
18:49		18.5	15	
18:50		25.9	11	
18:51	6 minutes 30 seconds	25.5	6	

Photos

terraphase engineering

Soil Gas Field Log

Site: Tillamook Brownfields
Tillamook County

Project Number.: O053

Default Site Location

Sampler: Adrienne Venegas|Aditya Manohar **Weather:** Sunny

Sample ID	Sample Date	Manifold #	Canister #	Start Pressure	End Pressure	Volume Purged	Comments
3S-SV-4	06/07/2024	23692	1L3575	5	30	2568	Well Volume 1: helium 22% in shroud 16% from pump Leak detected. Discussed with Don - continuing sampling regardless. Well Volume 2: helium 25% in shroud 19.6% from pump Well Volume 3: helium 35.3% in shroud 13.2% from pump

Leak Check Start Time	Leak Check Start Pressure	Leak Check End Pressure	Leak Check End Time	Satisfy Leak Check?
16:51	16.5	16.5	16:53	YES

Field Readings

Time	Time Elapsed	Helium Percentage	Suma Pressure (in HG)	Remarks
17:29		12.5	30	
17:30		20.3	25.5	
17:31		33.2	19.5	
17:32		20.1	14	
17:33		17	10	
17:34		16.0	7	
17:35	6 minutes	15.6	5	

Photos

Appendix B

Boring Logs

SOIL BORING: 3S-SBFA-1

Project Number: O053.007.002
Project Name: 910 W 3rd St Property
Client: Tillamook County
Address: 910 W 3rd St, Tillamook, OR
Drilling Date: 05/24/2024

Drilling Company: Holocene
Driller: Tyler Sagon
Drill Rig: Geoprobe 6011DT
Drilling Method: Direct Push
Total Depth: 15'
Borehole Diameter: 2.25"

Coordinates: 45.456693, -123.857124
Coords Sys: Lat/Lon
Surface Elevation: 16.7'
Logged By: Don Malkemus
Checked By: James Farrow

Comments -

Depth (Ft)	Pid (Ppm)	Recovery Length (In)	Sample ID	Water Levels	Graphic Log	USCS	Visual Classification and Remarks
	0	36	3S-SBFA-1-1.0-3.0			GM	**Silty, Sandy GRAVEL FILL** (GM) - medium dense, dark brown (10YR 3/3), moist, up to 1-inch in diameter, with sand (40%) and silt (20%) 1.0
	0						**Silty, Gravelly SAND FILL** (SM) - loose, black (GLEY1 2.5/N), moist, interbedded wood debris, with sand (40%) and gravel (30%)
	0						Methane: 12.14%
	0						
5	0	36	3S-SBFA-1-5.0-8.0	5-24-24		SM	Methane: 6.07%
	0						
	0						
10	0	48		5-24-24			Wet below 10 feet bgs 11.0
	0					ML	**SILT** (ML) - medium stiff, dark gray (10YR 3/1), moist, low plasticity, some very fine-grained sand (10%) and lenses of wood debris
	0						
	0						15.0
15							End of boring at 15'

SOIL BORING: 3S-SBFA-2

Project Number: O053.007.002
Project Name: 910 W 3rd St Property
Client: Tillamook County
Address: 910 W 3rd St, Tillamook, OR
Drilling Date: 05/24/2024

Drilling Company: Holocene
Driller: Tyler Sagon
Drill Rig: Geoprobe 6011DT
Drilling Method: Direct Push
Total Depth: 20'
Borehole Diameter: 2.25"

Coordinates: 45.456693, -123.857124
Coords Sys: Lat/Lon
Surface Elevation: N/A
Logged By: Don Malkemus
Checked By: James Farrow

Comments -

Depth (Ft)	Pid (Ppm)	Recovery Length (In)	Sample ID	Water Levels	Graphic Log	USCS	Visual Classification and Remarks
	0	36	3S-SBFA-2-1.5-3.0			GM	**Silty GRAVEL FILL with Sand** (GM) - medium dense, dark yellowish brown (10YR 4/6), up to 2 inches in diameter, with silt (20%) and sand (20%) 1.5
	0					SM	**Silty SAND FILL with Gravel** (SM) - loose, black (GLEY1 2.5/N), moist, with silt (40%) and gravel (20%), abundant wood debris Methane: 11.27%
	0						
5	0	60	3S-SBFA-2-5.0-7.0				Methane: 21.76% 6.5
	0					ML	**SILT with Sand** (ML) - stiff, dark grayish brown (10YR 4/2), moist, low plasticity, with sand (10%) Methane: 23.11%
	0						
	0						
10	0	42					Methane: 24.13% 11.0
	0						**Silty GRAVEL with Sand** (GM) - medium dense, grayish brown (2.5Y 5/2), wet, up to 2 inches in diameter, low plasticity silt, with silt (30%) and medium-grained sand (20%) 11.5
	0					GW	**Well-graded Sandy GRAVEL with Silt** (GW) - dense, olive brown (2.5Y 4/3), wet, up to 2 inches in diameter, medium- to coarse-grained sand (35%), with silt (5%)
15	0	30					
	0						
	0						
20							20.0 End of boring at 20'

SOIL BORING: 3S-SBFA-3

Project Number: O053.007.002
Project Name: 910 W 3rd St Property
Client: Tillamook County
Address: 910 W 3rd St, Tillamook, OR
Drilling Date: 05/24/2024

Drilling Company: Holocene
Driller: Tyler Sagon
Drill Rig: Geoprobe 6011DT
Drilling Method: Direct Push
Total Depth: 20'
Borehole Diameter: 2.25"

Coordinates: 45.456693, -123.857124
Coords Sys: Lat/Lon
Surface Elevation: 16.7'
Logged By: Don Malkemus
Checked By: James Farrow

Comments -

Depth (Ft)	Pid (Ppm)	Recovery Length (In)	Sample ID	Water Levels	Graphic Log	USCS	Visual Classification and Remarks
	0	42	BS-SBFA-3-1.0-3.5 & BS-SBFA-3-1.0-3.5-DUP			GM	**Sandy Silty GRAVEL FILL** (GM) - medium dense, dark brown (10YR 3/5), moist, up to 1-inch in diameter, with sand (40%) and silt (20%) 1.0
	0						**Gravelly Silty SAND FILL** (SM) - medium dense, black (GLEY1 2.5/N), moist, fine-grained, interbedded wood debris, gravel (30%), and silt (30%) layers
	0						Methane: 3.19%
5	0	36	BS-SBFA-3-5.0- 8.0				Methane: 42.81%
	0						Methane: 51.70%
	0					SM	
10	0	60		5-24-24 5-24-24			
	0						
	0						
	0						
	0						
15	0	30					
	0						16.0
	0						**Elastic SILT** (MH) - medium stiff, very dark brown (10YR 2/2), moist, high plasticity, some wood debris, trace sand (5%)
						MH	
20							20.0

End of boring at 20'

SOIL BORING: 3S-SBFA-4

Project Number: O053.007.002
Project Name: 910 W 3rd St Property
Client: Tillamook County
Address: 910 W 3rd St, Tillamook, OR
Drilling Date: 05/24/2024

Drilling Company: Holocene
Driller: Tyler Sagon
Drill Rig: Geoprobe 6011DT
Drilling Method: Direct Push
Total Depth: 20'
Borehole Diameter: 2.25"

Coordinates: 45.456693, -123.857124
Coords Sys: Lat/Lon
Surface Elevation: 16.7'
Logged By: Don Malkemus
Checked By: James Farrow

Comments -

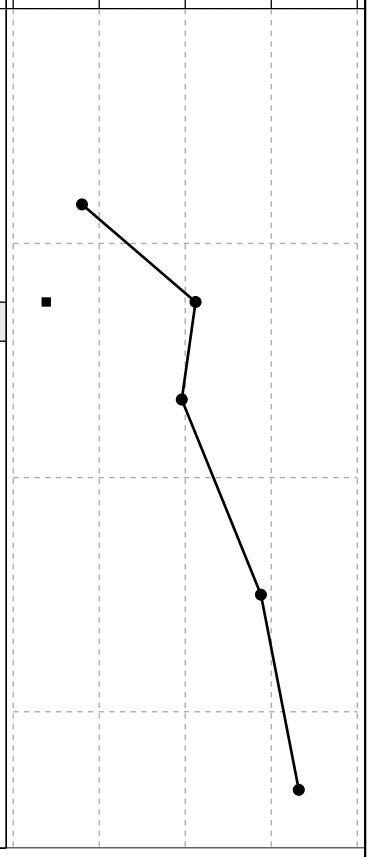
Depth (Ft)	Pid (Ppm)	Recovery Length (In)	Sample ID	Water Levels	Graphic Log	USCS	Visual Classification and Remarks
	0	33	3S-SBFA-4-2.0 -3.0			SM	**Silty SAND FILL** (SM) - medium dense, dark brown (10YR 3/5), damp, very fine-grained, low plasticity silt (20%), abundant rootlets in upper 3 inches bgs. 1.5
	0						**Silty SAND FILL with Gravel** (SM) - medium dense, brown (10YR 5/3), moist, very fine- to coarse-grained, low plasticity silt (15%), with angular gravel up to 1-inch in diameter (10%) 2.0
	0					GM	**Silty GRAVEL FILL with Sand** (GM) - loose, black (GLEY1 2.5/N), moist, up to 2 inches in diameter, with sand (20%), interbedded silt (20%) and wood debris
5	0	42	3S-SBFA-4-5.0-8.0				Methane: 6.59%
	0						Methane: 9.83%
	0						Methane: 23.46% 8.0
	0			5-24-24			**Gravelly Silty SAND FILL** (SM) - loose, black (GLEY1 2.5/N), wet, fine-grained, with gravel up to 1-inch in diameter (20%) and silt (30%), abundant wood debris
10	0						
	0						
	0					SM	
15	0	29					17.5
	0						**Elastic SILT** (MH) - medium stiff, very dark brown (10YR 2/2), moist, high plasticity, some wood debris, trace sand (5%)
	0					MH	
	0						20.0
20							End of boring at 20'

Tillamook Housing

Soil Boring: B-1

Date Started:	11/12/2024	Date Completed:	11/12/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~16.3'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.456396, -123.857091

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts	Samples: N60	Lab: Moisture Content (%)	Lab: % Fines
15				**FILL**, medium dense, brown, damp to moist, **Silty Sand** (SM), with angular gravel, some cobbles up to 4 inches in diameter, density based on digging effort	0.5 ft	100				
				2.0	3.5 ft	100				
	5			**FILL**, stiff, dark gray to brown, moist, **Sandy Silt** (ML), with fine-grained sand, trace subangular to subrounded gravel up to 1 inch in diameter, stiffness based on digging effort	5 ft	61	1 3 11 (14)	20		
10				4.5	7.5 ft					
				Medium dense, dark brown, moist, **Poorly Graded Sand** (SP), with angular gravel up to 1 inch in diameter and silt		67	6 19 18 (37)	53	9.6	7
	10	11-12-24		7.0	10 ft					
5				Dense, dark brown, moist, **Well-graded Gravel** with **Silt & Sand** (GW-GM) Wet below 10 feet bgs.		44	7 16 18 (34)	49		
					15 ft					
0	15					44	15 22 28 (50)	72		
					20 ft					
	20			Very dense below about 20 feet bgs.		17	26 30 28 (58)	83		
-5				21.5						
				End of boring at 21.5'						

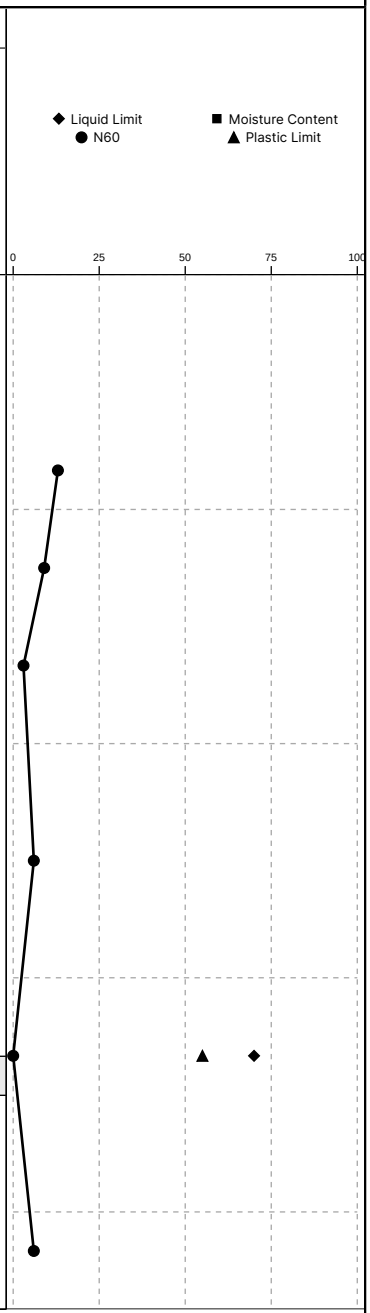


Tillamook Housing

Soil Boring: B-2

Date Started:	11/12/2024	Date Completed:	11/12/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.2'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	26.5'	Boring Diameter:	8 in	Lat Lng:	45.456628, -123.857169

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts	Samples: N60	Lab: Atterberg Limits (LL-PL-PI)
15	0			**FILL**, medium dense, dark brown, moist, **Silty Sand** (SM), with trace angular gravel up to 2 inches in diameter, density based on digging effort	0.5 ft	100			
					2.5 ft				
					3 ft	100			
						100			
10	5			**FILL**, medium stiff, brown, wet, **Sandy Silt** (ML), with trace angular gravel and cobbles up to 4 inches in diameter, stiffness based on digging effort	5 ft	33	1 3 6 (9)	13	
					7.5 ft	67	2 2 4 (6)	9	
5	10	11-12-24		**FILL**, loose, black, moist, **Poorly Graded Sand** (SP), with angular gravel up to 1 inch in diameter and silt	10 ft	61	1 1 1 (2)	3	
				FILL, loose, dark gray to black, moist, **Silty Sand** (SM), with angular gravel up to 1 inch in diameter, abundant wood debris (interbedded)					
0	15			Very loose below ~7.5 feet bgs. Wet below 10 feet bgs	15 ft	6	2 2 2 (4)	6	
					20 ft	89	0 0 0 (0)	0	70-55-15
-5	20			Very soft, dark gray to black, wet, **Elastic Silt** (MH), low to medium plasticity, with fine-grained sand, some organics					
					25 ft	50	0 0 4 (4)	6	
	25			abundant rootlets, increase in plasticity below ~25 feet bgs.					
-10				End of boring at 26.5'					

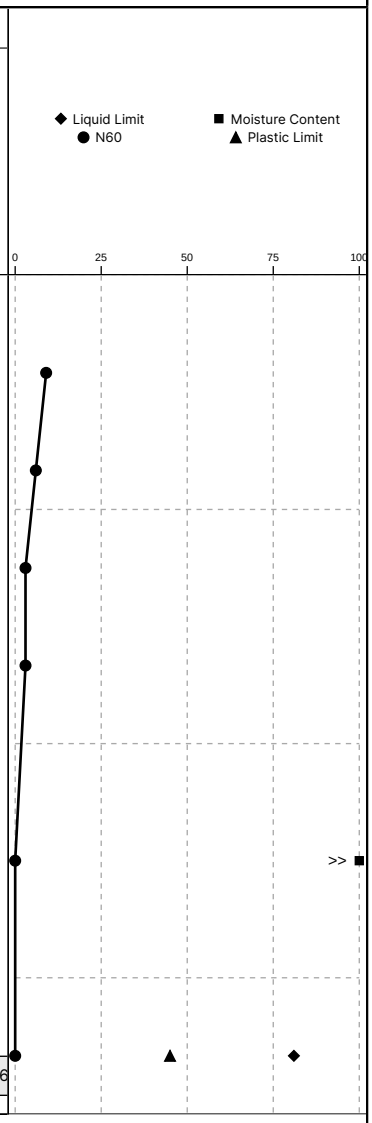


Tillamook Housing

Soil Boring: B-3

Date Started:	11/12/2024	Date Completed:	11/12/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.2'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.457051, -123.856732

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts	Samples: N60	Lab: Moisture Content (%)	Lab: % Fines	Lab: Atterberg Limits (LL-PL-PI)
15	0			**FILL**, dense, brown, damp, **Silty Sand** (SM), fine- to coarse-grained, low plasticity fines, with angular gravel up to 3 inches in diameter and cobbles up to 6 inches in diameter (15%) 2.0	2.5 ft	50	16 (6)	9			
10	5	11-12-24		**FILL**, loose, dark gray to black, moist, **Silty Sand** (SM), fine- to coarse-grained, low plasticity fines, with angular gravel up to 1 inch in diameter (5%), abundant wood debris	5 ft	50	122 (4)	6			
5	10			Very loose, wet, increase in gravel content below ~7.5 feet bgs 12.5	7.5 ft	11	011 (2)	3			
0	15			Very soft, brown to grayish brown, moist, **Elastic Silt** with **Fine Sand** (MH), medium plasticity, abundant organics, and root fibers 17.5	10 ft	11	111 (2)	3			
-5	20			Very soft, gray, moist to wet, **Elastic Silt** with **Fine Sand** (MH), medium plasticity and abundant organic debris (root fibers) 21.5	15 ft	89	000 (0)	0	233.2	90	
				End of boring at 21.5'	20 ft	100	000 (0)	0			81-45-36

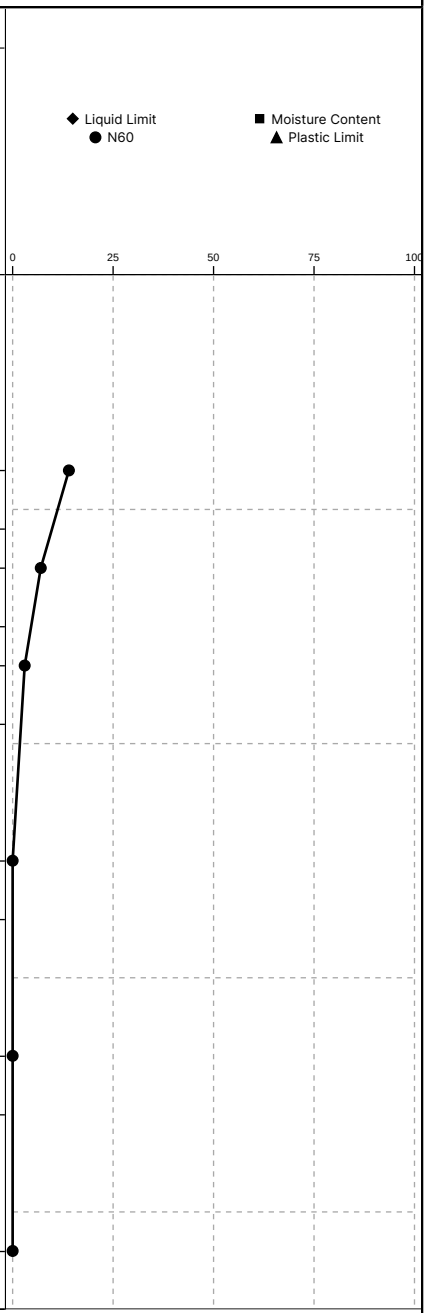


Tillamook Housing

Soil Boring: B-4

Date Started:	11/12/2024	Date Completed:	11/12/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~18.2'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	26.5'	Boring Diameter:	8 in	Lat Lng:	45.456795, -123.856651

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Depth of Sample (ft)	% Recovery	Blow Counts (N/Refusal)	N60
15				**FILL**, dense, brown, damp, **Silty Sand** (SM), with angular gravel up to 3 inches in diameter, density based on digging effort	0.5 ft	100		
				3.0	3 ft			
				FILL, medium dense, dark gray to black, damp, **Silty Sand** (SM), abundant wood debris, some angular gravel up to 2 inches in diameter, density based on digging effort	3.5 ft	100		
					5 ft	100		
5	5	11-12-24				6	1 4 6 (10)	14
				Loose, wet below 5 feet bgs	7.5 ft			
10						6	3 3 2 (5)	7
	10				10 ft			
						6	2 1 1 (2)	3
5				13.5				
	15			Very soft, brown to grayish brown, moist, **Silt** (ML), low to medium plasticity, some fine-grained sand, abundant organics and root fibers	15 ft	100	0 0 0 (0)	0
0								
	20				20 ft	6	0 0 0 (0)	0
-5								
	25			Gray, wet, decrease in organic content below ~25 feet bgs.	25 ft	100	0 0 0 (0)	0
				26.5				
				End of boring at 26.5'				

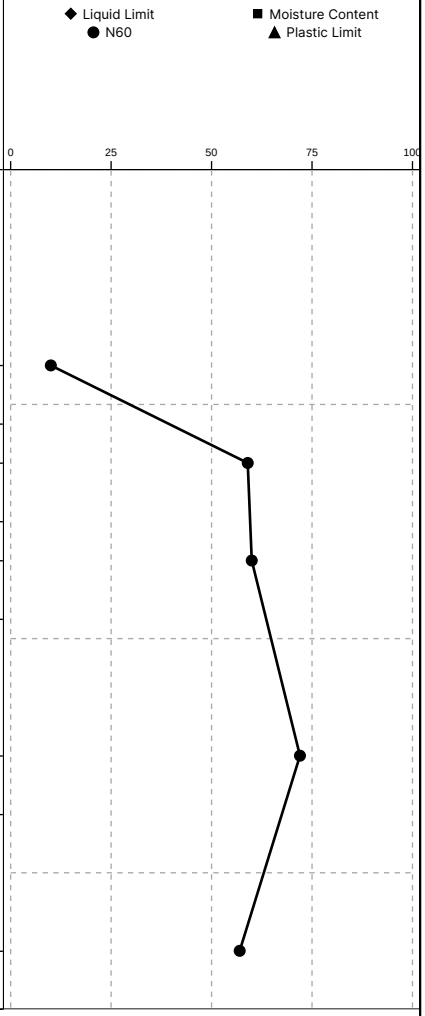


Tillamook Housing

Soil Boring: B-5

Date Started:	11/13/2024	Date Completed:	11/13/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~20.1'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.456635, -123.856524

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	% Recovery	Blow Counts (N/Refusal)	N60
15	5			**FILL**, medium dense, dark brown, moist, **Silty Sand** (SM), some angular gravel up to 2 inches in diameter, trace terra cotta debris	0.5 ft			
					2 ft	100		
				Black, angular to subrounded gravel, significant wood and organic debris below 2 feet bgs		100		
				Increase in moisture below 3 feet bgs	5 ft			
						56	1 0 7 (7)	10
		11-13-24		6.5	7.5 ft			
10	10			Dense, orange to brown, wet, **Poorly Graded Gravel** (GP-GM), angular to subrounded, up to 3 inches in diameter, fine- to coarse-grained, subrounded to rounded sand, with low to medium plasticity clayey silt		67	3 20 21 (41)	59
					10 ft			
						67	22 21 21 (42)	60
5	15			Medium- to coarse-grained sand interbeds below ~15 feet bgs.	15 ft			
						67	25 24 26 (50)	72
0	20			Predominantly rounded gravel below ~20 feet bgs.	20 ft			
				21.5		67	10 16 24 (40)	57
				End of boring at 21.5'				

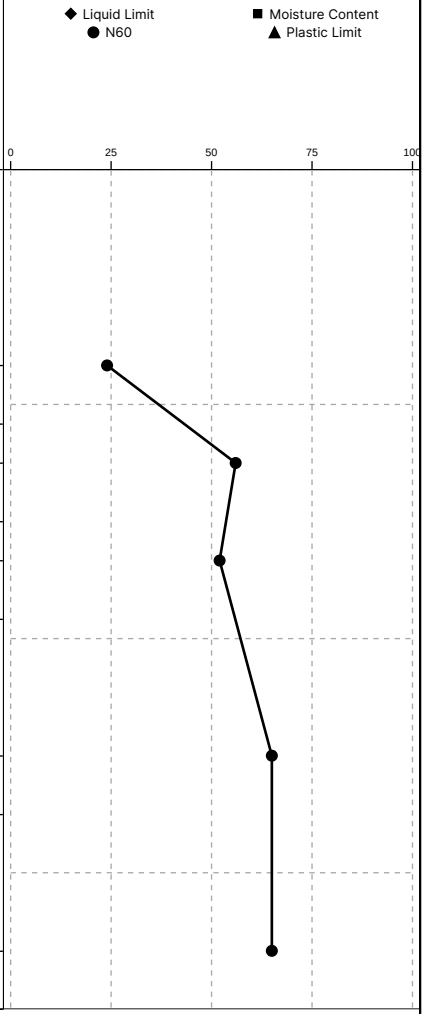


Tillamook Housing

Soil Boring: B-6

Date Started:	11/13/2024	Date Completed:	11/13/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.9'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.456469, -123.856696

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts (N/Refusal)	Samples: N60
15				**FILL**, medium dense, brown, damp, **Silty Sand** (SM), with angular to subangular gravel and cobbles up to 6 inches in diameter	0.5 ft	100		
				Decrease in gravel content below 2 feet bgs	2 ft	100		
	5			POORLY GRADED **GRAVEL** (GP-GM), Grayish brown below 4 feet bgs	5 ft	83	3 7 10 (17)	24
10		▽		5.0 Medium dense, orange to brown, moist, subangular to rounded, **Poorly Graded Gravel** with **Silt** (GP-GM), up to 3 inches in diameter	7.5 ft	67	3 20 19 (39)	56
	10			Wet below ~7.5 feet bgs	10 ft	56	15 17 19 (36)	52
5								
	15			Dense to very dense, medium- to coarse-grained sand interbeds below ~15 feet bgs	15 ft	83	16 23 22 (45)	65
0								
	20				20 ft	67	8 25 20 (45)	65
				21.5 End of boring at 21.5'				

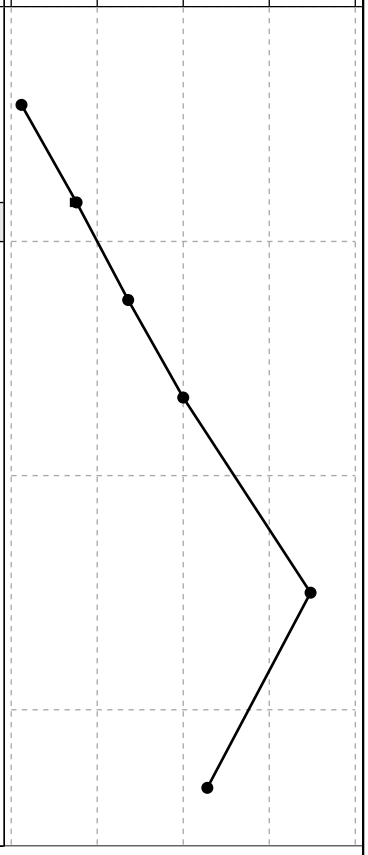


Tillamook Housing

Soil Boring: B-7

Date Started:	11/13/2024	Date Completed:	11/13/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.2'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.456530, -123.856271

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Depth of Sample (ft)	% Recovery	Blow Counts	N60	Moisture Content (%)	% Fines
15				**FILL**, brown, damp, **Poorly Graded Gravel** (GP-GM), sandy, angular to subangular, up to 3 inches in diameter	2.5 ft					
				Grayish brown below 1.5 feet bgs, with subrounded cobbles up to 4 inches in diameter 2.5	5 ft	50	0 1 1 (2)	3		
10	5			Very loose, grayish brown, moist, **Silty Sand** (SM), some subangular to subrounded gravel up to 1 inch in diameter 4.5	7.5 ft	33	1 2 11 (13)	19	18.4	14
5	10	11-13-24		Medium dense, orangish brown to dark brown, moist, **Silty Gravel** with **Sand** (GM), angular to subrounded, up to 2 inches in diameter, with clayey silt Subrounded to rounded gravel below ~7.5 feet bgs. Dense, wet below ~10 feet bgs.	10 ft	50	1 8 16 (24)	34		
0	15			Very dense below ~15 feet bgs.	15 ft	67	5 14 21 (35)	50		
-5	20			19.0 Dense, dark brown, wet, **Poorly Graded Sand** (SP-SM), medium- to coarse-grained, with low plasticity silt. 21.5	20 ft	67	11 28 33 (61)	87		
				End of boring at 21.5'		17	17 27 13 (40)	57		

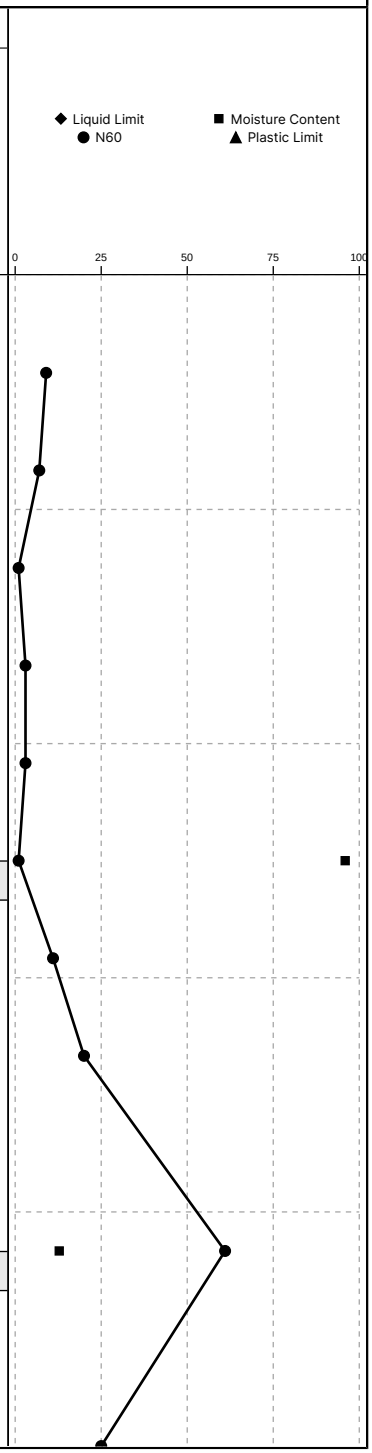


Tillamook Housing

Soil Boring: B-8

Date Started:	11/13/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.8'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	61.5'	Boring Diameter:	8 in	Lat Lng:	45.456740, -123.856359

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts	Samples: N60	Lab: Moisture Content (%)	Lab: % Fines
15	0			**FILL**, medium dense, orange, moist, **Silty Sand** (SM), with angular gravel and cobbles up to 6 inches in diameter	0.5 ft					
					1.5 ft	100				
					2.5 ft	100				
				2.5						
				FILL, loose, brown to gray, moist, **Poorly Graded Gravel** (GP-GM), angular to subrounded, up to 1 inch in diameter			3 4 3 (7)	9		
5	5				5 ft					
						6	4 4 1 (5)	7		
10					7.5 ft					
						6	1 1 0 (1)	1		
	10	11-13-24			10 ft					
				Black, wet, increase in sand content below ~10 feet bgs		33	1 1 1 (2)	3		
5				12.0	12.5 ft					
				FILL, very loose, dark gray to black, wet, **Silty Sand** (SM), trace angular to subrounded gravel up to 0.25-inch in diameter		67	1 1 1 (2)	3		
	15			14.5	15 ft					
0				Soft, dark gray to black, **Elastic Silt** with **Gravel and Sand** (MH), medium plasticity, clayey, fine-grained sand, trace subrounded to rounded gravel up to 0.25-inch in diameter		67	0 0 1 (1)	1	95.9	80
					17.5 ft					
				17.0		33	2 4 4 (8)	11		
	20			Loose, orangish brown, wet, subangular to subrounded, **Silty Gravel** (GM), up to 2 inches in diameter, medium plasticity silt, with fine- to coarse-grained sand Medium dense to dense below ~20 feet bgs.	20 ft					
-5						22	5 6 9 (15)	20		
					25 ft					
	25					67	18 18 28 (46)	61	12.8	18
-10										

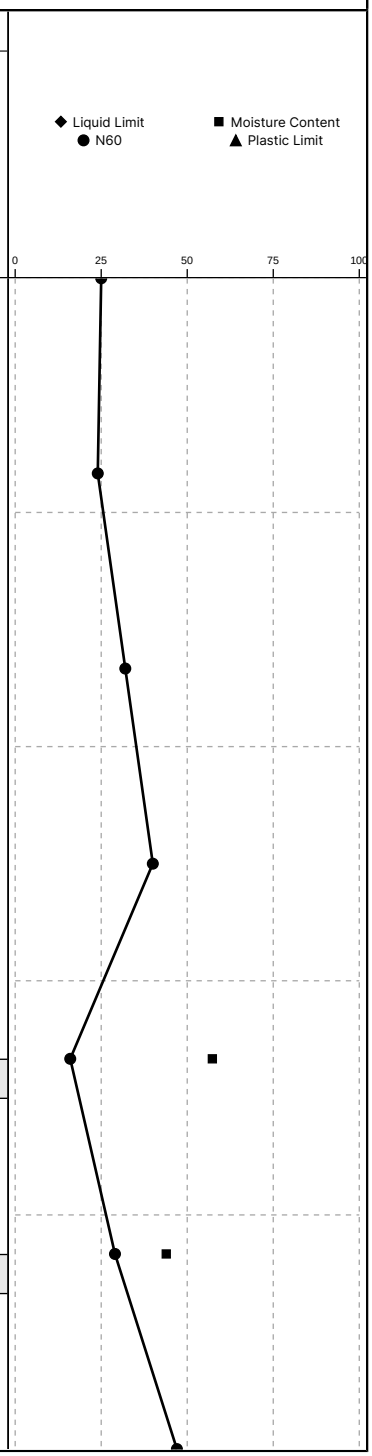


Tillamook Housing

Soil Boring: B-8

Date Started:	11/13/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.8'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	61.5'	Boring Diameter:	8 in	Lat Lng:	45.456740, -123.856359

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts	Samples: N60	Lab: Moisture Content (%)	Lab: % Fines
				Loose, orangish brown, wet, subangular to subrounded, **Silty Gravel** (GM), up to 2 inches in diameter, medium plasticity silt, with fine- to coarse-grained sand	30 ft	6	10 11 8 (19)	25		
-15										
	35			Weathered gravel below ~35 feet bgs.	35 ft	22	5 5 13 (18)	24		
-20										
	40				40 ft	67	10 10 14 (24)	32		
-25										
	45				45 ft	17	12 17 13 (30)	40		
				47.0						
-30				Stiff, orange to orangish brown, moist, **Sandy Silt** (ML), medium plasticity, with fine- to coarse-grained sand (interbedded) [Weathered Siltstone]	50 ft	83	1 3 9 (12)	16	57.3	83
	50									
-35										
				53.5						
	55			Hard, orange to orangish brown, moist, **Sandy Silt** (ML), fine- to medium grained, medium plasticity silt [Weathered Sandstone]	55 ft	83	5 8 14 (22)	29	43.9	63
-40										

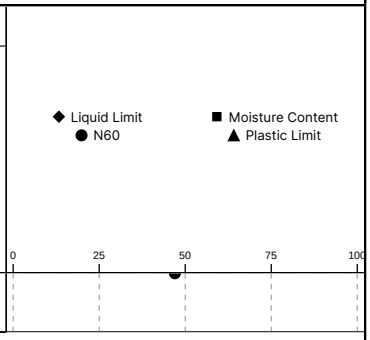


Tillamook Housing

Soil Boring: B-8

Date Started:	11/13/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.8'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	61.5'	Boring Diameter:	8 in	Lat Lng:	45.456740, -123.856359

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts	Samples: N60	Lab: Moisture Content (%)	Lab: % Fines
	—			Hard, orange to orangish brown, moist, **Sandy Silt** (ML), fine- to medium grained, medium plasticity silt [Weathered Sandstone]	60 ft	89	8 15 20 (35)	47		
				61.5						
				End of boring at 61.5'						

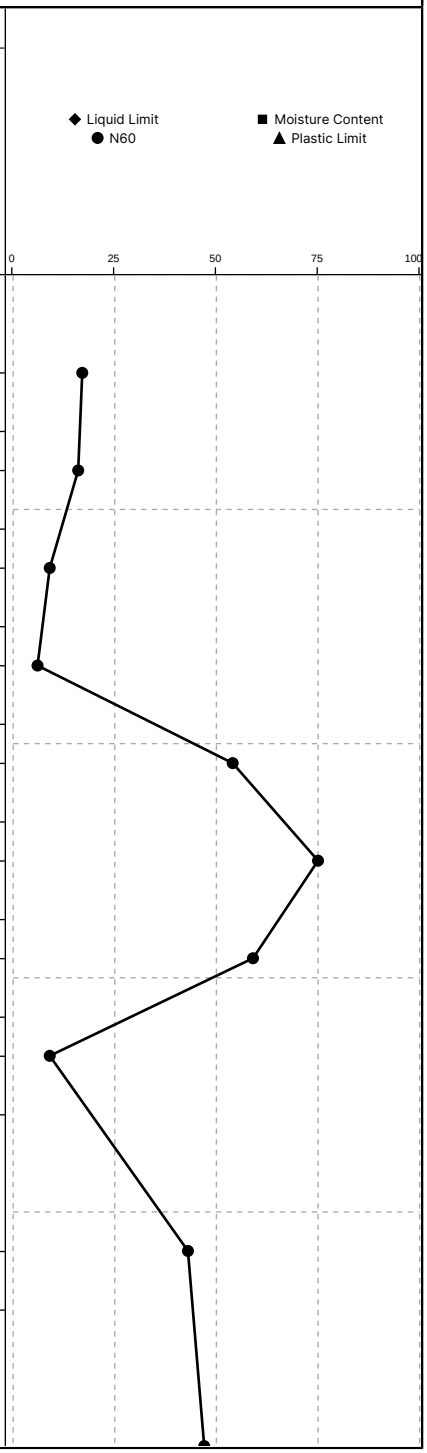


Tillamook Housing

Soil Boring: B-9

Date Started:	11/14/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.5'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	46.5'	Boring Diameter:	8 in	Lat Lng:	45.456543, -123.856879

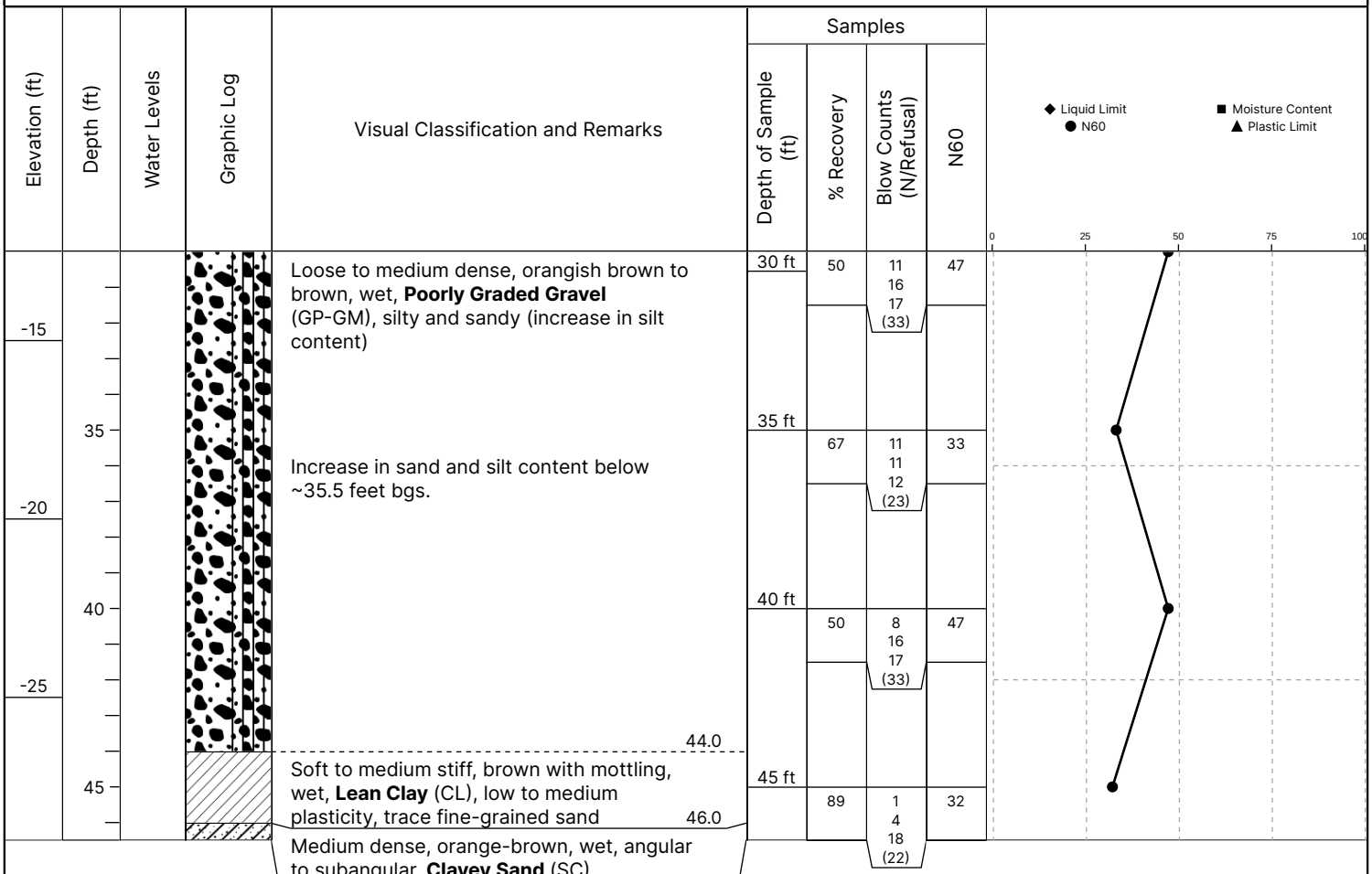
Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Depth of Sample (ft)	% Recovery	Blow Counts (N/Refusal)	N60
					Samples			
15				**FILL**, dense, brown, wet, subangular to subrounded, **Poorly Graded Gravel** with **Sand** (GP-GM), up to 4 inches in diameter	2.5 ft	100		
	5				5 ft	11	6 5 7 (12)	17
10				dark grayish brown, angular to rounded, up to 2 inches in diameter, abundant wood debris below ~5 feet bgs.	7.5 ft	67	6 4 7 (11)	16
		11-14-24		9.0	10 ft	33	2 3 3 (6)	9
5	10			Soft to medium stiff, dark gray, wet, **Sandy Silt** (ML), medium plasticity, fine- to medium-grained sand, with subrounded to angular gravel up to 1 inch in diameter 12.0	12.5 ft	33	1 2 2 (4)	6
				Medium dense to dense, orange-brown to gray-brown, wet, subangular to subrounded, **Poorly Graded Gravel** with **Sand** (GP-GM), fine- to coarse-grained, subrounded to subangular sand, with low plasticity fines	15 ft	50	13 19 19 (38)	54
0	15				17.5 ft	50	17 27 25 (52)	75
				Weathered sand and gravel below ~17.5 feet bgs	20 ft	67	19 20 21 (41)	59
-5	20			20.0 Loose to medium dense, orangish brown to brown, wet, **Poorly Graded Gravel** (GP-GM), silty and sandy (increase in silt content)	25 ft	50	7 5 1 (6)	9
	25			Clayey silt below ~25 feet bgs		67	4 14 16 (30)	43
-10								



Tillamook Housing

Soil Boring: B-9

Date Started:	11/14/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~17.5'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	46.5'	Boring Diameter:	8 in	Lat Lng:	45.456543, -123.856879



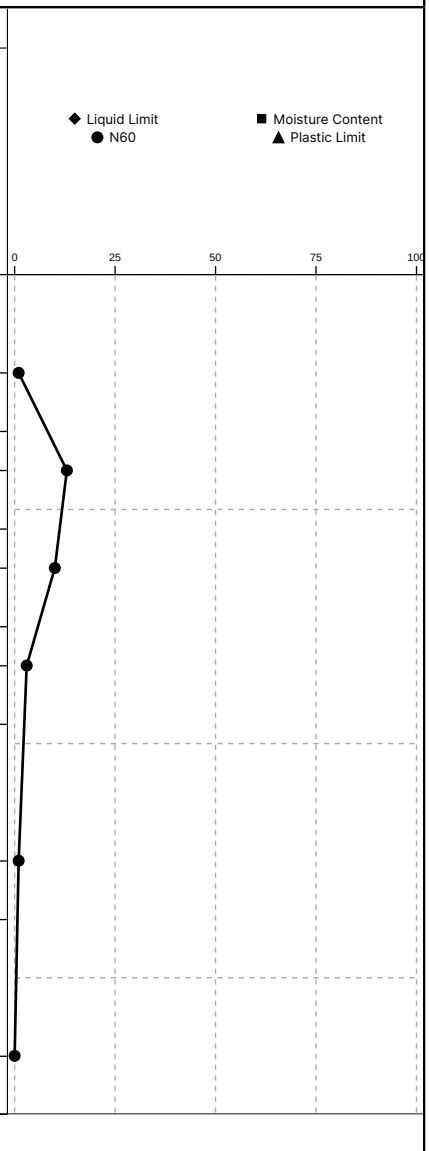
Tillamook Housing

Soil Boring: B-10

Date Started:	11/14/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~15.0'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.456653, -123.857850

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Depth of Sample (ft)	% Recovery	Blow Counts (N/Refusal)	N60
10	0			**FILL**, dense to very dense, dark brown, wet, angular, **Poorly Graded Gravel** with **Sand & Silt** (GP-GM), up to 4 inches in diameter	0.5 ft	100		
					2.0			
				FILL, very loose, black, wet, **Silty Sand** (SM), fine- to coarse-grained, low plasticity fines, abundant organics	2.5 ft	89	1 0 1 (1)	1
	5	11-14-24		Abundant wood debris below ~5 feet bgs.	5 ft	78	0 5 4 (9)	13
5		11-14-24		Wet, trace angular gravel up to 1 inch in diameter below ~7.5 feet bgs.	7.5 ft	33	2 3 4 (7)	10
	10				10 ft	11	2 1 1 (2)	3
0								
	15			Very soft, dark gray to brown, moist, **Sandy Silt** (ML), low plasticity, fine-grained sand, abundant organics	15 ft	100	0 0 1 (1)	1
-5					20 ft			
	20						0 0 0 (0)	0
					21.5			

End of boring at 21.5'

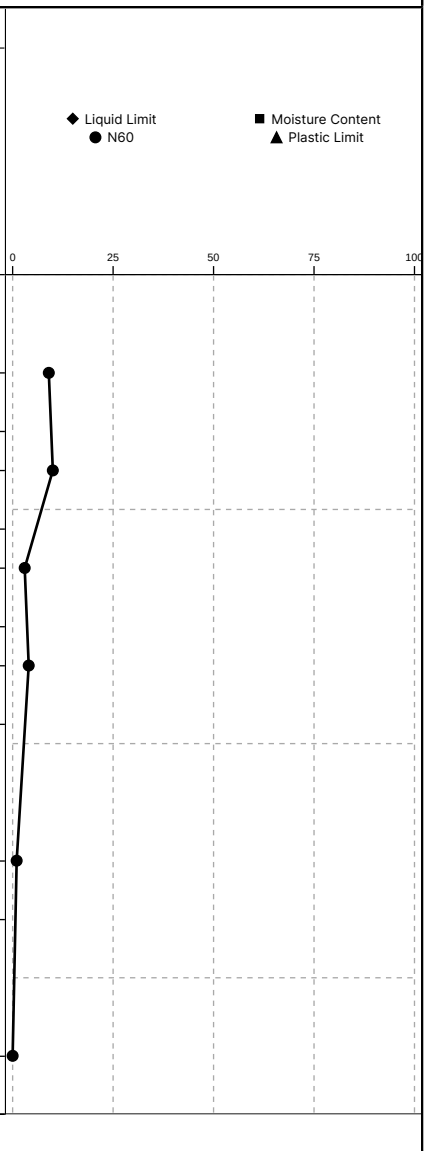


Tillamook Housing

Soil Boring: B-11

Date Started:	11/14/2024	Date Completed:	11/14/2024	Project No:	O053.011
Client Name:	CHA Consulting, Inc.	Project Address:	920 West 3rd Street, Tillamook, Oregon	Surface Elevation:	~15.3'
Drilling Firm:	Holt	Logged By:	Adrienne Venegas	Checked By:	Joseph Schmidt
Method:	Auger	Hammer Type:	Auto	Hammer Efficiency:	86%
Depth:	21.5'	Boring Diameter:	8 in	Lat Lng:	45.456554, -123.857871

Elevation (ft)	Depth (ft)	Water Levels	Graphic Log	Visual Classification and Remarks	Samples: Depth of Sample (ft)	Samples: % Recovery	Samples: Blow Counts (N/Refusal)	Samples: N60
				FILL, dense, dark brown, wet, angular to rounded, **Poorly Graded Gravel** with **Sand** (GP-GM), up to 6 inches in diameter, fine- to coarse-grained sand, with low plasticity silt	2.5 ft	67	1 3 3 (6)	9
				2.0 **FILL**, loose, dark gray to black, moist, **Silty Sand** (SM), fine- to coarse-grained, low plasticity fines	5 ft	33	1 1 6 (7)	10
10	5				7.5 ft	75	1 1 1 (2)	3
5	10	11-14-24		Wet, with angular gravel up to 1 inch in diameter below ~10 feet bgs.	10 ft	6	1 2 1 (3)	4
				14.0				
0	15			Very soft, dark gray, moist to wet, **Elastic Silt** (MH), medium plasticity, some fine- to coarse-grained sand, abundant organics.	15 ft	100	1 1 0 (1)	1
-5	20				20 ft	100	0 0 0 (0)	0
				21.5				
				End of boring at 21.5'				



TILL 52899

STATE OF OREGON
GEOTECHNICAL HOLE REPORT
(as required by OAR 690-240-0035)

8/22/2019

(1) OWNER/PROJECT

Hole Number B1

PROJECT NAME/NBR: CDREDDING-2-01

First Name _____ Last Name _____
Company GEO DESIGN - OWNER'S REP
Address 9450 SW COMMERCE CIRCLE SUITE 300
City WILSONVILLE State OR Zip 97070

(2) TYPE OF WORK

☒ New ☐ Deepening ☒ Abandonment
☐ Alteration (repair/recondition)

(3) CONSTRUCTION

☐ Rotary Air ☐ Hand Auger ☐ Hollow stem auger
☒ Rotary Mud ☐ Cable ☐ Push Probe
☐ Other _____

(4) TYPE OF HOLE:

◉ Uncased Temporary ○ Cased Permanent
○ Uncased Permanent ○ Slope Stablity
○ Other
Other: _____

(5) USE OF HOLE

GEOTECHNICAL SOIL

(6) BORE HOLE CONSTRUCTION

Special Standard ☐ (Attach copy)
Depth of Completed Hole 50.00 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs
4.87	0	50	Bentonite Chips	0	10	2	S
			Bentonite Grout	10	50	2	S

Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____

(7) CASING/SCREEN

Casing	Screen	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐

(8) WELL TESTS

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration(hr)

Temperature _____ °F Lab analysis ☐ Yes By _____
Supervising Geologist/Engineer _____
Water quality concerns? ☐ Yes (describe below) TDS amount _____ _____

From	To	Description	Amount	Units

(9) LOCATION OF HOLE (legal description)

County TILLAMOOK Twp 1.00 S N/S Range 10.00 W E/W WM
Sec 25 SE 1/4 of the NW 1/4 Tax Lot 400
Tax Map Number _____ Lot _____
Lat ° ' " or 45.45645833 DMS or DD
Long ° ' " or -123.85748889 DMS or DD
○ Street address of hole ◉ Nearest address
998-800 OR-131,

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			☐	
Completed Well			☐	

Flowing Artesian? ☐
Depth water was first found _____

WATER BEARING ZONES

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
					☐	
					☐	
					☐	
					☐	
					☐	

(11) SUBSURFACE LOG

Ground Elevation _____

Material	From	To
Fill Dirt	0	10
Sand & Gravel	10	50

Date Started 5/20/2019 Completed 5/20/2019

(12) ABANDONMENT LOG:

Material	From	To	Amt	sacks/ lbs
Bentonite Chips	0	10	2	S
Bentonite Grout	10	50	2	S

Date Started 5/20/2019 Completed 5/20/2019

Professional Certification

(to be signed by an Oregon licensed water or monitoring well constructor, Oregon registered geologist or professional engineer).

I accept responsibility for the construction, deepening, alteration, or abandonment work performed during the construction dates reported above. All work performed during this time is in compliance with Oregon geotechnical hole construction standards. This report is true to the best of my knowledge and belief.

License/Registration Number 10563 Date 8/22/2019
First Name FORD Last Name STIGALL
Affiliation WESTERN STATES

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version:

(6) BORE HOLE CONSTRUCTION

BORE HOLE

Dia	From	To

SEAL

Material	From	To	Amt	sacks/ lbs

FILTER PACK

From	To	Material	Size

(7) CASING/SCREENS

Casing	Screen	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		
○	○						○	○		

(8) WELL TESTS

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Water Quality Concerns

From	To	Description	Amount	Units

Comments/Remarks

Dave Buchanan drilled the boring

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(11) SUBSURFACE LOG

Material	From	To

(12) ABANDONMENT LOG

Material	From	To	Amt	sacks/ lbs

GEOTECHNICAL HOLE REPORT - Map with location identified must be attached and shall include an approximate scale and north arrow

TILL 52899

8/22/2019

Map of Hole

TILL 52900

STATE OF OREGON
GEOTECHNICAL HOLE REPORT
(as required by OAR 690-240-0035)

8/22/2019

(1) OWNER/PROJECT

Hole Number B2

PROJECT NAME/NBR: CDREDDING-2-01

First Name _____ Last Name _____
Company GEO DESIGN - OWNER'S REP
Address 9450 SW COMMERCE CIRCLE SUITE 300
City WILSONVILLE State OR Zip 97070

(2) TYPE OF WORK

☒ New ☐ Deepening ☒ Abandonment
☐ Alteration (repair/recondition)

(3) CONSTRUCTION

☐ Rotary Air ☐ Hand Auger ☐ Hollow stem auger
☒ Rotary Mud ☐ Cable ☐ Push Probe
☐ Other _____

(4) TYPE OF HOLE:

◉ Uncased Temporary ○ Cased Permanent
○ Uncased Permanent ○ Slope Stablity
○ Other
Other: _____

(5) USE OF HOLE

GEOTECHNICAL SOIL

(6) BORE HOLE CONSTRUCTION

Special Standard ☐ (Attach copy)
Depth of Completed Hole 50.00 ft.

BORE HOLE Dia	From	To	SEAL Material	From	To	Amt	sacks/ lbs
4.87	0	50	Bentonite Chips	0	10	2	S
			Bentonite Grout	10	50	2	S

Backfill placed from _____ ft. to _____ ft. Material _____
Filter pack from _____ ft. to _____ ft. Material _____ Size _____

(7) CASING/SCREEN

Casing	Screen	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐
○	○		☐				○	○	☐	☐

(8) WELL TESTS

○ Pump ○ Bailer ○ Air ○ Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration(hr)

Temperature _____ °F Lab analysis ☐ Yes By _____
Supervising Geologist/Engineer _____
Water quality concerns? ☐ Yes (describe below) TDS amount _____ _____

From	To	Description	Amount	Units

(9) LOCATION OF HOLE (legal description)

County TILLAMOOK Twp 1.00 S N/S Range 10.00 W E/W WM
Sec 25 SE 1/4 of the NW 1/4 Tax Lot 400
Tax Map Number _____ Lot _____
Lat ° ' " or 45.45646389 DMS or DD
Long ° ' " or -123.85700833 DMS or DD
○ Street address of hole ◉ Nearest address
801-981 OR-131

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Predeepening			☐	
Completed Well			☐	

Flowing Artesian? ☐
Depth water was first found _____

WATER BEARING ZONES

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
					☐	
					☐	
					☐	
					☐	
					☐	

(11) SUBSURFACE LOG

Ground Elevation _____

Material	From	To
Fill Dirt	0	10
Sand & Gravel	10	50

Date Started 5/20/2019 Completed 5/20/2019

(12) ABANDONMENT LOG:

Material	From	To	Amt	sacks/ lbs
Bentonite Chips	0	10	2	S
Bentonite Grout	10	50	2	S

Date Started 5/20/2019 Completed 5/20/2019

Professional Certification

(to be signed by an Oregon licensed water or monitoring well constructor, Oregon registered geologist or professional engineer).

I accept responsibility for the construction, deepening, alteration, or abandonment work performed during the construction dates reported above. All work performed during this time is in compliance with Oregon geotechnical hole construction standards. This report is true to the best of my knowledge and belief.

License/Registration Number 10563 Date 8/22/2019
First Name FORD Last Name STIGALL
Affiliation WESTERN STATES

ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK

Form Version:

(6) BORE HOLE CONSTRUCTION

BORE HOLE

Dia	From	To

SEAL

Material	From	To	Amt	sacks/ lbs

FILTER PACK

From	To	Material	Size

(7) CASING/SCREENS

Casing	Screen	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd

(8) WELL TESTS

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)

Water Quality Concerns

From	To	Description	Amount	Units

Comments/Remarks

Dave Buchanan drilled the boring

(10) STATIC WATER LEVEL

Water Bearing Zones

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)

(11) SUBSURFACE LOG

Material	From	To

(12) ABANDONMENT LOG

Material	From	To	Amt	sacks/ lbs

GEOTECHNICAL HOLE REPORT - Map with location identified must be attached and shall include an approximate scale and north arrow

TILL 52900

8/22/2019

Map of Hole

Appendix C

Laboratory Analytical Reports

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6/21/2024
Mr. Don Malkemus
Terraphase Engineering Inc.
610 SW Broadway
Suite 405
Portland OR 97205

Project Name: 910 West 3rd Street Property
Project #: 0053.007.002
Workorder #: 2406323

Dear Mr. Don Malkemus

The following report includes the data for the above referenced project for sample(s) received on 6/10/2024 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Monica Tran at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Monica Tran

Project Manager

eurofins | Air Toxics

WORK ORDER #: 2406323

Work Order Summary

CLIENT:	Mr. Don Malkemus Terraphase Engineering Inc. 610 SW Broadway Suite 405 Portland, OR 97205	**BILL TO:**	Accounts Payable Terraphase Engineering Inc. 1300 Clay Street Suite 1000 Oakland, CA 94612
PHONE:	510-645-1856	**P.O. #**	
FAX:		**PROJECT #**	0053.007.002 910 West 3rd Street Property
DATE RECEIVED:	06/10/2024	**CONTACT:**	Monica Tran
DATE COMPLETED:	06/21/2024		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	3S-SV-4	Modified ASTM D-1946	5.9 "Hg	9.9 psi
02A	3S-SV-1	Modified ASTM D-1946	3.9 "Hg	9.8 psi
03A	3S-SV-1-REP	Modified ASTM D-1946	6.5 "Hg	9.6 psi
04A	Lab Blank	Modified ASTM D-1946	NA	NA
04B	Lab Blank	Modified ASTM D-1946	NA	NA
05A	CCV	Modified ASTM D-1946	NA	NA
06A	LCS	Modified ASTM D-1946	NA	NA
06AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 06/21/24

Technical Director

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA ELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-017
Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

LABORATORY NARRATIVE
Modified ASTM D-1946
Terraphase Engineering Inc.
Workorder# 2406323

Three 1 Liter Summa Canister samples were received on June 10, 2024. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the EATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

A revised Chain of Custody (COC) was provided by the client on 6/10/2024.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: 3S-SV-4

Lab ID#: 2406323-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	0.62
Methane	0.00021	68
Carbon Dioxide	0.021	23

Client Sample ID: 3S-SV-1

Lab ID#: 2406323-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.19	1.1
Methane	0.00019	38
Carbon Dioxide	0.019	22

Client Sample ID: 3S-SV-1-REP

Lab ID#: 2406323-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	1.0
Methane	0.00021	38
Carbon Dioxide	0.021	22

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Client Sample ID: 3S-SV-4

Lab ID#: 2406323-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062122**	**Date of Collection: 6/7/24 5:35:00 PM**	
Dil. Factor:	**2.08**	**Date of Analysis: 6/21/24 03:39 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.21	0.62
Helium	0.10	Not Detected
Carbon Monoxide	0.021	Not Detected
Methane	0.00021	68
Carbon Dioxide	0.021	23

Container Type: 1 Liter Summa Canister

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Client Sample ID: 3S-SV-1

Lab ID#: 2406323-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062123**	**Date of Collection: 6/7/24 6:04:00 PM**	
Dil. Factor:	**1.91**	**Date of Analysis: 6/21/24 04:02 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.19	1.1
Helium	0.096	Not Detected
Carbon Monoxide	0.019	Not Detected
Methane	0.00019	38
Carbon Dioxide	0.019	22

Container Type: 1 Liter Summa Canister

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Client Sample ID: 3S-SV-1-REP

Lab ID#: 2406323-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062124**	**Date of Collection: 6/7/24 6:51:00 PM**	
Dil. Factor:	**2.11**	**Date of Analysis: 6/21/24 04:24 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.21	1.0
Helium	0.10	Not Detected
Carbon Monoxide	0.021	Not Detected
Methane	0.00021	38
Carbon Dioxide	0.021	22

Container Type: 1 Liter Summa Canister

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Client Sample ID: Lab Blank

Lab ID#: 2406323-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062104**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/24 08:07 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Carbon Monoxide	0.010	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 2406323-04B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062103c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/24 07:44 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: CCV

Lab ID#: 2406323-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062101**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/24 06:40 PM**

Compound	%Recovery
Oxygen	99
Helium	98
Carbon Monoxide	100
Methane	97
Carbon Dioxide	100

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 2406323-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/20/24 07:04 PM**	

Compound	%Recovery	Method Limits
Oxygen	103	85-115
Helium	98	85-115
Carbon Monoxide	98	85-115
Methane	90	85-115
Carbon Dioxide	100	85-115

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 2406323-06AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10062125**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 6/21/24 04:47 PM**	

Compound	%Recovery	Method Limits
Oxygen	102	85-115
Helium	98	85-115
Carbon Monoxide	98	85-115
Methane	95	85-115
Carbon Dioxide	100	85-115

Container Type: NA - Not Applicable

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Method : Modified ASTM D-1946 (Sh)-CH4, CO, CO2, He, & O2

CAS Number	Compound	Rpt. Limit (%)
7782-44-7	Oxygen	0.10
7440-59-7	**Helium**	**0.050**
630-08-0	Carbon Monoxide	0.010
74-82-8	Methane	0.00010
124-38-9	Carbon Dioxide	0.010

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Analysis Request /Canister Chain of Custody

For Laboratory Use Only

PID: _____ Workorder #: 2406323

180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Click links below to view:
Canister Sampling Guide
Helium Shroud Video

Client: Terraphase Eng Inc PID: –
Project Name: 910 West 3rd Street Property
Project Manager: James Fallon P.O.# –
Sampler: Adrienne Vanegas + Aditya Manohar
Site Name:

Special Instructions/Notes:
Project Name: 910 West 3rd St Property
Project # : 0053.007.002

Turnaround Time (Rush surcharges may apply)
Select TAT from drop down box : Standard

Lab ID	Sample Identification	Can #	Flow Controller #	Start Sampling Information		Stop Sampling Information		Canister Vacuum/Pressure		Lab Use Only		Requested Analyses			
				Date	Time	Date	Time	Initial (in Hg)	Final (in Hg)	Receipt	Final (psig) Gas: N_2 / He	Methane, oxygen (CO_2 / He (ONLY))	Carbon monoxide		
	35-SV-4	1L3575	23692	06/07	1729	06/07	1735	30	5			X	X		
	35-SV-1	1L2200	26791	06/07	1837	06/07	1844	30	5			X	X		
	35-SV-1-REP	1L4435	25203	06/07	1846	06/07	1851	28	5			X	X		

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Aditya Manohar	06/08/2024	1100			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: | Custody Seals Intact? | Yes | No | None

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

Revised as received 6/10/24 SKL

Analysis Request / Canister Chain of Custody

eurofins | Air Toxics

Eurofins Environment Testing Northern California, LLC
180 Blue Ravine Rd. Suite B, Folsom, CA 95630
Phone (800) 985-5955; Fax (916) 351-8279

Workorder #: 24063..3

Instructions

If no TAT is marked, EATL will proceed with Standard TAT

page 1 of 1

Client: Terraphase Eng Inc
Site Name: 910 West 3rd Street Property
Project Manager: James Farrow
Sampler: Adrienne Venegas + Aditya Manohar

Project Name: 910 West 3rd Street Property
Project #: 0053.007.002
PO#:

Turnaround Time (Specify Below)

Standard X Rush _____ (Surcharges will apply, per availability)

Samples received after 3PM PST are considered to be received on the following workday.

Requested Date (mm/dd/yy): 5

OR Number of Days:

Lab ID	Field Sample Identification (Location)	Canister Barcode #	Flow Controller Barcode #	Start Sampling Information		Stop Sampling Information		Requested Analyses				Canister Vacuum/Pressure		Lab Use Only	
				Date	Time	Date	Time	TO-15	He (DI946)	Carbon Monoxide		Initial (in "Hg)	Final (in "Hg)	Receipt (in "Hg)	Final (in psi) Gas: N2 / He
01A	3S-SV-4	1L3575	23692	06/07	1724	06/07	1727	X	X	X		-30	-5		
02A	3S-SV-1	1L2200	26791	06/07	1837	06/07	1844	X	X	X		-30	-5		
03A	3S-SV-1-REP	1L4435	25203	06/07	1846	06/07	1851	X	X	X		-28	-5		

Special Instructions/Notes:

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Aditya Manohar T.E.I	06/08/24	1100		6/10/24	0941
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Lab Use Only

Shipper Name: Fed Ex | Custody Seals Intact? Yes No (None) | Condition:

Sample Transportation Notice: Relinquishing signature on this document indicates that samples are shipped in compliance with all applicable local, State, Federal, and international laws, regulations, and ordinances of any kind. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins Air Toxics against any claim, demand, or action, of any kind, related to the collection, handling, of shipping of samples. D.O.T Hotline (800) 467-4922

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

ANALYTICAL REPORT

Friday, June 14, 2024

James Farrow
Terraphase Engineering
610 SW Broadway #406
Portland, OR 97205

RE: A4E1630 - 910 West 3rd Street Property - O053.07.003

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 A4E1630, which was received by the laboratory on 5/28/2024 at 7:39:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: DAuvil@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)					
Cooler #1	1.3	degC	Cooler #2	1.6	degC
Cooler #3	1.8	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

Darrell Auvil, Client Services Manager

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

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
3S-SBFA-1-1.0-3.0	A4E1630-01	Soil	05/24/24 13:08	05/28/24 07:39
3S-SBFA-1-5.0-8.0	A4E1630-02	Soil	05/24/24 13:15	05/28/24 07:39
3S-SBFA-2-1.5-3.0	A4E1630-03	Soil	05/24/24 12:10	05/28/24 07:39
3S-SBFA-2-5.0-7.0	A4E1630-04	Soil	05/24/24 12:20	05/28/24 07:39
3S-SBFA-3-1.0-3.5	A4E1630-05	Soil	05/24/24 11:35	05/28/24 07:39
3S-SBFA-3-1.0-3.5-DUP	A4E1630-06	Soil	05/24/24 11:38	05/28/24 07:39
3S-SBFA-3-5.0-8.0	A4E1630-07	Soil	05/24/24 11:50	05/28/24 07:39
3S-SBFA-4-2.0-3.0	A4E1630-08	Soil	05/24/24 10:30	05/28/24 07:39
3S-SBFA-4-5.0-8.0	A4E1630-09	Soil	05/24/24 10:40	05/28/24 07:39
3S-SBHOT-1-0.0-1.0-DUP	A4E1630-10	Soil	05/24/24 16:05	05/28/24 07:39
3S-SBHOT-1-0.0-1.0	A4E1630-11	Soil	05/24/24 16:00	05/28/24 07:39
3S-SBFA-EB-20240524	A4E1630-15	Water	05/24/24 15:00	05/28/24 07:39
3S-SBFA-4-GW-13-18	A4E1630-16	Water	05/24/24 13:28	05/28/24 07:39
3S-SBFA-3-GW-11-16	A4E1630-17	Water	05/24/24 15:13	05/28/24 07:39
3S-SBFA-3-GW-11-16-DUP	A4E1630-18	Water	05/24/24 15:39	05/28/24 07:39

Apex Laboratories

Darrell Auvil, Client Services Manager

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

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-1-1.0-3.0 (A4E1630-01)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	41.0	mg/kg dry	1	05/29/24 21:42	NWTPH-HCID	
Diesel Range Organics	ND	---	102	mg/kg dry	1	05/29/24 21:42	NWTPH-HCID	
Oil Range Organics	**DET**	---	205	mg/kg dry	1	05/29/24 21:42	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*112 %*	*Limits: 50-150 %*	*1*	*05/29/24 21:42*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*113 %*	*50-150 %*	*1*	*05/29/24 21:42*	*NWTPH-HCID*	
3S-SBFA-1-5.0-8.0 (A4E1630-02)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	31.2	mg/kg dry	1	05/29/24 20:32	NWTPH-HCID	
Diesel Range Organics	ND	---	77.9	mg/kg dry	1	05/29/24 20:32	NWTPH-HCID	
Oil Range Organics	**DET**	---	156	mg/kg dry	1	05/29/24 20:32	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*96 %*	*Limits: 50-150 %*	*1*	*05/29/24 20:32*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*97 %*	*50-150 %*	*1*	*05/29/24 20:32*	*NWTPH-HCID*	
3S-SBFA-2-1.5-3.0 (A4E1630-03)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	**DET**	---	41.3	mg/kg dry	1	05/29/24 23:39	NWTPH-HCID	
Diesel Range Organics	ND	---	103	mg/kg dry	1	05/29/24 23:39	NWTPH-HCID	
Oil Range Organics	**DET**	---	207	mg/kg dry	1	05/29/24 23:39	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*105 %*	*Limits: 50-150 %*	*1*	*05/29/24 23:39*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*105 %*	*50-150 %*	*1*	*05/29/24 23:39*	*NWTPH-HCID*	
3S-SBFA-2-5.0-7.0 (A4E1630-04)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	38.1	mg/kg dry	1	05/30/24 00:02	NWTPH-HCID	
Diesel Range Organics	ND	---	95.3	mg/kg dry	1	05/30/24 00:02	NWTPH-HCID	
Oil Range Organics	**DET**	---	191	mg/kg dry	1	05/30/24 00:02	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*103 %*	*Limits: 50-150 %*	*1*	*05/30/24 00:02*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*104 %*	*50-150 %*	*1*	*05/30/24 00:02*	*NWTPH-HCID*	
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	43.6	mg/kg dry	1	05/29/24 22:29	NWTPH-HCID	
Diesel Range Organics	ND	---	109	mg/kg dry	1	05/29/24 22:29	NWTPH-HCID	
Oil Range Organics	**DET**	---	218	mg/kg dry	1	05/29/24 22:29	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*103 %*	*Limits: 50-150 %*	*1*	*05/29/24 22:29*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*103 %*	*50-150 %*	*1*	*05/29/24 22:29*	*NWTPH-HCID*	

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Darrell Auvil, Client Services Manager

Apex Laboratories, LLC
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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-1.0-3.5-DUP (A4E1630-06)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	41.3	mg/kg dry	1	05/29/24 22:52	NWTPH-HCID	
Diesel Range Organics	ND	---	103	mg/kg dry	1	05/29/24 22:52	NWTPH-HCID	
Oil Range Organics	**DET**	---	207	mg/kg dry	1	05/29/24 22:52	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*89 %*	*Limits: 50-150 %*	*1*	*05/29/24 22:52*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*92 %*	*50-150 %*	*1*	*05/29/24 22:52*	*NWTPH-HCID*	
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	30.3	mg/kg dry	1	05/29/24 23:15	NWTPH-HCID	
Diesel Range Organics	ND	---	75.8	mg/kg dry	1	05/29/24 23:15	NWTPH-HCID	
Oil Range Organics	**DET**	---	152	mg/kg dry	1	05/29/24 23:15	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*108 %*	*Limits: 50-150 %*	*1*	*05/29/24 23:15*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*90 %*	*50-150 %*	*1*	*05/29/24 23:15*	*NWTPH-HCID*	
3S-SBFA-4-2.0-3.0 (A4E1630-08)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	25.6	mg/kg dry	1	05/30/24 00:25	NWTPH-HCID	
Diesel Range Organics	ND	---	64.1	mg/kg dry	1	05/30/24 00:25	NWTPH-HCID	
Oil Range Organics	**DET**	---	128	mg/kg dry	1	05/30/24 00:25	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*104 %*	*Limits: 50-150 %*	*1*	*05/30/24 00:25*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*102 %*	*50-150 %*	*1*	*05/30/24 00:25*	*NWTPH-HCID*	
3S-SBFA-4-5.0-8.0 (A4E1630-09)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	**DET**	---	38.5	mg/kg dry	1	05/30/24 00:49	NWTPH-HCID	
Diesel Range Organics	ND	---	96.2	mg/kg dry	1	05/30/24 00:49	NWTPH-HCID	
Oil Range Organics	**DET**	---	192	mg/kg dry	1	05/30/24 00:49	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*82 %*	*Limits: 50-150 %*	*1*	*05/30/24 00:49*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*72 %*	*50-150 %*	*1*	*05/30/24 00:49*	*NWTPH-HCID*	
3S-SBHOT-1-0.0-1.0-DUP (A4E1630-10)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	31.2	mg/kg dry	1	05/29/24 20:55	NWTPH-HCID	
Diesel Range Organics	ND	---	77.9	mg/kg dry	1	05/29/24 20:55	NWTPH-HCID	
Oil Range Organics	ND	---	156	mg/kg dry	1	05/29/24 20:55	NWTPH-HCID	
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*86 %*	*Limits: 50-150 %*	*1*	*05/29/24 20:55*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*84 %*	*50-150 %*	*1*	*05/29/24 20:55*	*NWTPH-HCID*	

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBHOT-1-0.0-1.0 (A4E1630-11)				**Matrix: Soil**		**Batch: 24E0998**		
Gasoline Range Organics	ND	---	31.9	mg/kg dry	1	05/29/24 21:19	NWTPH-HCID	
Diesel Range Organics	ND	---	79.9	mg/kg dry	1	05/29/24 21:19	NWTPH-HCID	
Oil Range Organics	ND	---	160	mg/kg dry	1	05/29/24 21:19	NWTPH-HCID	
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*102 %*	*Limits: 50-150 %*	*1*	*05/29/24 21:19*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*93 %*	*50-150 %*	*1*	*05/29/24 21:19*	*NWTPH-HCID*	
3S-SBFA-EB-20240524 (A4E1630-15)				**Matrix: Water**		**Batch: 24E1067**		
Gasoline Range Organics	ND	---	0.0971	mg/L	1	05/30/24 22:12	NWTPH-HCID	
Diesel Range Organics	ND	---	0.243	mg/L	1	05/30/24 22:12	NWTPH-HCID	
Oil Range Organics	ND	---	0.243	mg/L	1	05/30/24 22:12	NWTPH-HCID	
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*90 %*	*Limits: 50-150 %*	*1*	*05/30/24 22:12*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*35 %*	*10-120 %*	*1*	*05/30/24 22:12*	*NWTPH-HCID*	
3S-SBFA-4-GW-13-18 (A4E1630-16)				**Matrix: Water**		**Batch: 24E1067**		
Gasoline Range Organics	ND	---	0.104	mg/L	1	05/30/24 22:33	NWTPH-HCID	
Diesel Range Organics	ND	---	0.260	mg/L	1	05/30/24 22:33	NWTPH-HCID	
Oil Range Organics	ND	---	0.260	mg/L	1	05/30/24 22:33	NWTPH-HCID	
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*85 %*	*Limits: 50-150 %*	*1*	*05/30/24 22:33*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*25 %*	*10-120 %*	*1*	*05/30/24 22:33*	*NWTPH-HCID*	
3S-SBFA-3-GW-11-16 (A4E1630-17)				**Matrix: Water**		**Batch: 24E1067**		
Gasoline Range Organics	**DET**	---	0.104	mg/L	1	05/30/24 22:54	NWTPH-HCID	
Diesel Range Organics	ND	---	0.260	mg/L	1	05/30/24 22:54	NWTPH-HCID	
Oil Range Organics	**DET**	---	0.260	mg/L	1	05/30/24 22:54	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*83 %*	*Limits: 50-150 %*	*1*	*05/30/24 22:54*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*23 %*	*10-120 %*	*1*	*05/30/24 22:54*	*NWTPH-HCID*	
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**		**Batch: 24E1067**		
Gasoline Range Organics	**DET**	---	0.109	mg/L	1	05/30/24 23:56	NWTPH-HCID	
Diesel Range Organics	ND	---	0.272	mg/L	1	05/30/24 23:56	NWTPH-HCID	
Oil Range Organics	**DET**	---	0.272	mg/L	1	05/30/24 23:56	NWTPH-HCID	F-03
Surrogate: o-Terphenyl (Surr)		*Recovery:*	*87 %*	*Limits: 50-150 %*	*1*	*05/30/24 23:56*	*NWTPH-HCID*	
4-Bromofluorobenzene (Surr)			*29 %*	*10-120 %*	*1*	*05/30/24 23:56*	*NWTPH-HCID*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-1-1.0-3.0 (A4E1630-01)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	37.7	mg/kg dry	1	06/06/24 22:42	NWTPH-Dx/SG	
Oil	**1350**	---	75.4	mg/kg dry	1	06/06/24 22:42	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*	*1*	*06/06/24 22:42*	*NWTPH-Dx/SG*	
3S-SBFA-1-5.0-8.0 (A4E1630-02)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	28.8	mg/kg dry	1	06/06/24 23:23	NWTPH-Dx/SG	
Oil	**547**	---	57.7	mg/kg dry	1	06/06/24 23:23	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*	*1*	*06/06/24 23:23*	*NWTPH-Dx/SG*	
3S-SBFA-2-1.5-3.0 (A4E1630-03)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	38.0	mg/kg dry	1	06/07/24 01:07	NWTPH-Dx/SG	
Oil	**1120**	---	76.1	mg/kg dry	1	06/07/24 01:07	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 87 %*		*Limits: 50-150 %*	*1*	*06/07/24 01:07*	*NWTPH-Dx/SG*	
3S-SBFA-2-5.0-7.0 (A4E1630-04)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	35.8	mg/kg dry	1	06/07/24 01:28	NWTPH-Dx/SG	
Oil	**925**	---	71.5	mg/kg dry	1	06/07/24 01:28	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*	*1*	*06/07/24 01:28*	*NWTPH-Dx/SG*	
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	40.2	mg/kg dry	1	06/07/24 01:48	NWTPH-Dx/SG	
Oil	**407**	---	80.4	mg/kg dry	1	06/07/24 01:48	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 91 %*		*Limits: 50-150 %*	*1*	*06/07/24 01:48*	*NWTPH-Dx/SG*	
3S-SBFA-3-1.0-3.5-DUP (A4E1630-06)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	37.5	mg/kg dry	1	06/07/24 02:30	NWTPH-Dx/SG	
Oil	**1300**	---	75.0	mg/kg dry	1	06/07/24 02:30	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 93 %*		*Limits: 50-150 %*	*1*	*06/07/24 02:30*	*NWTPH-Dx/SG*	
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	28.5	mg/kg dry	1	06/07/24 02:50	NWTPH-Dx/SG	
Oil	**522**	---	57.0	mg/kg dry	1	06/07/24 02:50	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 89 %*		*Limits: 50-150 %*	*1*	*06/07/24 02:50*	*NWTPH-Dx/SG*	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-4-2.0-3.0 (A4E1630-08)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	24.9	mg/kg dry	1	06/07/24 03:11	NWTPH-Dx/SG	
Oil	**567**	---	49.7	mg/kg dry	1	06/07/24 03:11	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 94 %*	*Limits: 50-150 %*		*1*	*06/07/24 03:11*	*NWTPH-Dx/SG*	
3S-SBFA-4-5.0-8.0 (A4E1630-09)				**Matrix: Soil**		**Batch: 24F0182**		
Diesel	ND	---	34.9	mg/kg dry	1	06/07/24 03:32	NWTPH-Dx/SG	
Oil	**540**	---	69.9	mg/kg dry	1	06/07/24 03:32	NWTPH-Dx/SG	**F-03**
Surrogate: o-Terphenyl (Surr)		*Recovery: 90 %*	*Limits: 50-150 %*		*1*	*06/07/24 03:32*	*NWTPH-Dx/SG*	
3S-SBFA-3-GW-11-16 (A4E1630-17)				**Matrix: Water**		**Batch: 24F0173**		
Diesel	ND	---	0.190	mg/L	1	06/06/24 19:23	NWTPH-Dx/SG	
Oil	**7.36**	---	0.381	mg/L	1	06/06/24 19:23	NWTPH-Dx/SG	
Surrogate: o-Terphenyl (Surr)		*Recovery: 85 %*	*Limits: 50-150 %*		*1*	*06/06/24 19:23*	*NWTPH-Dx/SG*	
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**		**Batch: 24F0173**		
Diesel	ND	---	0.217	mg/L	1	06/06/24 20:28	NWTPH-Dx/SG	
Oil	**4.72**	---	0.435	mg/L	1	06/06/24 20:28	NWTPH-Dx/SG	
Surrogate: o-Terphenyl (Surr)		*Recovery: 109 %*	*Limits: 50-150 %*		*1*	*06/06/24 20:28*	*NWTPH-Dx/SG*	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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
3S-SBFA-2-1.5-3.0 (A4E1630-03RE1)				**Matrix: Soil**		**Batch: 24F0231**		
Gasoline Range Organics	ND	---	28.4	mg/kg dry	50	06/07/24 12:46	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 97 %*		*Limits: 50-150 %*	*1*	*06/07/24 12:46*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*106 %*	*50-150 %*	*1*	*06/07/24 12:46*	*NWTPH-Gx (MS)*	
3S-SBFA-4-5.0-8.0 (A4E1630-09)				**Matrix: Soil**		**Batch: 24F0185**		
Gasoline Range Organics	**30.3**	---	17.6	mg/kg dry	50	06/06/24 14:45	NWTPH-Gx (MS)	**F-03**
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 105 %*		*Limits: 50-150 %*	*1*	*06/06/24 14:45*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*06/06/24 14:45*	*NWTPH-Gx (MS)*	
3S-SBFA-3-GW-11-16 (A4E1630-17)				**Matrix: Water**		**Batch: 24F0177**		
Gasoline Range Organics	ND	---	0.100	mg/L	1	06/06/24 10:38	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 100 %*		*Limits: 50-150 %*	*1*	*06/06/24 10:38*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*06/06/24 10:38*	*NWTPH-Gx (MS)*	
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**		**Batch: 24F0177**		
Gasoline Range Organics	ND	---	0.100	mg/L	1	06/06/24 11:00	NWTPH-Gx (MS)	
Surrogate: 4-Bromofluorobenzene (Sur)		*Recovery: 102 %*		*Limits: 50-150 %*	*1*	*06/06/24 11:00*	*NWTPH-Gx (MS)*	
1,4-Difluorobenzene (Sur)			*107 %*	*50-150 %*	*1*	*06/06/24 11:00*	*NWTPH-Gx (MS)*	

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Darrell Auvil, Client Services Manager

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-1-1.0-3.0 (A4E1630-01)				**Matrix: Soil**		**Batch: 24F0080**		
Acenaphthene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Acenaphthylene	**152**	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Anthracene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Benz(a)anthracene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Benzo(a)pyrene	ND	---	113	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Benzo(b)fluoranthene	ND	---	113	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Benzo(k)fluoranthene	ND	---	113	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Chrysene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Fluoranthene	**249**	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Fluorene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
1-Methylnaphthalene	ND	---	150	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
2-Methylnaphthalene	ND	---	150	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Naphthalene	**480**	---	150	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Phenanthrene	**419**	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Pyrene	**207**	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Dibenzofuran	**108**	---	75.2	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	752	ug/kg dry	10	06/05/24 19:34	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*108 %*	*Limits: 37-122 %*	*10*	*06/05/24 19:34*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*96 %*	*44-120 %*	*10*	*06/05/24 19:34*	*EPA 8270E*	
Phenol-d6 (Surr)			*99 %*	*33-122 %*	*10*	*06/05/24 19:34*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*104 %*	*54-127 %*	*10*	*06/05/24 19:34*	*EPA 8270E*	
2-Fluorophenol (Surr)			*90 %*	*35-120 %*	*10*	*06/05/24 19:34*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*117 %*	*39-132 %*	*10*	*06/05/24 19:34*	*EPA 8270E*	
3S-SBFA-1-5.0-8.0 (A4E1630-02RE1)				**Matrix: Soil**		**Batch: 24F0234**		
Acenaphthene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Acenaphthylene	**56.4**	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Anthracene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Benz(a)anthracene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	Q-37, Q-42
Benzo(a)pyrene	ND	---	63.9	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Benzo(b)fluoranthene	ND	---	63.9	ug/kg dry	10	06/07/24 15:23	EPA 8270E	

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Darrell Auvil, Client Services Manager

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ORELAP ID: **OR100062**

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-1-5.0-8.0 (A4E1630-02RE1)				**Matrix: Soil**		**Batch: 24F0234**		
Benzo(k)fluoranthene	ND	---	63.9	ug/kg dry	10	06/07/24 15:23	EPA 8270E	Q-37, Q-42
Benzo(g,h,i)perylene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Chrysene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Fluoranthene	**88.2**	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Fluorene	**48.4**	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	**Q-42**
Indeno(1,2,3-cd)pyrene	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
1-Methylnaphthalene	ND	---	85.2	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
2-Methylnaphthalene	ND	---	85.2	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Naphthalene	**163**	---	85.2	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Phenanthrene	**219**	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Pyrene	**79.6**	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Dibenzofuran	ND	---	42.7	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	427	ug/kg dry	10	06/07/24 15:23	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*93 %*	*Limits: 37-122 %*	*10*	*06/07/24 15:23*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*86 %*	*44-120 %*	*10*	*06/07/24 15:23*	*EPA 8270E*	
Phenol-d6 (Surr)			*84 %*	*33-122 %*	*10*	*06/07/24 15:23*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*99 %*	*54-127 %*	*10*	*06/07/24 15:23*	*EPA 8270E*	
2-Fluorophenol (Surr)			*77 %*	*35-120 %*	*10*	*06/07/24 15:23*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*107 %*	*39-132 %*	*10*	*06/07/24 15:23*	*EPA 8270E*	
3S-SBFA-2-1.5-3.0 (A4E1630-03RE1)				**Matrix: Soil**		**Batch: 24F0234**		
Acenaphthene	**170**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Acenaphthylene	**785**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Anthracene	**173**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Benz(a)anthracene	**99.6**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Benzo(a)pyrene	**139**	---	83.9	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Benzo(b)fluoranthene	**170**	---	83.9	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Benzo(k)fluoranthene	ND	---	83.9	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Chrysene	**131**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Fluoranthene	**727**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Fluorene	**114**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	

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Darrell Auvil, Client Services Manager

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-2-1.5-3.0 (A4E1630-03RE1)				**Matrix: Soil**		**Batch: 24F0234**		
Indeno(1,2,3-cd)pyrene	ND	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
1-Methylnaphthalene	**122**	---	112	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
2-Methylnaphthalene	**162**	---	112	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Naphthalene	**2980**	---	112	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Phenanthrene	**1400**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Pyrene	**557**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Dibenzofuran	**427**	---	56.0	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	560	ug/kg dry	10	06/07/24 17:43	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*93 %*	*Limits: 37-122 %*	*10*	*06/07/24 17:43*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*75 %*	*44-120 %*	*10*	*06/07/24 17:43*	*EPA 8270E*	
Phenol-d6 (Surr)			*77 %*	*33-122 %*	*10*	*06/07/24 17:43*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*79 %*	*54-127 %*	*10*	*06/07/24 17:43*	*EPA 8270E*	
2-Fluorophenol (Surr)			*68 %*	*35-120 %*	*10*	*06/07/24 17:43*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*99 %*	*39-132 %*	*10*	*06/07/24 17:43*	*EPA 8270E*	
3S-SBFA-2-5.0-7.0 (A4E1630-04)				**Matrix: Soil**		**Batch: 24F0080**		
Acenaphthene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Acenaphthylene	**76.9**	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Anthracene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Benz(a)anthracene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Benzo(a)pyrene	ND	---	101	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Benzo(b)fluoranthene	ND	---	101	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Benzo(k)fluoranthene	ND	---	101	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Chrysene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Fluoranthene	**186**	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Fluorene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
1-Methylnaphthalene	ND	---	135	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
2-Methylnaphthalene	ND	---	135	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Naphthalene	**166**	---	135	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Phenanthrene	**288**	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Pyrene	**153**	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-2-5.0-7.0 (A4E1630-04)				**Matrix: Soil**		**Batch: 24F0080**		
Dibenzofuran	ND	---	67.7	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	677	ug/kg dry	10	06/05/24 21:14	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery: 105 %*		*Limits: 37-122 %*	*10*	*06/05/24 21:14*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*87 %*	*44-120 %*	*10*	*06/05/24 21:14*	*EPA 8270E*	
Phenol-d6 (Surr)			*93 %*	*33-122 %*	*10*	*06/05/24 21:14*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*93 %*	*54-127 %*	*10*	*06/05/24 21:14*	*EPA 8270E*	
2-Fluorophenol (Surr)			*83 %*	*35-120 %*	*10*	*06/05/24 21:14*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*113 %*	*39-132 %*	*10*	*06/05/24 21:14*	*EPA 8270E*	
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**		**Batch: 24F0080**		**R-04**
Acenaphthene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Acenaphthylene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Anthracene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Benz(a)anthracene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Benzo(a)pyrene	ND	---	120	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Benzo(b)fluoranthene	ND	---	120	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Benzo(k)fluoranthene	ND	---	120	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Chrysene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Fluoranthene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Fluorene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
1-Methylnaphthalene	ND	---	159	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
2-Methylnaphthalene	ND	---	159	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Naphthalene	ND	---	159	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Phenanthrene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Pyrene	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Dibenzofuran	ND	---	79.8	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	798	ug/kg dry	10	06/05/24 21:48	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery: 104 %*		*Limits: 37-122 %*	*10*	*06/05/24 21:48*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*89 %*	*44-120 %*	*10*	*06/05/24 21:48*	*EPA 8270E*	
Phenol-d6 (Surr)			*96 %*	*33-122 %*	*10*	*06/05/24 21:48*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*97 %*	*54-127 %*	*10*	*06/05/24 21:48*	*EPA 8270E*	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**		**Batch: 24F0080**		**R-04**
Surrogate: 2-Fluorophenol (Surr)		*Recovery:*	*82 %*	*Limits: 35-120 %*	*10*	*06/05/24 21:48*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*115 %*	*39-132 %*	*10*	*06/05/24 21:48*	*EPA 8270E*	
3S-SBFA-3-1.0-3.5-DUP (A4E1630-06RE1)				**Matrix: Soil**		**Batch: 24F0234**		
Acenaphthene	**96.4**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Acenaphthylene	**290**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Anthracene	**139**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Benz(a)anthracene	**59.8**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Benzo(a)pyrene	**94.3**	---	82.4	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Benzo(b)fluoranthene	**91.0**	---	82.4	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Benzo(k)fluoranthene	ND	---	82.4	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Chrysene	**76.9**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Fluoranthene	**413**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Fluorene	**399**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
1-Methylnaphthalene	ND	---	110	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
2-Methylnaphthalene	ND	---	110	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Naphthalene	**1120**	---	110	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Phenanthrene	**946**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Pyrene	**385**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Dibenzofuran	**123**	---	55.0	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	550	ug/kg dry	10	06/07/24 16:33	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*98 %*	*Limits: 37-122 %*	*10*	*06/07/24 16:33*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*80 %*	*44-120 %*	*10*	*06/07/24 16:33*	*EPA 8270E*	
Phenol-d6 (Surr)			*85 %*	*33-122 %*	*10*	*06/07/24 16:33*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*85 %*	*54-127 %*	*10*	*06/07/24 16:33*	*EPA 8270E*	
2-Fluorophenol (Surr)			*81 %*	*35-120 %*	*10*	*06/07/24 16:33*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*108 %*	*39-132 %*	*10*	*06/07/24 16:33*	*EPA 8270E*	
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**		**Batch: 24F0080**		
Acenaphthene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Acenaphthylene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**		**Batch: 24F0080**		
Anthracene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Benz(a)anthracene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Benzo(a)pyrene	ND	---	84.9	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Benzo(b)fluoranthene	ND	---	84.9	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Benzo(k)fluoranthene	ND	---	84.9	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Chrysene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Fluoranthene	**57.5**	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Fluorene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
1-Methylnaphthalene	ND	---	113	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
2-Methylnaphthalene	ND	---	113	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Naphthalene	ND	---	113	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Phenanthrene	**102**	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Pyrene	**62.1**	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Dibenzofuran	ND	---	56.7	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	567	ug/kg dry	10	06/05/24 22:55	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*103 %*	*Limits: 37-122 %*	*10*	*06/05/24 22:55*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*88 %*	*44-120 %*	*10*	*06/05/24 22:55*	*EPA 8270E*	
Phenol-d6 (Surr)			*95 %*	*33-122 %*	*10*	*06/05/24 22:55*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*100 %*	*54-127 %*	*10*	*06/05/24 22:55*	*EPA 8270E*	
2-Fluorophenol (Surr)			*82 %*	*35-120 %*	*10*	*06/05/24 22:55*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*115 %*	*39-132 %*	*10*	*06/05/24 22:55*	*EPA 8270E*	
3S-SBFA-4-2.0-3.0 (A4E1630-08)				**Matrix: Soil**		**Batch: 24F0080**		
Acenaphthene	**65.0**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Acenaphthylene	**265**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Anthracene	**110**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Benz(a)anthracene	**117**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Benzo(a)pyrene	**207**	---	74.0	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Benzo(b)fluoranthene	**234**	---	74.0	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Benzo(k)fluoranthene	**83.8**	---	74.0	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Benzo(g,h,i)perylene	**121**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	

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Darrell Auvil, Client Services Manager

Apex Laboratories, LLC
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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-4-2.0-3.0 (A4E1630-08)				**Matrix: Soil**		**Batch: 24F0080**		
Chrysene	**149**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Fluoranthene	**495**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Fluorene	ND	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**119**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
1-Methylnaphthalene	ND	---	98.6	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
2-Methylnaphthalene	ND	---	98.6	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Naphthalene	**1430**	---	98.6	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Phenanthrene	**736**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Pyrene	**359**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Dibenzofuran	**218**	---	49.4	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	494	ug/kg dry	10	06/05/24 23:28	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*107 %*	*Limits: 37-122 %*	*10*	*06/05/24 23:28*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*87 %*	*44-120 %*	*10*	*06/05/24 23:28*	*EPA 8270E*	
Phenol-d6 (Surr)			*88 %*	*33-122 %*	*10*	*06/05/24 23:28*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*88 %*	*54-127 %*	*10*	*06/05/24 23:28*	*EPA 8270E*	
2-Fluorophenol (Surr)			*76 %*	*35-120 %*	*10*	*06/05/24 23:28*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*116 %*	*39-132 %*	*10*	*06/05/24 23:28*	*EPA 8270E*	
3S-SBFA-4-5.0-8.0 (A4E1630-09RE1)				**Matrix: Soil**		**Batch: 24F0080**		
Acenaphthene	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Acenaphthylene	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Anthracene	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Benz(a)anthracene	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Benzo(a)pyrene	**134**	---	104	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Benzo(b)fluoranthene	**170**	---	104	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Benzo(k)fluoranthene	ND	---	104	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Benzo(g,h,i)perylene	**85.8**	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Chrysene	**107**	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Fluoranthene	**181**	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Fluorene	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Indeno(1,2,3-cd)pyrene	**73.0**	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
1-Methylnaphthalene	ND	---	138	ug/kg dry	10	06/06/24 00:01	EPA 8270E	

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6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-4-5.0-8.0 (A4E1630-09RE1)				**Matrix: Soil**		**Batch: 24F0080**		
2-Methylnaphthalene	ND	---	138	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Naphthalene	**345**	---	138	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Phenanthrene	**264**	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Pyrene	**152**	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Dibenzofuran	ND	---	69.2	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	692	ug/kg dry	10	06/06/24 00:01	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery: 101 %*		*Limits: 37-122 %*	*10*	*06/06/24 00:01*	*EPA 8270E*	
2-Fluorobiphenyl (Surr)			*83 %*	*44-120 %*	*10*	*06/06/24 00:01*	*EPA 8270E*	
Phenol-d6 (Surr)			*91 %*	*33-122 %*	*10*	*06/06/24 00:01*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*88 %*	*54-127 %*	*10*	*06/06/24 00:01*	*EPA 8270E*	
2-Fluorophenol (Surr)			*79 %*	*35-120 %*	*10*	*06/06/24 00:01*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*110 %*	*39-132 %*	*10*	*06/06/24 00:01*	*EPA 8270E*	
3S-SBFA-EB-20240524 (A4E1630-15)				**Matrix: Water**		**Batch: 24E1093**		
Acenaphthene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Acenaphthylene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Anthracene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Benz(a)anthracene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Benzo(a)pyrene	ND	---	0.0300	ug/L	1	05/31/24 19:08	EPA 8270E	
Benzo(b)fluoranthene	ND	---	0.0300	ug/L	1	05/31/24 19:08	EPA 8270E	
Benzo(k)fluoranthene	ND	---	0.0300	ug/L	1	05/31/24 19:08	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Chrysene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Fluoranthene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Fluorene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	05/31/24 19:08	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	05/31/24 19:08	EPA 8270E	
Naphthalene	ND	---	0.0400	ug/L	1	05/31/24 19:08	EPA 8270E	
Phenanthrene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Pyrene	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Dibenzofuran	ND	---	0.0200	ug/L	1	05/31/24 19:08	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	0.200	ug/L	1	05/31/24 19:08	EPA 8270E	

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Darrell Auvil, Client Services Manager

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6700 S.W. Sandburg Street
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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-EB-20240524 (A4E1630-15)				**Matrix: Water**		**Batch: 24E1093**		
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*64 %*	*Limits: 44-120 %*	*1*	*05/31/24 19:08*	*EPA 8270E*	*Q-41*
2-Fluorobiphenyl (Surr)			*46 %*	*44-120 %*	*1*	*05/31/24 19:08*	*EPA 8270E*	
Phenol-d6 (Surr)			*22 %*	*10-133 %*	*1*	*05/31/24 19:08*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*79 %*	*50-134 %*	*1*	*05/31/24 19:08*	*EPA 8270E*	
2-Fluorophenol (Surr)			*30 %*	*19-120 %*	*1*	*05/31/24 19:08*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*73 %*	*43-140 %*	*1*	*05/31/24 19:08*	*EPA 8270E*	
3S-SBFA-4-GW-13-18 (A4E1630-16)				**Matrix: Water**		**Batch: 24E1093**		**PRES**
Acenaphthene	**0.253**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Acenaphthylene	**0.307**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Anthracene	ND	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Benz(a)anthracene	ND	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Benzo(a)pyrene	ND	---	0.0309	ug/L	1	05/31/24 19:41	EPA 8270E	
Benzo(b)fluoranthene	ND	---	0.0309	ug/L	1	05/31/24 19:41	EPA 8270E	
Benzo(k)fluoranthene	ND	---	0.0309	ug/L	1	05/31/24 19:41	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Chrysene	ND	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Fluoranthene	**0.0814**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Fluorene	**0.0354**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
1-Methylnaphthalene	**0.103**	---	0.0412	ug/L	1	05/31/24 19:41	EPA 8270E	
2-Methylnaphthalene	**0.0791**	---	0.0412	ug/L	1	05/31/24 19:41	EPA 8270E	
Naphthalene	**2.90**	---	0.0412	ug/L	1	05/31/24 19:41	EPA 8270E	
Phenanthrene	**0.154**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Pyrene	**0.0592**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Dibenzofuran	**0.128**	---	0.0206	ug/L	1	05/31/24 19:41	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	0.206	ug/L	1	05/31/24 19:41	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*69 %*	*Limits: 44-120 %*	*1*	*05/31/24 19:41*	*EPA 8270E*	*Q-41*
2-Fluorobiphenyl (Surr)			*39 %*	*44-120 %*	*1*	*05/31/24 19:41*	*EPA 8270E*	*S-06*
Phenol-d6 (Surr)			*23 %*	*10-133 %*	*1*	*05/31/24 19:41*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*54 %*	*50-134 %*	*1*	*05/31/24 19:41*	*EPA 8270E*	
2-Fluorophenol (Surr)			*30 %*	*19-120 %*	*1*	*05/31/24 19:41*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*58 %*	*43-140 %*	*1*	*05/31/24 19:41*	*EPA 8270E*	

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Darrell Auvil, Client Services Manager

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-GW-11-16 (A4E1630-17)				**Matrix: Water**		**Batch: 24E1093**		**DCNT**
Acenaphthene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Acenaphthylene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Anthracene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Benz(a)anthracene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Benzo(a)pyrene	ND	---	0.0353	ug/L	1	05/31/24 20:15	EPA 8270E	
Benzo(b)fluoranthene	ND	---	0.0353	ug/L	1	05/31/24 20:15	EPA 8270E	
Benzo(k)fluoranthene	ND	---	0.0353	ug/L	1	05/31/24 20:15	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Chrysene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Fluoranthene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Fluorene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
1-Methylnaphthalene	ND	---	0.0471	ug/L	1	05/31/24 20:15	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0471	ug/L	1	05/31/24 20:15	EPA 8270E	
Naphthalene	ND	---	0.0471	ug/L	1	05/31/24 20:15	EPA 8270E	
Phenanthrene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Pyrene	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Dibenzofuran	ND	---	0.0235	ug/L	1	05/31/24 20:15	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	0.235	ug/L	1	05/31/24 20:15	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*103 %*	*Limits: 44-120 %*	*1*	*05/31/24 20:15*	*EPA 8270E*	*Q-41*
2-Fluorobiphenyl (Surr)			*78 %*	*44-120 %*	*1*	*05/31/24 20:15*	*EPA 8270E*	
Phenol-d6 (Surr)			*41 %*	*10-133 %*	*1*	*05/31/24 20:15*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*88 %*	*50-134 %*	*1*	*05/31/24 20:15*	*EPA 8270E*	
2-Fluorophenol (Surr)			*56 %*	*19-120 %*	*1*	*05/31/24 20:15*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*100 %*	*43-140 %*	*1*	*05/31/24 20:15*	*EPA 8270E*	
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**		**Batch: 24E1093**		**DCNT**
Acenaphthene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Acenaphthylene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Anthracene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Benz(a)anthracene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Benzo(a)pyrene	ND	---	0.0291	ug/L	1	05/31/24 20:48	EPA 8270E	
Benzo(b)fluoranthene	ND	---	0.0291	ug/L	1	05/31/24 20:48	EPA 8270E	

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**		**Batch: 24E1093**		**DCNT**
Benzo(k)fluoranthene	ND	---	0.0291	ug/L	1	05/31/24 20:48	EPA 8270E	
Benzo(g,h,i)perylene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Chrysene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Dibenz(a,h)anthracene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Fluoranthene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Fluorene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Indeno(1,2,3-cd)pyrene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
1-Methylnaphthalene	ND	---	0.0388	ug/L	1	05/31/24 20:48	EPA 8270E	
2-Methylnaphthalene	ND	---	0.0388	ug/L	1	05/31/24 20:48	EPA 8270E	
Naphthalene	ND	---	0.0388	ug/L	1	05/31/24 20:48	EPA 8270E	
Phenanthrene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Pyrene	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Dibenzofuran	ND	---	0.0194	ug/L	1	05/31/24 20:48	EPA 8270E	
Pentachlorophenol (PCP)	ND	---	0.194	ug/L	1	05/31/24 20:48	EPA 8270E	
Surrogate: Nitrobenzene-d5 (Surr)		*Recovery:*	*80 %*	*Limits: 44-120 %*	*1*	*05/31/24 20:48*	*EPA 8270E*	*Q-41*
2-Fluorobiphenyl (Surr)			*61 %*	*44-120 %*	*1*	*05/31/24 20:48*	*EPA 8270E*	
Phenol-d6 (Surr)			*25 %*	*10-133 %*	*1*	*05/31/24 20:48*	*EPA 8270E*	
p-Terphenyl-d14 (Surr)			*64 %*	*50-134 %*	*1*	*05/31/24 20:48*	*EPA 8270E*	
2-Fluorophenol (Surr)			*36 %*	*19-120 %*	*1*	*05/31/24 20:48*	*EPA 8270E*	
2,4,6-Tribromophenol (Surr)			*92 %*	*43-140 %*	*1*	*05/31/24 20:48*	*EPA 8270E*	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-1-1.0-3.0 (A4E1630-01)				**Matrix: Soil**				
Batch: 24E0996								
Antimony	ND	---	2.11	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Arsenic	ND	---	2.11	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Beryllium	**0.422**	---	0.422	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Cadmium	ND	---	0.422	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Chromium	**6.31**	---	2.11	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Copper	**16.4**	---	4.22	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Lead	**4.54**	---	0.422	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Mercury	ND	---	0.169	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Nickel	**6.43**	---	4.22	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Selenium	ND	---	2.11	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Silver	ND	---	0.422	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Thallium	ND	---	0.422	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
Zinc	**57.8**	---	8.45	mg/kg dry	10	05/30/24 21:33	EPA 6020B	
3S-SBFA-1-5.0-8.0 (A4E1630-02)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	1.59	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Arsenic	ND	---	1.59	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Beryllium	**0.487**	---	0.319	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Cadmium	ND	---	0.319	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Chromium	**6.42**	---	1.59	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Copper	**15.6**	---	3.19	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Lead	**3.99**	---	0.319	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Mercury	ND	---	0.127	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Nickel	**7.04**	---	3.19	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Selenium	**1.67**	---	1.59	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Silver	ND	---	0.319	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Thallium	ND	---	0.319	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
Zinc	**48.9**	---	6.37	mg/kg dry	10	06/04/24 16:31	EPA 6020B	
3S-SBFA-2-1.5-3.0 (A4E1630-03)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	2.24	mg/kg dry	10	06/04/24 16:43	EPA 6020B	

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-2-1.5-3.0 (A4E1630-03)				**Matrix: Soil**				
Arsenic	ND	---	2.24	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Beryllium	**0.527**	---	0.448	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Cadmium	ND	---	0.448	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Chromium	**8.77**	---	2.24	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Copper	**20.9**	---	4.48	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Lead	**8.22**	---	0.448	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Mercury	ND	---	0.179	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Nickel	**9.76**	---	4.48	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Selenium	ND	---	2.24	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Silver	ND	---	0.448	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Thallium	ND	---	0.448	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
Zinc	**72.4**	---	8.96	mg/kg dry	10	06/04/24 16:43	EPA 6020B	
3S-SBFA-2-5.0-7.0 (A4E1630-04)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	2.14	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Arsenic	**4.20**	---	2.14	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Beryllium	**0.821**	---	0.429	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Cadmium	ND	---	0.429	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Chromium	**52.0**	---	2.14	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Copper	**59.1**	---	4.29	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Lead	**25.9**	---	0.429	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Mercury	ND	---	0.172	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Nickel	**43.6**	---	4.29	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Selenium	**3.15**	---	2.14	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Silver	ND	---	0.429	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Thallium	ND	---	0.429	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
Zinc	**98.6**	---	8.58	mg/kg dry	10	06/04/24 17:05	EPA 6020B	
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	2.17	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Arsenic	ND	---	2.17	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Beryllium	ND	---	0.433	mg/kg dry	10	06/04/24 17:11	EPA 6020B	

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**				
Cadmium	ND	---	0.433	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Chromium	**8.03**	---	2.17	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Copper	**19.0**	---	4.33	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Lead	**4.81**	---	0.433	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Mercury	ND	---	0.173	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Nickel	**11.4**	---	4.33	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Selenium	ND	---	2.17	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Silver	ND	---	0.433	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Thallium	ND	---	0.433	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
Zinc	**75.2**	---	8.66	mg/kg dry	10	06/04/24 17:11	EPA 6020B	
3S-SBFA-3-1.0-3.5-DUP (A4E1630-06)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	2.14	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Arsenic	ND	---	2.14	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Beryllium	ND	---	0.427	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Cadmium	ND	---	0.427	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Chromium	**7.24**	---	2.14	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Copper	**21.0**	---	4.27	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Lead	**5.08**	---	0.427	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Mercury	ND	---	0.171	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Nickel	**7.09**	---	4.27	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Selenium	ND	---	2.14	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Silver	ND	---	0.427	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Thallium	ND	---	0.427	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
Zinc	**64.9**	---	8.55	mg/kg dry	10	06/04/24 17:16	EPA 6020B	
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	1.75	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Arsenic	ND	---	1.75	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Beryllium	**0.505**	---	0.349	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Cadmium	ND	---	0.349	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Chromium	**20.5**	---	1.75	mg/kg dry	10	06/04/24 17:22	EPA 6020B	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**				
Copper	**32.3**	---	3.49	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Lead	**5.10**	---	0.349	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Mercury	ND	---	0.140	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Nickel	**17.0**	---	3.49	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Selenium	**1.98**	---	1.75	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Silver	ND	---	0.349	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Thallium	ND	---	0.349	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
Zinc	**61.0**	---	6.99	mg/kg dry	10	06/04/24 17:22	EPA 6020B	
3S-SBFA-4-2.0-3.0 (A4E1630-08)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	1.38	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Arsenic	ND	---	1.38	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Beryllium	**0.289**	---	0.275	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Cadmium	ND	---	0.275	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Chromium	**4.22**	---	1.38	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Copper	**12.9**	---	2.75	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Lead	**3.68**	---	0.275	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Mercury	ND	---	0.110	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Nickel	**4.58**	---	2.75	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Selenium	ND	---	1.38	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Silver	ND	---	0.275	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Thallium	ND	---	0.275	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
Zinc	**44.3**	---	5.51	mg/kg dry	10	06/04/24 17:28	EPA 6020B	
3S-SBFA-4-5.0-8.0 (A4E1630-09)				**Matrix: Soil**				
Batch: 24F0052								
Antimony	ND	---	2.02	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Arsenic	ND	---	2.02	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Beryllium	**0.445**	---	0.405	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Cadmium	ND	---	0.405	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Chromium	**8.92**	---	2.02	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Copper	**19.8**	---	4.05	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Lead	**6.15**	---	0.405	mg/kg dry	10	06/04/24 17:33	EPA 6020B	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-4-5.0-8.0 (A4E1630-09)				**Matrix: Soil**				
Mercury	ND	---	0.162	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Nickel	**9.51**	---	4.05	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Selenium	ND	---	2.02	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Silver	ND	---	0.405	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Thallium	ND	---	0.405	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
Zinc	**57.4**	---	8.10	mg/kg dry	10	06/04/24 17:33	EPA 6020B	
3S-SBFA-EB-20240524 (A4E1630-15)				**Matrix: Water**				
Batch: 24F0030								
Antimony	ND	---	1.00	ug/L	1	06/03/24 19:52	EPA 6020B	
Arsenic	ND	---	1.00	ug/L	1	06/03/24 19:52	EPA 6020B	
Beryllium	ND	---	0.200	ug/L	1	06/03/24 19:52	EPA 6020B	
Cadmium	ND	---	0.200	ug/L	1	06/03/24 19:52	EPA 6020B	
Chromium	**15.7**	---	2.00	ug/L	1	06/03/24 19:52	EPA 6020B	
Copper	**3.98**	---	2.00	ug/L	1	06/03/24 19:52	EPA 6020B	
Lead	**0.309**	---	0.200	ug/L	1	06/03/24 19:52	EPA 6020B	
Mercury	ND	---	0.0800	ug/L	1	06/03/24 19:52	EPA 6020B	
Nickel	**3.32**	---	2.00	ug/L	1	06/03/24 19:52	EPA 6020B	
Selenium	ND	---	1.00	ug/L	1	06/03/24 19:52	EPA 6020B	
Silver	ND	---	0.200	ug/L	1	06/03/24 19:52	EPA 6020B	
Thallium	ND	---	0.200	ug/L	1	06/03/24 19:52	EPA 6020B	
Zinc	ND	---	4.00	ug/L	1	06/03/24 19:52	EPA 6020B	
3S-SBFA-4-GW-13-18 (A4E1630-16)				**Matrix: Water**				
Batch: 24F0084								
Beryllium	ND	---	0.200	ug/L	1	06/04/24 22:17	EPA 6020B	
Lead	ND	---	0.200	ug/L	1	06/04/24 22:17	EPA 6020B	
Mercury	ND	---	0.0800	ug/L	1	06/04/24 22:17	EPA 6020B	
Selenium	ND	---	1.00	ug/L	1	06/04/24 22:17	EPA 6020B	
Thallium	ND	---	0.200	ug/L	1	06/04/24 22:17	EPA 6020B	
3S-SBFA-4-GW-13-18 (A4E1630-16RE1)				**Matrix: Water**				
Batch: 24F0084								
Antimony	ND	---	1.00	ug/L	1	06/05/24 12:03	EPA 6020B	

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-4-GW-13-18 (A4E1630-16RE1)				**Matrix: Water**				
Arsenic	ND	---	1.00	ug/L	1	06/05/24 12:03	EPA 6020B	
Cadmium	ND	---	0.200	ug/L	1	06/05/24 12:03	EPA 6020B	
Chromium	ND	---	2.00	ug/L	1	06/05/24 12:03	EPA 6020B	
Copper	ND	---	2.00	ug/L	1	06/05/24 12:03	EPA 6020B	
Nickel	**6.14**	---	2.00	ug/L	1	06/05/24 12:03	EPA 6020B	
Silver	ND	---	0.200	ug/L	1	06/05/24 12:03	EPA 6020B	
Zinc	**5.45**	---	4.00	ug/L	1	06/05/24 12:03	EPA 6020B	
3S-SBFA-3-GW-11-16 (A4E1630-17)				**Matrix: Water**				
Batch: 24F0084								
Beryllium	ND	---	0.200	ug/L	1	06/04/24 22:29	EPA 6020B	
Lead	ND	---	0.200	ug/L	1	06/04/24 22:29	EPA 6020B	
Mercury	ND	---	0.0800	ug/L	1	06/04/24 22:29	EPA 6020B	
Selenium	ND	---	1.00	ug/L	1	06/04/24 22:29	EPA 6020B	
Thallium	ND	---	0.200	ug/L	1	06/04/24 22:29	EPA 6020B	
3S-SBFA-3-GW-11-16 (A4E1630-17RE1)				**Matrix: Water**				
Batch: 24F0084								
Antimony	ND	---	1.00	ug/L	1	06/05/24 12:15	EPA 6020B	
Arsenic	**1.34**	---	1.00	ug/L	1	06/05/24 12:15	EPA 6020B	
Cadmium	ND	---	0.200	ug/L	1	06/05/24 12:15	EPA 6020B	
Chromium	ND	---	2.00	ug/L	1	06/05/24 12:15	EPA 6020B	
Copper	ND	---	2.00	ug/L	1	06/05/24 12:15	EPA 6020B	
Nickel	**10.4**	---	2.00	ug/L	1	06/05/24 12:15	EPA 6020B	
Silver	ND	---	0.200	ug/L	1	06/05/24 12:15	EPA 6020B	
Zinc	**7.14**	---	4.00	ug/L	1	06/05/24 12:15	EPA 6020B	
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**				
Batch: 24F0084								
Beryllium	ND	---	0.200	ug/L	1	06/04/24 22:51	EPA 6020B	
Cadmium	ND	---	0.200	ug/L	1	06/04/24 22:51	EPA 6020B	
Lead	**1.33**	---	0.200	ug/L	1	06/04/24 22:51	EPA 6020B	
Mercury	ND	---	0.0800	ug/L	1	06/04/24 22:51	EPA 6020B	
Selenium	ND	---	1.00	ug/L	1	06/04/24 22:51	EPA 6020B	

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-3-GW-11-16-DUP (A4E1630-18)				**Matrix: Water**				
Thallium	ND	---	0.200	ug/L	1	06/04/24 22:51	EPA 6020B	
3S-SBFA-3-GW-11-16-DUP (A4E1630-18RE1)				**Matrix: Water**				
Batch: 24F0084								
Antimony	ND	---	1.00	ug/L	1	06/05/24 12:37	EPA 6020B	
Arsenic	**1.40**	---	1.00	ug/L	1	06/05/24 12:37	EPA 6020B	
Chromium	ND	---	2.00	ug/L	1	06/05/24 12:37	EPA 6020B	
Copper	ND	---	2.00	ug/L	1	06/05/24 12:37	EPA 6020B	
Nickel	**9.28**	---	2.00	ug/L	1	06/05/24 12:37	EPA 6020B	
Silver	ND	---	0.200	ug/L	1	06/05/24 12:37	EPA 6020B	
Zinc	**7.86**	---	4.00	ug/L	1	06/05/24 12:37	EPA 6020B	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

ANALYTICAL SAMPLE RESULTS

Percent Dry Weight

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
3S-SBFA-1-1.0-3.0 (A4E1630-01)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**48.2**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-1-5.0-8.0 (A4E1630-02)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**62.5**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-2-1.5-3.0 (A4E1630-03)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**47.3**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-2-5.0-7.0 (A4E1630-04)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**50.5**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-3-1.0-3.5 (A4E1630-05)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**45.2**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-3-1.0-3.5-DUP (A4E1630-06)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**48.0**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-3-5.0-8.0 (A4E1630-07)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**63.5**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-4-2.0-3.0 (A4E1630-08)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**72.3**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBFA-4-5.0-8.0 (A4E1630-09)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**51.5**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBHOT-1-0.0-1.0-DUP (A4E1630-10)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**61.8**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	
3S-SBHOT-1-0.0-1.0 (A4E1630-11)				**Matrix: Soil**		**Batch: 24E1009**		
% Solids	**60.1**	---	1.00	%	1	05/30/24 06:12	EPA 8000D	

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ANALYTICAL REPORT

Terraphase Engineering	Project: 910 West 3rd Street Property	
610 SW Broadway #406	Project Number: O053.07.003	Report ID:
Portland, OR 97205	Project Manager: James Farrow	A4E1630 - 06 14 24 1152

QUALITY CONTROL (QC) SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E0998 - EPA 3546 (Fuels)							Soil					
Blank (24E0998-BLK1)			Prepared: 05/29/24 05:24 Analyzed: 05/29/24 17:48									
NWTPH-HCID												
Gasoline Range Organics	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Diesel Range Organics	ND	---	50.0	mg/kg wet	1	---	---	---	---	---	---	
Oil Range Organics	ND	---	100	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 81 %*	*Limits: 50-150 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*80 %*	*50-150 %*			*"*					
Duplicate (24E0998-DUP1)			Prepared: 05/29/24 05:24 Analyzed: 05/29/24 22:05									
QC Source Sample: 3S-SBFA-1-1.0-3.0 (A4E1630-01)												
NWTPH-HCID												
Gasoline Range Organics	ND	---	39.6	mg/kg dry	1	---	ND	---	---	---	30%	
Diesel Range Organics	ND	---	99.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil Range Organics	**DET**	---	198	mg/kg dry	1	---	ND	---	---		30%	F-03
Surr: o-Terphenyl (Surr)			*Recovery: 99 %*	*Limits: 50-150 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*102 %*	*50-150 %*			*"*					
Duplicate (24E0998-DUP2)			Prepared: 05/29/24 05:24 Analyzed: 05/29/24 20:08									
QC Source Sample: Non-SDG (A4E1639-02)												
Gasoline Range Organics	ND	---	27.6	mg/kg dry	1	---	ND	---	---	---	30%	
Diesel Range Organics	ND	---	69.0	mg/kg dry	1	---	ND	---	---	---	30%	
Oil Range Organics	ND	---	138	mg/kg dry	1	---	ND	---	---	---	30%	
Surr: o-Terphenyl (Surr)			*Recovery: 79 %*	*Limits: 50-150 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*77 %*	*50-150 %*			*"*					
Batch 24E1067 - EPA 3510C (Fuels/Acid Ext.)							Water					
Blank (24E1067-BLK1)			Prepared: 05/30/24 06:45 Analyzed: 05/30/24 20:08									
NWTPH-HCID												
Gasoline Range Organics	ND	---	0.100	mg/L	1	---	---	---	---	---	---	
Diesel Range Organics	ND	---	0.250	mg/L	1	---	---	---	---	---	---	
Oil Range Organics	ND	---	0.250	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 83 %*	*Limits: 50-150 %*			*Dilution: 1x*					
4-Bromofluorobenzene (Surr)			*28 %*	*10-120 %*			*"*					

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Hydrocarbon Identification Screen by NWTPH-HCID

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E1067 - EPA 3510C (Fuels/Acid Ext.)												**Water**

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Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0173 - EPA 3510C (Fuels/Acid Ext.) w/SG+Acid												**Water**
Blank (24F0173-BLK1)				Prepared: 06/06/24 06:22		Analyzed: 06/06/24 18:17						
NWTPH-Dx/SG												
Diesel	ND	---	0.200	mg/L	1	---	---	---	---	---	---	
Oil	ND	---	0.400	mg/L	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 106 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS (24F0173-BS1)				Prepared: 06/06/24 06:22		Analyzed: 06/06/24 18:39						
NWTPH-Dx/SG												
Diesel	1.22	---	0.200	mg/L	1	1.25	---	97	36-132%	---	---	
Surr: o-Terphenyl (Surr)		*Recovery: 118 %*		*Limits: 50-150 %*		*Dilution: 1x*						
LCS Dup (24F0173-BSD1)				Prepared: 06/06/24 06:22		Analyzed: 06/06/24 19:02						**Q-19**
NWTPH-Dx/SG												
Diesel	1.08	---	0.200	mg/L	1	1.25	---	86	36-132%	12	30%	
Surr: o-Terphenyl (Surr)		*Recovery: 115 %*		*Limits: 50-150 %*		*Dilution: 1x*						

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Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0182 - EPA 3546 w/SG+Acid (NWTPH)							Soil					
Blank (24F0182-BLK1)			Prepared: 06/06/24 08:31		Analyzed: 06/06/24 22:01							
NWTPH-Dx/SG												
Diesel	ND	---	20.0	mg/kg wet	1	---	---	---	---	---	---	
Oil	ND	---	40.0	mg/kg wet	1	---	---	---	---	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 96 %*		*Limits: 50-150 %*		*Dilution: 1x*					
LCS (24F0182-BS1)			Prepared: 06/06/24 08:31		Analyzed: 06/06/24 22:21							
NWTPH-Dx/SG												
Diesel	114	---	20.0	mg/kg wet	1	125	---	91	38-132%	---	---	
Surr: o-Terphenyl (Surr)			*Recovery: 99 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (24F0182-DUP1)			Prepared: 06/06/24 08:31		Analyzed: 06/06/24 23:03							
QC Source Sample: 3S-SBFA-1-1.0-3.0 (A4E1630-01)												
NWTPH-Dx/SG												
Diesel	ND	---	37.6	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**1410**	---	75.3	mg/kg dry	1	---	1350	---	---	4	30%	F-03
Surr: o-Terphenyl (Surr)			*Recovery: 88 %*		*Limits: 50-150 %*		*Dilution: 1x*					
Duplicate (24F0182-DUP2)			Prepared: 06/06/24 08:31		Analyzed: 06/07/24 03:52							
QC Source Sample: 3S-SBFA-4-5.0-8.0 (A4E1630-09)												
NWTPH-Dx/SG												
Diesel	ND	---	34.4	mg/kg dry	1	---	ND	---	---	---	30%	
Oil	**468**	---	68.7	mg/kg dry	1	---	540	---	---	14	30%	F-03
Surr: o-Terphenyl (Surr)			*Recovery: 94 %*		*Limits: 50-150 %*		*Dilution: 1x*					

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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 24F0177 - EPA 5030C									Water			
Blank (24F0177-BLK1)			Prepared: 06/06/24 06:58		Analyzed: 06/06/24 09:32							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	0.100	mg/L	1	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*				*"*			
LCS (24F0177-BS2)			Prepared: 06/06/24 06:58		Analyzed: 06/06/24 09:10							
NWTPH-Gx (MS)												
Gasoline Range Organics	0.567	---	0.100	mg/L	1	0.500	---	113	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 94 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*98 %*		*50-150 %*				*"*			
Duplicate (24F0177-DUP1)			Prepared: 06/06/24 06:58		Analyzed: 06/06/24 15:49							
QC Source Sample: Non-SDG (A4F0883-01)												
Gasoline Range Organics	ND	---	1.00	mg/L	10	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)			*Recovery: 97 %*		*Limits: 50-150 %*				*Dilution: 1x*			
1,4-Difluorobenzene (Sur)			*103 %*		*50-150 %*				*"*			

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Portland, OR 97205	Project Manager: James Farrow	A4E1630 - 06 14 24 1152

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 24F0185 - EPA 5035A								Soil				
Blank (24F0185-BLK1)			Prepared: 06/06/24 09:00		Analyzed: 06/06/24 12:02							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 91 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*106 %*	*50-150 %*		*"*							
LCS (24F0185-BS2)			Prepared: 06/06/24 09:00		Analyzed: 06/06/24 11:35							
NWTPH-Gx (MS)												
Gasoline Range Organics	23.1	---	5.00	mg/kg wet	50	25.0	---	92	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 91 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*105 %*	*50-150 %*		*"*							
Duplicate (24F0185-DUP1)			Prepared: 05/29/24 13:40		Analyzed: 06/06/24 21:32							
QC Source Sample: Non-SDG (A4F0872-01)												
Gasoline Range Organics	**12200**	---	1050	mg/kg dry	10000	---	11600	---	---	5	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 92 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*102 %*	*50-150 %*		*"*							
Duplicate (24F0185-DUP2)			Prepared: 05/29/24 14:00		Analyzed: 06/06/24 22:26							
QC Source Sample: Non-SDG (A4F0872-02)												
Gasoline Range Organics	**10400**	---	5880	mg/kg dry	50000	---	10900	---	---	5	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 93 %*	*Limits: 50-150 %*		*Dilution: 1x*							
1,4-Difluorobenzene (Sur)		*102 %*	*50-150 %*		*"*							

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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 24F0231 - EPA 5035A												**Soil**
Blank (24F0231-BLK1)			Prepared: 06/07/24 09:00		Analyzed: 06/07/24 12:19							
NWTPH-Gx (MS)												
Gasoline Range Organics	ND	---	5.00	mg/kg wet	50	---	---	---	---	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 91 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*105 %*		*50-150 %*			*"*					
LCS (24F0231-BS2)			Prepared: 06/07/24 09:00		Analyzed: 06/07/24 11:52							
NWTPH-Gx (MS)												
Gasoline Range Organics	24.4	---	5.00	mg/kg wet	50	25.0	---	97	80-120%	---	---	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 91 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*104 %*		*50-150 %*			*"*					
Duplicate (24F0231-DUP1)			Prepared: 06/06/24 18:00		Analyzed: 06/07/24 20:00							
QC Source Sample: Non-SDG (A4F0885-26)												
Gasoline Range Organics	ND	---	7.29	mg/kg dry	50	---	ND	---	---	---	30%	
Surr: 4-Bromofluorobenzene (Sur)		*Recovery: 96 %*		*Limits: 50-150 %*			*Dilution: 1x*					
1,4-Difluorobenzene (Sur)		*109 %*		*50-150 %*			*"*					

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Darrell Auvil, Client Services Manager

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: 910 West 3rd Street Property	
610 SW Broadway #406	Project Number: O053.07.003	Report ID:
Portland, OR 97205	Project Manager: James Farrow	A4E1630 - 06 14 24 1152

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E1093 - EPA 3510C (Acid Extraction)								Water				
Blank (24E1093-BLK2)			Prepared: 05/30/24 11:41 Analyzed: 05/31/24 17:24									
EPA 8270E												
Acenaphthene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Anthracene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	0.0300	ug/L	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	0.0300	ug/L	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	0.0300	ug/L	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Chrysene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Fluoranthene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Fluorene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	
Naphthalene	ND	---	0.0400	ug/L	1	---	---	---	---	---	---	
Phenanthrene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Pyrene	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Carbazole	ND	---	0.0300	ug/L	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	0.0200	ug/L	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*106 %*	*Limits:*	*44-120 %*		*Dilution:*	*1x*				*Q-41*
2-Fluorobiphenyl (Surr)			*80 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*30 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*105 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*44 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*81 %*		*43-140 %*			*"*				
LCS (24E1093-BS2)			Prepared: 05/30/24 11:41 Analyzed: 05/31/24 17:59									
EPA 8270E												
Acenaphthene	2.98	---	0.0800	ug/L	4	4.00	---	74	47-122%	---	---	
Acenaphthylene	3.32	---	0.0800	ug/L	4	4.00	---	83	41-130%	---	---	
Anthracene	3.95	---	0.0800	ug/L	4	4.00	---	99	57-123%	---	---	

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E1093 - EPA 3510C (Acid Extraction)							**Water**					
LCS (24E1093-BS2)			Prepared: 05/30/24 11:41 Analyzed: 05/31/24 17:59									
Benz(a)anthracene	4.04	---	0.0800	ug/L	4	4.00	---	101	58-125%	---	---	
Benzo(a)pyrene	4.06	---	0.120	ug/L	4	4.00	---	102	54-128%	---	---	
Benzo(b)fluoranthene	4.16	---	0.120	ug/L	4	4.00	---	104	53-131%	---	---	
Benzo(k)fluoranthene	4.07	---	0.120	ug/L	4	4.00	---	102	57-129%	---	---	
Benzo(g,h,i)perylene	4.01	---	0.0800	ug/L	4	4.00	---	100	50-134%	---	---	
Chrysene	3.99	---	0.0800	ug/L	4	4.00	---	100	59-123%	---	---	
Dibenz(a,h)anthracene	3.88	---	0.0800	ug/L	4	4.00	---	97	51-134%	---	---	
Fluoranthene	4.12	---	0.0800	ug/L	4	4.00	---	103	57-128%	---	---	
Fluorene	3.75	---	0.0800	ug/L	4	4.00	---	94	52-124%	---	---	
Indeno(1,2,3-cd)pyrene	3.90	---	0.0800	ug/L	4	4.00	---	98	52-134%	---	---	
1-Methylnaphthalene	2.35	---	0.160	ug/L	4	4.00	---	59	41-120%	---	---	
2-Methylnaphthalene	2.27	---	0.160	ug/L	4	4.00	---	57	40-121%	---	---	
Naphthalene	2.27	---	0.160	ug/L	4	4.00	---	57	40-121%	---	---	
Phenanthrene	3.84	---	0.0800	ug/L	4	4.00	---	96	59-120%	---	---	
Pyrene	4.13	---	0.0800	ug/L	4	4.00	---	103	57-126%	---	---	
Carbazole	4.45	---	0.120	ug/L	4	4.00	---	111	60-122%	---	---	
Dibenzofuran	3.39	---	0.0800	ug/L	4	4.00	---	85	53-120%	---	---	
Pentachlorophenol (PCP)	2.28	---	0.800	ug/L	4	4.00	---	57	35-138%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 96 %*		*Limits: 44-120 %*			*Dilution: 4x*				*Q-41*
2-Fluorobiphenyl (Surr)			*75 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*26 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*93 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*39 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*92 %*		*43-140 %*			*"*				
LCS Dup (24E1093-BSD2)			Prepared: 05/30/24 11:41 Analyzed: 05/31/24 18:33									**Q-19**
EPA 8270E												
Acenaphthene	3.04	---	0.0800	ug/L	4	4.00	---	76	47-122%	2	30%	
Acenaphthylene	3.38	---	0.0800	ug/L	4	4.00	---	85	41-130%	2	30%	
Anthracene	4.00	---	0.0800	ug/L	4	4.00	---	100	57-123%	1	30%	
Benz(a)anthracene	4.18	---	0.0800	ug/L	4	4.00	---	104	58-125%	3	30%	
Benzo(a)pyrene	4.28	---	0.120	ug/L	4	4.00	---	107	54-128%	5	30%	
Benzo(b)fluoranthene	4.31	---	0.120	ug/L	4	4.00	---	108	53-131%	4	30%	
Benzo(k)fluoranthene	4.23	---	0.120	ug/L	4	4.00	---	106	57-129%	4	30%	

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ORELAP ID: **OR100062**

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E1093 - EPA 3510C (Acid Extraction)							**Water**					
LCS Dup (24E1093-BSD2)			Prepared: 05/30/24 11:41		Analyzed: 05/31/24 18:33							**Q-19**
Benzo(g,h,i)perylene	4.14	---	0.0800	ug/L	4	4.00	---	103	50-134%	3	30%	
Chrysene	4.03	---	0.0800	ug/L	4	4.00	---	101	59-123%	1	30%	
Dibenz(a,h)anthracene	4.02	---	0.0800	ug/L	4	4.00	---	100	51-134%	4	30%	
Fluoranthene	4.16	---	0.0800	ug/L	4	4.00	---	104	57-128%	0.9	30%	
Fluorene	3.83	---	0.0800	ug/L	4	4.00	---	96	52-124%	2	30%	
Indeno(1,2,3-cd)pyrene	4.00	---	0.0800	ug/L	4	4.00	---	100	52-134%	2	30%	
1-Methylnaphthalene	2.45	---	0.160	ug/L	4	4.00	---	61	41-120%	4	30%	
2-Methylnaphthalene	2.37	---	0.160	ug/L	4	4.00	---	59	40-121%	4	30%	
Naphthalene	2.37	---	0.160	ug/L	4	4.00	---	59	40-121%	4	30%	
Phenanthrene	3.81	---	0.0800	ug/L	4	4.00	---	95	59-120%	0.7	30%	
Pyrene	4.15	---	0.0800	ug/L	4	4.00	---	104	57-126%	0.6	30%	
Carbazole	4.47	---	0.120	ug/L	4	4.00	---	112	60-122%	0.5	30%	
Dibenzofuran	3.44	---	0.0800	ug/L	4	4.00	---	86	53-120%	2	30%	
Pentachlorophenol (PCP)	2.60	---	0.800	ug/L	4	4.00	---	65	35-138%	13	30%	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 97 %*		*Limits: 44-120 %*			*Dilution: 4x*				*Q-41*
2-Fluorobiphenyl (Surr)			*77 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*28 %*		*10-133 %*			*"*				
p-Terphenyl-d14 (Surr)			*96 %*		*50-134 %*			*"*				
2-Fluorophenol (Surr)			*41 %*		*19-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*92 %*		*43-140 %*			*"*				

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Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0080 - EPA 3546							**Soil**					
Blank (24F0080-BLK1)			Prepared: 06/04/24 10:44	Analyzed: 06/04/24 16:29								
EPA 8270E												
Acenaphthene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	5.33	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	5.33	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	5.33	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	26.7	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*109 %*	*Limits: 37-122 %*			*Dilution: 1x*					*Q-41*
2-Fluorobiphenyl (Surr)			*97 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*111 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*111 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*98 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*101 %*	*39-132 %*			*"*					
LCS (24F0080-BS1)			Prepared: 06/04/24 10:44	Analyzed: 06/04/24 17:03								**Q-18**
EPA 8270E												
Acenaphthene	610	---	10.7	ug/kg wet	4	533	---	114	40-123%	---	---	
Acenaphthylene	666	---	10.7	ug/kg wet	4	533	---	125	32-132%	---	---	
Anthracene	652	---	10.7	ug/kg wet	4	533	---	122	47-123%	---	---	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0080 - EPA 3546							**Soil**					
LCS (24F0080-BS1)			Prepared: 06/04/24 10:44	Analyzed: 06/04/24 17:03								**Q-18**
Benz(a)anthracene	639	---	10.7	ug/kg wet	4	533	---	120	49-126%	---	---	
Benzo(a)pyrene	658	---	16.0	ug/kg wet	4	533	---	123	45-129%	---	---	
Benzo(b)fluoranthene	653	---	16.0	ug/kg wet	4	533	---	123	45-132%	---	---	
Benzo(k)fluoranthene	643	---	16.0	ug/kg wet	4	533	---	121	47-132%	---	---	
Benzo(g,h,i)perylene	639	---	10.7	ug/kg wet	4	533	---	120	43-134%	---	---	
Chrysene	611	---	10.7	ug/kg wet	4	533	---	115	50-124%	---	---	
Dibenz(a,h)anthracene	629	---	10.7	ug/kg wet	4	533	---	118	45-134%	---	---	
Fluoranthene	654	---	10.7	ug/kg wet	4	533	---	123	50-127%	---	---	
Fluorene	678	---	10.7	ug/kg wet	4	533	---	**127**	**43-125%**	---	---	Q-29
Indeno(1,2,3-cd)pyrene	622	---	10.7	ug/kg wet	4	533	---	117	45-133%	---	---	
1-Methylnaphthalene	599	---	21.3	ug/kg wet	4	533	---	112	40-120%	---	---	
2-Methylnaphthalene	604	---	21.3	ug/kg wet	4	533	---	113	38-122%	---	---	
Naphthalene	598	---	21.3	ug/kg wet	4	533	---	112	35-123%	---	---	
Phenanthrene	631	---	10.7	ug/kg wet	4	533	---	118	50-121%	---	---	
Pyrene	657	---	10.7	ug/kg wet	4	533	---	123	47-127%	---	---	
Carbazole	681	---	16.0	ug/kg wet	4	533	---	**128**	**50-123%**	---	---	Q-29
Dibenzofuran	641	---	10.7	ug/kg wet	4	533	---	120	44-120%	---	---	
Pentachlorophenol (PCP)	483	---	107	ug/kg wet	4	533	---	91	25-133%	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*118 %*	*Limits: 37-122 %*			*Dilution: 4x*					*Q-41*
2-Fluorobiphenyl (Surr)			*106 %*	*44-120 %*			*"*					
Phenol-d6 (Surr)			*120 %*	*33-122 %*			*"*					
p-Terphenyl-d14 (Surr)			*113 %*	*54-127 %*			*"*					
2-Fluorophenol (Surr)			*105 %*	*35-120 %*			*"*					
2,4,6-Tribromophenol (Surr)			*120 %*	*39-132 %*			*"*					
Duplicate (24F0080-DUP1)			Prepared: 06/04/24 10:44	Analyzed: 06/04/24 19:57								
QC Source Sample: Non-SDG (A4E1780-01RE2)												
Acenaphthene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Acenaphthylene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Anthracene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Benz(a)anthracene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Benzo(a)pyrene	ND	---	3.78	ug/kg wet	1	---	2.11	---	---	***	30%	
Benzo(b)fluoranthene	ND	---	3.78	ug/kg wet	1	---	2.03	---	---	***	30%	
Benzo(k)fluoranthene	ND	---	3.78	ug/kg wet	1	---	ND	---	---	---	30%	

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

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0080 - EPA 3546							**Soil**					
Duplicate (24F0080-DUP1)			Prepared: 06/04/24 10:44		Analyzed: 06/04/24 19:57							
QC Source Sample: Non-SDG (A4E1780-01RE2)												
Benzo(g,h,i)perylene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Chrysene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Fluoranthene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Fluorene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Indeno(1,2,3-cd)pyrene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	---	5.03	ug/kg wet	1	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	5.03	ug/kg wet	1	---	ND	---	---	---	30%	
Naphthalene	ND	---	5.03	ug/kg wet	1	---	ND	---	---	---	30%	
Phenanthrene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Pyrene	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Carbazole	ND	---	3.78	ug/kg wet	1	---	ND	---	---	---	30%	
Dibenzofuran	ND	---	2.52	ug/kg wet	1	---	ND	---	---	---	30%	
Pentachlorophenol (PCP)	ND	---	25.2	ug/kg wet	1	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*98 %*	*Limits:*	*37-122 %*		*Dilution:*	*1x*				*Q-41*
2-Fluorobiphenyl (Surr)			*81 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*102 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*91 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*88 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*87 %*		*39-132 %*			*"*				

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: 910 West 3rd Street Property	
610 SW Broadway #406	Project Number: O053.07.003	Report ID:
Portland, OR 97205	Project Manager: James Farrow	A4E1630 - 06 14 24 1152

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0234 - EPA 3546							Soil					
Blank (24F0234-BLK1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 14:14									
EPA 8270E												
Acenaphthene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Acenaphthylene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Anthracene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benz(a)anthracene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Benzo(a)pyrene	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(b)fluoranthene	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(k)fluoranthene	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Benzo(g,h,i)perylene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Chrysene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Dibenz(a,h)anthracene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluoranthene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Fluorene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Indeno(1,2,3-cd)pyrene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
1-Methylnaphthalene	ND	---	5.33	ug/kg wet	1	---	---	---	---	---	---	
2-Methylnaphthalene	ND	---	5.33	ug/kg wet	1	---	---	---	---	---	---	
Naphthalene	ND	---	5.33	ug/kg wet	1	---	---	---	---	---	---	
Phenanthrene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Pyrene	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Carbazole	ND	---	4.00	ug/kg wet	1	---	---	---	---	---	---	
Dibenzofuran	ND	---	2.67	ug/kg wet	1	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	26.7	ug/kg wet	1	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*103 %*	*Limits:*	*37-122 %*		*Dilution:*	*1x*				
2-Fluorobiphenyl (Surr)			*97 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*102 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*114 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*91 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*89 %*		*39-132 %*			*"*				
LCS (24F0234-BS1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 14:49									
EPA 8270E												
Acenaphthene	520	---	10.7	ug/kg wet	4	533	---	97	40-123%	---	---	
Acenaphthylene	561	---	10.7	ug/kg wet	4	533	---	105	32-132%	---	---	
Anthracene	559	---	10.7	ug/kg wet	4	533	---	105	47-123%	---	---	

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Darrell Auvil, Client Services Manager

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

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0234 - EPA 3546							**Soil**					
LCS (24F0234-BS1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 14:49									
Benz(a)anthracene	552	---	10.7	ug/kg wet	4	533	---	103	49-126%	---	---	
Benzo(a)pyrene	569	---	16.0	ug/kg wet	4	533	---	107	45-129%	---	---	
Benzo(b)fluoranthene	570	---	16.0	ug/kg wet	4	533	---	107	45-132%	---	---	
Benzo(k)fluoranthene	564	---	16.0	ug/kg wet	4	533	---	106	47-132%	---	---	
Benzo(g,h,i)perylene	550	---	10.7	ug/kg wet	4	533	---	103	43-134%	---	---	
Chrysene	531	---	10.7	ug/kg wet	4	533	---	99	50-124%	---	---	
Dibenz(a,h)anthracene	534	---	10.7	ug/kg wet	4	533	---	100	45-134%	---	---	
Fluoranthene	550	---	10.7	ug/kg wet	4	533	---	103	50-127%	---	---	
Fluorene	553	---	10.7	ug/kg wet	4	533	---	104	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	529	---	10.7	ug/kg wet	4	533	---	99	45-133%	---	---	
1-Methylnaphthalene	516	---	21.3	ug/kg wet	4	533	---	97	40-120%	---	---	
2-Methylnaphthalene	515	---	21.3	ug/kg wet	4	533	---	97	38-122%	---	---	
Naphthalene	509	---	21.3	ug/kg wet	4	533	---	95	35-123%	---	---	
Phenanthrene	540	---	10.7	ug/kg wet	4	533	---	101	50-121%	---	---	
Pyrene	548	---	10.7	ug/kg wet	4	533	---	103	47-127%	---	---	
Carbazole	552	---	16.0	ug/kg wet	4	533	---	104	50-123%	---	---	
Dibenzofuran	525	---	10.7	ug/kg wet	4	533	---	98	44-120%	---	---	
Pentachlorophenol (PCP)	390	---	107	ug/kg wet	4	533	---	73	25-133%	---	---	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*103 %*	*Limits:*	*37-122 %*		*Dilution:*	*4x*				
2-Fluorobiphenyl (Surr)			*97 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*104 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*108 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*93 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*107 %*		*39-132 %*			*"*				
Duplicate (24F0234-DUP1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 15:58									
QC Source Sample: 3S-SBFA-1-5.0-8.0 (A4E1630-02RE1)												
EPA 8270E												
Acenaphthene	ND	---	42.6	ug/kg dry	10	---	25.3	---	---	***	30%	
Acenaphthylene	**73.1**	---	42.6	ug/kg dry	10	---	56.4	---	---	26	30%	
Anthracene	ND	---	42.6	ug/kg dry	10	---	29.2	---	---	***	30%	
Benz(a)anthracene	ND	---	42.6	ug/kg dry	10	---	ND	---	---	**---**	**30%**	Q-17
Benzo(a)pyrene	ND	---	63.9	ug/kg dry	10	---	43.8	---	---	***	30%	
Benzo(b)fluoranthene	ND	---	63.9	ug/kg dry	10	---	41.7	---	---	***	30%	

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0234 - EPA 3546							**Soil**					
Duplicate (24F0234-DUP1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 15:58									
QC Source Sample: 3S-SBFA-1-5.0-8.0 (A4E1630-02RE1)												
Benzo(k)fluoranthene	ND	---	63.9	ug/kg dry	10	---	ND	---	---	**---**	**30%**	Q-17
Benzo(g,h,i)perylene	ND	---	42.6	ug/kg dry	10	---	ND	---	---	---	30%	
Chrysene	ND	---	42.6	ug/kg dry	10	---	ND	---	---	---	30%	
Dibenz(a,h)anthracene	ND	---	42.6	ug/kg dry	10	---	ND	---	---	---	30%	
Fluoranthene	**93.7**	---	42.6	ug/kg dry	10	---	88.2	---	---	6	30%	
Fluorene	ND	---	42.6	ug/kg dry	10	---	48.4	---	---	***	**30%**	Q-17
Indeno(1,2,3-cd)pyrene	ND	---	42.6	ug/kg dry	10	---	ND	---	---	---	30%	
1-Methylnaphthalene	ND	---	85.1	ug/kg dry	10	---	ND	---	---	---	30%	
2-Methylnaphthalene	ND	---	85.1	ug/kg dry	10	---	ND	---	---	---	30%	
Naphthalene	**181**	---	85.1	ug/kg dry	10	---	163	---	---	10	30%	
Phenanthrene	**188**	---	42.6	ug/kg dry	10	---	219	---	---	15	30%	
Pyrene	**95.5**	---	42.6	ug/kg dry	10	---	79.6	---	---	18	30%	
Carbazole	ND	---	63.9	ug/kg dry	10	---	ND	---	---	---	30%	
Dibenzofuran	ND	---	42.6	ug/kg dry	10	---	37.5	---	---	***	30%	
Pentachlorophenol (PCP)	ND	---	426	ug/kg dry	10	---	ND	---	---	---	30%	
Surr: Nitrobenzene-d5 (Surr)		*Recovery:*	*103 %*	*Limits:*	*37-122 %*		*Dilution:*	*10x*				
2-Fluorobiphenyl (Surr)			*89 %*		*44-120 %*			*"*				
Phenol-d6 (Surr)			*94 %*		*33-122 %*			*"*				
p-Terphenyl-d14 (Surr)			*104 %*		*54-127 %*			*"*				
2-Fluorophenol (Surr)			*85 %*		*35-120 %*			*"*				
2,4,6-Tribromophenol (Surr)			*113 %*		*39-132 %*			*"*				
Matrix Spike (24F0234-MS1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 17:08									
QC Source Sample: 3S-SBFA-3-1.0-3.5-DUP (A4E1630-06RE1)												
Acenaphthene	1090	---	54.9	ug/kg dry	10	1100	96.4	91	40-123%	---	---	
Acenaphthylene	1340	---	54.9	ug/kg dry	10	1100	290	96	32-132%	---	---	
Anthracene	1140	---	54.9	ug/kg dry	10	1100	139	91	47-123%	---	---	
Benz(a)anthracene	1060	---	54.9	ug/kg dry	10	1100	59.8	91	49-126%	---	---	
Benzo(a)pyrene	1220	---	82.2	ug/kg dry	10	1100	94.3	103	45-129%	---	---	
Benzo(b)fluoranthene	1160	---	82.2	ug/kg dry	10	1100	91.0	97	45-132%	---	---	
Benzo(k)fluoranthene	1050	---	82.2	ug/kg dry	10	1100	51.8	91	47-132%	---	---	
Benzo(g,h,i)perylene	881	---	54.9	ug/kg dry	10	1100	36.8	77	43-134%	---	---	
Chrysene	1040	---	54.9	ug/kg dry	10	1100	76.9	88	50-124%	---	---	

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Darrell Auvil, Client Services Manager

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Selected Semivolatile Organic Compounds by EPA 8270E

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0234 - EPA 3546							**Soil**					
Matrix Spike (24F0234-MS1)			Prepared: 06/07/24 08:52 Analyzed: 06/07/24 17:08									
QC Source Sample: 3S-SBFA-3-1.0-3.5-DUP (A4E1630-06RE1)												
Dibenz(a,h)anthracene	1030	---	54.9	ug/kg dry	10	1100	ND	94	45-134%	---	---	
Fluoranthene	1300	---	54.9	ug/kg dry	10	1100	413	81	50-127%	---	---	
Fluorene	1360	---	54.9	ug/kg dry	10	1100	399	87	43-125%	---	---	
Indeno(1,2,3-cd)pyrene	990	---	54.9	ug/kg dry	10	1100	28.1	88	45-133%	---	---	
1-Methylnaphthalene	1040	---	110	ug/kg dry	10	1100	ND	94	40-120%	---	---	
2-Methylnaphthalene	1050	---	110	ug/kg dry	10	1100	ND	96	38-122%	---	---	
Naphthalene	2110	---	110	ug/kg dry	10	1100	1120	91	35-123%	---	---	
Phenanthrene	1740	---	54.9	ug/kg dry	10	1100	946	73	50-121%	---	---	
Pyrene	1260	---	54.9	ug/kg dry	10	1100	385	80	47-127%	---	---	
Carbazole	1030	---	82.2	ug/kg dry	10	1100	ND	94	50-123%	---	---	
Dibenzofuran	1130	---	54.9	ug/kg dry	10	1100	123	92	44-120%	---	---	
Pentachlorophenol (PCP)	1170	---	549	ug/kg dry	10	1100	ND	106	25-133%	---	---	
Surr: Nitrobenzene-d5 (Surr)			*Recovery: 107 %*		*Limits: 37-122 %*				*Dilution: 10x*			
2-Fluorobiphenyl (Surr)			*85 %*		*44-120 %*				*"*			
Phenol-d6 (Surr)			*93 %*		*33-122 %*				*"*			
p-Terphenyl-d14 (Surr)			*90 %*		*54-127 %*				*"*			
2-Fluorophenol (Surr)			*88 %*		*35-120 %*				*"*			
2,4,6-Tribromophenol (Surr)			*116 %*		*39-132 %*				*"*			

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Darrell Auvil, Client Services Manager

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ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E0996 - EPA 3051A							Soil					
Blank (24E0996-BLK1)			Prepared: 05/29/24 10:15 Analyzed: 05/30/24 16:56									
EPA 6020B												
Antimony	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	---	2.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0800	mg/kg wet	10	---	---	---	---	---	---	
Nickel	ND	---	2.00	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	---	4.00	mg/kg wet	10	---	---	---	---	---	---	
LCS (24E0996-BS1)			Prepared: 05/29/24 10:15 Analyzed: 05/30/24 17:10									
EPA 6020B												
Antimony	25.0	---	1.00	mg/kg wet	10	25.0	---	100	80-120%	---	---	
Arsenic	51.1	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Beryllium	25.6	---	0.200	mg/kg wet	10	25.0	---	103	80-120%	---	---	
Cadmium	50.7	---	0.200	mg/kg wet	10	50.0	---	101	80-120%	---	---	
Chromium	51.5	---	1.00	mg/kg wet	10	50.0	---	103	80-120%	---	---	
Copper	52.4	---	2.00	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Lead	49.1	---	0.200	mg/kg wet	10	50.0	---	98	80-120%	---	---	
Mercury	0.954	---	0.0800	mg/kg wet	10	1.00	---	95	80-120%	---	---	
Nickel	53.8	---	2.00	mg/kg wet	10	50.0	---	108	80-120%	---	---	
Selenium	25.1	---	1.00	mg/kg wet	10	25.0	---	100	80-120%	---	---	
Silver	26.1	---	0.200	mg/kg wet	10	25.0	---	104	80-120%	---	---	
Thallium	25.7	---	0.200	mg/kg wet	10	25.0	---	103	80-120%	---	---	
Zinc	51.2	---	4.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Duplicate (24E0996-DUP1)			Prepared: 05/29/24 10:15 Analyzed: 05/30/24 17:23									
QC Source Sample: Non-SDG (A4E1569-03)												
Antimony	ND	---	1.17	mg/kg dry	10	---	ND	---	---	---	20%	

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ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24E0996 - EPA 3051A							**Soil**					
Duplicate (24E0996-DUP1)			Prepared: 05/29/24 10:15 Analyzed: 05/30/24 17:23									
QC Source Sample: Non-SDG (A4E1569-03)												
Arsenic	**1.75**	---	1.17	mg/kg dry	10	---	1.88	---	---	7	20%	
Beryllium	**0.288**	---	0.234	mg/kg dry	10	---	0.265	---	---	8	20%	
Cadmium	ND	---	0.234	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	**13.2**	---	1.17	mg/kg dry	10	---	33.1	---	---	**86**	**20%**	Q-04
Copper	**14.5**	---	2.34	mg/kg dry	10	---	14.3	---	---	1	20%	
Lead	**13.0**	---	0.234	mg/kg dry	10	---	11.2	---	---	16	20%	
Mercury	ND	---	0.0936	mg/kg dry	10	---	ND	---	---	**---**	**20%**	
Nickel	**15.3**	---	2.34	mg/kg dry	10	---	15.2	---	---	0.7	20%	
Selenium	ND	---	1.17	mg/kg dry	10	---	ND	---	---	---	20%	
Silver	ND	---	0.234	mg/kg dry	10	---	ND	---	---	---	20%	
Thallium	ND	---	0.234	mg/kg dry	10	---	ND	---	---	---	20%	
Zinc	**41.3**	---	4.68	mg/kg dry	10	---	39.3	---	---	5	20%	
Matrix Spike (24E0996-MS1)			Prepared: 05/29/24 10:15 Analyzed: 05/30/24 17:37									
QC Source Sample: Non-SDG (A4E1569-04)												
EPA 6020B												
Antimony	30.1	---	1.25	mg/kg dry	10	31.2	ND	97	75-125%	---	---	
Arsenic	63.8	---	1.25	mg/kg dry	10	62.3	2.91	98	75-125%	---	---	
Beryllium	32.3	---	0.249	mg/kg dry	10	31.2	0.372	103	75-125%	---	---	
Cadmium	64.7	---	0.249	mg/kg dry	10	62.3	ND	104	75-125%	---	---	
Chromium	73.0	---	1.25	mg/kg dry	10	62.3	9.00	103	75-125%	---	---	
Copper	87.1	---	2.49	mg/kg dry	10	62.3	23.2	103	75-125%	---	---	
Lead	79.8	---	0.249	mg/kg dry	10	62.3	18.0	99	75-125%	---	---	
Mercury	1.31	---	0.0997	mg/kg dry	10	1.25	0.100	97	75-125%	---	---	
Nickel	78.2	---	2.49	mg/kg dry	10	62.3	16.5	99	75-125%	---	---	
Selenium	29.4	---	1.25	mg/kg dry	10	31.2	ND	94	75-125%	---	---	
Silver	32.9	---	0.249	mg/kg dry	10	31.2	ND	105	75-125%	---	---	
Thallium	31.8	---	0.249	mg/kg dry	10	31.2	ND	102	75-125%	---	---	
Zinc	93.6	---	4.99	mg/kg dry	10	62.3	38.8	88	75-125%	---	---	

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0030 - EPA 3015A												**Water**
Blank (24F0030-BLK1)			Prepared: 06/03/24 12:50 Analyzed: 06/03/24 17:27									
EPA 6020B												
Antimony	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Arsenic	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Beryllium	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Cadmium	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Chromium	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Copper	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Lead	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	---	0.0800	ug/L	1	---	---	---	---	---	---	
Nickel	ND	---	2.00	ug/L	1	---	---	---	---	---	---	
Selenium	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Silver	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Thallium	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	
LCS (24F0030-BS1)			Prepared: 06/03/24 12:50 Analyzed: 06/03/24 17:32									
EPA 6020B												
Antimony	29.4	---	1.00	ug/L	1	27.8	---	106	80-120%	---	---	
Arsenic	57.0	---	1.00	ug/L	1	55.6	---	103	80-120%	---	---	
Beryllium	28.1	---	0.200	ug/L	1	27.8	---	101	80-120%	---	---	
Cadmium	56.1	---	0.200	ug/L	1	55.6	---	101	80-120%	---	---	
Chromium	59.1	---	2.00	ug/L	1	55.6	---	106	80-120%	---	---	
Copper	58.8	---	2.00	ug/L	1	55.6	---	106	80-120%	---	---	
Lead	55.4	---	0.200	ug/L	1	55.6	---	100	80-120%	---	---	
Mercury	1.06	---	0.0800	ug/L	1	1.11	---	95	80-120%	---	---	
Nickel	59.3	---	2.00	ug/L	1	55.6	---	107	80-120%	---	---	
Selenium	29.1	---	1.00	ug/L	1	27.8	---	105	80-120%	---	---	
Silver	29.9	---	0.200	ug/L	1	27.8	---	108	80-120%	---	---	
Thallium	28.5	---	0.200	ug/L	1	27.8	---	103	80-120%	---	---	
Zinc	59.4	---	4.00	ug/L	1	55.6	---	107	80-120%	---	---	
Duplicate (24F0030-DUP1)			Prepared: 06/03/24 12:50 Analyzed: 06/03/24 17:55									
QC Source Sample: Non-SDG (A4E1566-01)												
Antimony	ND	---	1.00	ug/L	1	---	ND	---	---	---	20%	

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0030 - EPA 3015A							**Water**					
Duplicate (24F0030-DUP1)			Prepared: 06/03/24 12:50 Analyzed: 06/03/24 17:55									
QC Source Sample: Non-SDG (A4E1566-01)												
Arsenic	**13.0**	---	1.00	ug/L	1	---	12.3	---	---	5	20%	
Beryllium	**4.99**	---	0.200	ug/L	1	---	4.87	---	---	2	20%	
Cadmium	**1.32**	---	0.200	ug/L	1	---	1.35	---	---	2	20%	
Chromium	**43.2**	---	2.00	ug/L	1	---	42.4	---	---	2	20%	
Copper	**127**	---	2.00	ug/L	1	---	127	---	---	0.5	20%	
Nickel	**130**	---	2.00	ug/L	1	---	130	---	---	0.09	20%	
Selenium	**21.7**	---	1.00	ug/L	1	---	22.4	---	---	3	20%	
Silver	ND	---	0.200	ug/L	1	---	ND	---	---	---	20%	
Zinc	**289**	---	4.00	ug/L	1	---	286	---	---	0.9	20%	
Duplicate (24F0030-DUP2)			Prepared: 06/03/24 12:50 Analyzed: 06/04/24 15:52									
QC Source Sample: Non-SDG (A4E1566-01RE1)												
Lead	**14.6**	---	2.00	ug/L	10	---	13.9	---	---	5	20%	Q-16
Mercury	ND	---	0.800	ug/L	10	---	ND	---	---	---	20%	Q-16
Thallium	ND	---	2.00	ug/L	10	---	ND	---	---	---	20%	Q-16
Matrix Spike (24F0030-MS1)			Prepared: 06/03/24 12:50 Analyzed: 06/03/24 18:06									
QC Source Sample: Non-SDG (A4E1566-03)												
EPA 6020B												
Antimony	29.2	---	1.00	ug/L	1	27.8	ND	105	75-125%	---	---	
Arsenic	61.8	---	1.00	ug/L	1	55.6	4.48	103	75-125%	---	---	
Beryllium	29.6	---	0.200	ug/L	1	27.8	0.597	104	75-125%	---	---	
Cadmium	57.9	---	0.200	ug/L	1	55.6	0.202	104	75-125%	---	---	
Chromium	71.2	---	2.00	ug/L	1	55.6	12.6	105	75-125%	---	---	
Copper	80.9	---	2.00	ug/L	1	55.6	24.5	102	75-125%	---	---	
Lead	59.4	---	0.200	ug/L	1	55.6	6.11	96	75-125%	---	---	
Mercury	1.09	---	0.0800	ug/L	1	1.11	ND	98	75-125%	---	---	
Nickel	96.5	---	2.00	ug/L	1	55.6	39.9	102	75-125%	---	---	
Selenium	32.4	---	1.00	ug/L	1	27.8	3.28	105	75-125%	---	---	
Silver	30.1	---	0.200	ug/L	1	27.8	ND	108	75-125%	---	---	
Thallium	27.6	---	0.200	ug/L	1	27.8	ND	99	75-125%	---	---	
Zinc	112	---	4.00	ug/L	1	55.6	54.0	105	75-125%	---	---	

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Darrell Auvil, Client Services Manager

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ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0030 - EPA 3015A								**Water**				

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Darrell Auvil, Client Services Manager

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ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: 910 West 3rd Street Property	
610 SW Broadway #406	Project Number: O053.07.003	Report ID:
Portland, OR 97205	Project Manager: James Farrow	A4E1630 - 06 14 24 1152

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0052 - EPA 3051A							Soil					
Blank (24F0052-BLK1)			Prepared: 06/03/24 16:36 Analyzed: 06/04/24 16:20									
EPA 6020B												
Antimony	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Arsenic	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Beryllium	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Cadmium	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Chromium	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Copper	ND	---	2.00	mg/kg wet	10	---	---	---	---	---	---	
Lead	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Mercury	ND	---	0.0800	mg/kg wet	10	---	---	---	---	---	---	
Nickel	ND	---	2.00	mg/kg wet	10	---	---	---	---	---	---	
Selenium	ND	---	1.00	mg/kg wet	10	---	---	---	---	---	---	
Silver	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Thallium	ND	---	0.200	mg/kg wet	10	---	---	---	---	---	---	
Zinc	ND	---	4.00	mg/kg wet	10	---	---	---	---	---	---	
LCS (24F0052-BS1)			Prepared: 06/03/24 16:36 Analyzed: 06/04/24 16:26									
EPA 6020B												
Antimony	26.2	---	1.00	mg/kg wet	10	25.0	---	105	80-120%	---	---	
Arsenic	49.4	---	1.00	mg/kg wet	10	50.0	---	99	80-120%	---	---	
Beryllium	26.0	---	0.200	mg/kg wet	10	25.0	---	104	80-120%	---	---	
Cadmium	50.8	---	0.200	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Chromium	51.2	---	1.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Copper	50.9	---	2.00	mg/kg wet	10	50.0	---	102	80-120%	---	---	
Lead	54.6	---	0.200	mg/kg wet	10	50.0	---	109	80-120%	---	---	
Mercury	1.06	---	0.0800	mg/kg wet	10	1.00	---	106	80-120%	---	---	
Nickel	52.8	---	2.00	mg/kg wet	10	50.0	---	106	80-120%	---	---	
Selenium	24.8	---	1.00	mg/kg wet	10	25.0	---	99	80-120%	---	---	
Silver	26.8	---	0.200	mg/kg wet	10	25.0	---	107	80-120%	---	---	
Thallium	26.9	---	0.200	mg/kg wet	10	25.0	---	108	80-120%	---	---	
Zinc	52.7	---	4.00	mg/kg wet	10	50.0	---	105	80-120%	---	---	
Duplicate (24F0052-DUP1)			Prepared: 06/03/24 16:36 Analyzed: 06/04/24 16:37									
QC Source Sample: 3S-SBFA-1-5.0-8.0 (A4E1630-02)												
EPA 6020B												

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Darrell Auvil, Client Services Manager

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ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0052 - EPA 3051A							**Soil**					
Duplicate (24F0052-DUP1)			Prepared: 06/03/24 16:36 Analyzed: 06/04/24 16:37									
QC Source Sample: 3S-SBFA-1-5.0-8.0 (A4E1630-02)												
Antimony	ND	---	1.66	mg/kg dry	10	---	ND	---	---	---	20%	
Arsenic	ND	---	1.66	mg/kg dry	10	---	1.03	---	---	***	20%	
Beryllium	**0.527**	---	0.331	mg/kg dry	10	---	0.487	---	---	8	20%	
Cadmium	ND	---	0.331	mg/kg dry	10	---	ND	---	---	---	20%	
Chromium	**6.54**	---	1.66	mg/kg dry	10	---	6.42	---	---	2	20%	
Copper	**16.0**	---	3.31	mg/kg dry	10	---	15.6	---	---	2	20%	
Lead	**4.06**	---	0.331	mg/kg dry	10	---	3.99	---	---	2	20%	
Mercury	ND	---	0.132	mg/kg dry	10	---	ND	---	---	---	20%	
Nickel	**7.13**	---	3.31	mg/kg dry	10	---	7.04	---	---	1	20%	
Selenium	**1.93**	---	1.66	mg/kg dry	10	---	1.67	---	---	14	20%	
Silver	ND	---	0.331	mg/kg dry	10	---	ND	---	---	---	20%	
Thallium	ND	---	0.331	mg/kg dry	10	---	ND	---	---	---	20%	
Zinc	**55.4**	---	6.62	mg/kg dry	10	---	48.9	---	---	12	20%	
Matrix Spike (24F0052-MS1)			Prepared: 06/03/24 16:36 Analyzed: 06/04/24 16:59									
QC Source Sample: 3S-SBFA-2-1.5-3.0 (A4E1630-03)												
EPA 6020B												
Antimony	51.6	---	2.23	mg/kg dry	10	55.8	ND	93	75-125%	---	---	
Arsenic	110	---	2.23	mg/kg dry	10	112	1.37	97	75-125%	---	---	
Beryllium	55.8	---	0.446	mg/kg dry	10	55.8	0.527	99	75-125%	---	---	
Cadmium	110	---	0.446	mg/kg dry	10	112	ND	99	75-125%	---	---	
Chromium	121	---	2.23	mg/kg dry	10	112	8.77	101	75-125%	---	---	
Copper	134	---	4.46	mg/kg dry	10	112	20.9	101	75-125%	---	---	
Lead	118	---	0.446	mg/kg dry	10	112	8.22	99	75-125%	---	---	
Mercury	2.22	---	0.178	mg/kg dry	10	2.23	ND	99	75-125%	---	---	
Nickel	128	---	4.46	mg/kg dry	10	112	9.76	106	75-125%	---	---	
Selenium	60.3	---	2.23	mg/kg dry	10	55.8	1.89	105	75-125%	---	---	
Silver	55.5	---	0.446	mg/kg dry	10	55.8	ND	100	75-125%	---	---	
Thallium	55.4	---	0.446	mg/kg dry	10	55.8	ND	99	75-125%	---	---	
Zinc	195	---	8.92	mg/kg dry	10	112	72.4	110	75-125%	---	---	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0084 - EPA 3015A							**Water**					
Blank (24F0084-BLK1)			Prepared: 06/04/24 10:48 Analyzed: 06/04/24 22:06									
EPA 6020B												
Beryllium	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Lead	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Mercury	ND	---	0.0800	ug/L	1	---	---	---	---	---	---	
Selenium	ND	---	1.00	ug/L	1	---	---	---	---	---	---	
Thallium	ND	---	0.200	ug/L	1	---	---	---	---	---	---	
Blank (24F0084-BLK2)			Prepared: 06/04/24 10:48 Analyzed: 06/05/24 11:35									
EPA 6020B												
Antimony	ND	---	1.00	ug/L	1	---	---	---	---	---	---	Q-16
Arsenic	ND	---	1.00	ug/L	1	---	---	---	---	---	---	Q-16
Cadmium	ND	---	0.200	ug/L	1	---	---	---	---	---	---	Q-16
Chromium	ND	---	2.00	ug/L	1	---	---	---	---	---	---	Q-16
Copper	ND	---	2.00	ug/L	1	---	---	---	---	---	---	Q-16
Nickel	ND	---	2.00	ug/L	1	---	---	---	---	---	---	Q-16
Silver	ND	---	0.200	ug/L	1	---	---	---	---	---	---	Q-16
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	Q-16
LCS (24F0084-BS1)			Prepared: 06/04/24 10:48 Analyzed: 06/04/24 22:12									
EPA 6020B												
Beryllium	26.7	---	0.200	ug/L	1	27.8	---	96	80-120%	---	---	
Lead	60.1	---	0.200	ug/L	1	55.6	---	108	80-120%	---	---	
Mercury	1.15	---	0.0800	ug/L	1	1.11	---	103	80-120%	---	---	
Selenium	27.1	---	1.00	ug/L	1	27.8	---	98	80-120%	---	---	
Thallium	29.6	---	0.200	ug/L	1	27.8	---	107	80-120%	---	---	
LCS (24F0084-BS2)			Prepared: 06/04/24 10:48 Analyzed: 06/05/24 11:58									
EPA 6020B												
Antimony	28.6	---	1.00	ug/L	1	27.8	---	103	80-120%	---	---	Q-16
Arsenic	54.7	---	1.00	ug/L	1	55.6	---	98	80-120%	---	---	Q-16
Cadmium	55.8	---	0.200	ug/L	1	55.6	---	100	80-120%	---	---	Q-16
Chromium	57.3	---	2.00	ug/L	1	55.6	---	103	80-120%	---	---	Q-16
Copper	57.6	---	2.00	ug/L	1	55.6	---	104	80-120%	---	---	Q-16
Nickel	58.5	---	2.00	ug/L	1	55.6	---	105	80-120%	---	---	Q-16

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503-718-2323
ORELAP ID: OR100062

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0084 - EPA 3015A							**Water**					
LCS (24F0084-BS2)			Prepared: 06/04/24 10:48		Analyzed: 06/05/24 11:58							
Silver	29.8	---	0.200	ug/L	1	27.8	---	107	80-120%	---	---	Q-16
Zinc	58.4	---	4.00	ug/L	1	55.6	---	105	80-120%	---	---	Q-16
Duplicate (24F0084-DUP1)			Prepared: 06/04/24 10:48		Analyzed: 06/04/24 22:23							
QC Source Sample: 3S-SBFA-4-GW-13-18 (A4E1630-16)												
EPA 6020B												
Beryllium	ND	---	0.200	ug/L	1	---	ND	---	---	---	20%	
Lead	ND	---	0.200	ug/L	1	---	ND	---	---	---	20%	
Mercury	ND	---	0.0800	ug/L	1	---	ND	---	---	---	20%	
Selenium	ND	---	1.00	ug/L	1	---	ND	---	---	---	20%	
Thallium	ND	---	0.200	ug/L	1	---	ND	---	---	---	20%	
Duplicate (24F0084-DUP2)			Prepared: 06/04/24 10:48		Analyzed: 06/05/24 12:09							
QC Source Sample: 3S-SBFA-4-GW-13-18 (A4E1630-16RE1)												
EPA 6020B												
Antimony	ND	---	1.00	ug/L	1	---	ND	---	---	---	20%	Q-16
Arsenic	ND	---	1.00	ug/L	1	---	0.973	---	---	***	20%	Q-16
Cadmium	ND	---	0.200	ug/L	1	---	ND	---	---	---	20%	Q-16
Chromium	ND	---	2.00	ug/L	1	---	ND	---	---	---	20%	Q-16
Copper	ND	---	2.00	ug/L	1	---	ND	---	---	---	20%	Q-16
Nickel	**6.22**	---	2.00	ug/L	1	---	6.14	---	---	1	20%	Q-16
Silver	ND	---	0.200	ug/L	1	---	ND	---	---	---	20%	Q-16
Zinc	**4.80**	---	4.00	ug/L	1	---	5.45	---	---	13	20%	Q-16
Matrix Spike (24F0084-MS1)			Prepared: 06/04/24 10:48		Analyzed: 06/04/24 22:34							
QC Source Sample: 3S-SBFA-3-GW-11-16 (A4E1630-17)												
EPA 6020B												
Beryllium	28.5	---	0.200	ug/L	1	27.8	ND	103	75-125%	---	---	
Lead	53.7	---	0.200	ug/L	1	55.6	ND	97	75-125%	---	---	
Mercury	1.08	---	0.0800	ug/L	1	1.11	ND	97	75-125%	---	---	
Selenium	30.4	---	1.00	ug/L	1	27.8	ND	110	75-125%	---	---	
Thallium	26.8	---	0.200	ug/L	1	27.8	ND	97	75-125%	---	---	

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Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020B (ICPMS)

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
Batch 24F0084 - EPA 3015A							**Water**					
Matrix Spike (24F0084-MS2)			Prepared: 06/04/24 10:48 Analyzed: 06/05/24 12:31									
QC Source Sample: 3S-SBFA-3-GW-11-16 (A4E1630-17RE1)												
EPA 6020B												
Antimony	29.1	---	1.00	ug/L	1	27.8	ND	105	75-125%	---	---	Q-16
Arsenic	58.1	---	1.00	ug/L	1	55.6	1.34	102	75-125%	---	---	Q-16
Cadmium	57.7	---	0.200	ug/L	1	55.6	ND	104	75-125%	---	---	Q-16
Chromium	59.4	---	2.00	ug/L	1	55.6	1.27	105	75-125%	---	---	Q-16
Copper	53.9	---	2.00	ug/L	1	55.6	ND	97	75-125%	---	---	Q-16
Nickel	67.5	---	2.00	ug/L	1	55.6	10.4	103	75-125%	---	---	Q-16
Silver	28.5	---	0.200	ug/L	1	27.8	ND	103	75-125%	---	---	Q-16
Zinc	64.2	---	4.00	ug/L	1	55.6	7.14	103	75-125%	---	---	Q-16

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ANALYTICAL REPORT

Terraphase Engineering	Project: 910 West 3rd Street Property	
610 SW Broadway #406	Project Number: O053.07.003	Report ID:
Portland, OR 97205	Project Manager: James Farrow	A4E1630 - 06 14 24 1152

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 24E1009 - Total Solids (Dry Weight) - 2022							Soil					
Duplicate (24E1009-DUP1)			Prepared: 05/29/24 09:15		Analyzed: 05/30/24 06:12							PRO
QC Source Sample: Non-SDG (A4E1511-02)												
% Solids	**97.9**	---	1.00	%	1	---	98.0	---	---	0.2	10%	
Duplicate (24E1009-DUP2)			Prepared: 05/29/24 09:15		Analyzed: 05/30/24 06:12							PRO
QC Source Sample: Non-SDG (A4E1511-04)												
% Solids	**97.4**	---	1.00	%	1	---	97.4	---	---	0.07	10%	
Duplicate (24E1009-DUP3)			Prepared: 05/29/24 09:15		Analyzed: 05/30/24 06:12							PRO
QC Source Sample: Non-SDG (A4E1511-06)												
% Solids	**98.0**	---	1.00	%	1	---	98.1	---	---	0.02	10%	
Duplicate (24E1009-DUP4)			Prepared: 05/29/24 09:15		Analyzed: 05/30/24 06:12							PRO
QC Source Sample: Non-SDG (A4E1511-10)												
% Solids	**99.4**	---	1.00	%	1	---	99.4	---	---	0.06	10%	
Duplicate (24E1009-DUP5)			Prepared: 05/29/24 18:28		Analyzed: 05/30/24 06:12							
QC Source Sample: Non-SDG (A4E1684-01)												
% Solids	**78.4**	---	1.00	%	1	---	78.6	---	---	0.3	10%	
Duplicate (24E1009-DUP6)			Prepared: 05/29/24 18:28		Analyzed: 05/30/24 06:12							
QC Source Sample: Non-SDG (A4E1696-01)												
% Solids	**90.9**	---	1.00	%	1	---	90.9	---	---	0.01	10%	
Duplicate (24E1009-DUP7)			Prepared: 05/29/24 18:28		Analyzed: 05/30/24 06:12							
QC Source Sample: Non-SDG (A4E1697-01)												
% Solids	**92.0**	---	1.00	%	1	---	93.2	---	---	1	10%	
Duplicate (24E1009-DUP8)			Prepared: 05/29/24 18:28		Analyzed: 05/30/24 06:12							
QC Source Sample: Non-SDG (A4E1698-01)												
% Solids	**90.7**	---	1.00	%	1	---	91.2	---	---	0.5	10%	

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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 24E1009 - Total Solids (Dry Weight) - 2022							**Soil**					
Duplicate (24E1009-DUP9)			Prepared: 05/29/24 18:39		Analyzed: 05/30/24 06:12							
QC Source Sample: Non-SDG (A4E1700-01)												
% Solids	**70.3**	---	1.00	%	1	---	70.5	---	---	0.3	10%	

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

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

SAMPLE PREPARATION INFORMATION

Hydrocarbon Identification Screen by NWTPH-HCID

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24E1067							
A4E1630-15	Water	NWTPH-HCID	05/24/24 15:00	05/30/24 06:45	1030mL/5mL	1000mL/5mL	0.97
A4E1630-16	Water	NWTPH-HCID	05/24/24 13:28	05/30/24 06:45	960mL/5mL	1000mL/5mL	1.04
A4E1630-17	Water	NWTPH-HCID	05/24/24 15:13	05/30/24 06:45	960mL/5mL	1000mL/5mL	1.04
A4E1630-18	Water	NWTPH-HCID	05/24/24 15:39	05/30/24 06:45	920mL/5mL	1000mL/5mL	1.09

Prep: EPA 3546 (Fuels)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24E0998							
A4E1630-01	Soil	NWTPH-HCID	05/24/24 13:08	05/29/24 05:24	10.12g/10mL	10g/10mL	0.99
A4E1630-02	Soil	NWTPH-HCID	05/24/24 13:15	05/29/24 05:24	10.26g/10mL	10g/10mL	0.98
A4E1630-03	Soil	NWTPH-HCID	05/24/24 12:10	05/29/24 05:24	10.24g/10mL	10g/10mL	0.98
A4E1630-04	Soil	NWTPH-HCID	05/24/24 12:20	05/29/24 05:24	10.39g/10mL	10g/10mL	0.96
A4E1630-05	Soil	NWTPH-HCID	05/24/24 11:35	05/29/24 05:24	10.15g/10mL	10g/10mL	0.99
A4E1630-06	Soil	NWTPH-HCID	05/24/24 11:38	05/29/24 05:24	10.07g/10mL	10g/10mL	0.99
A4E1630-07	Soil	NWTPH-HCID	05/24/24 11:50	05/29/24 05:24	10.39g/10mL	10g/10mL	0.96
A4E1630-08	Soil	NWTPH-HCID	05/24/24 10:30	05/29/24 05:24	10.79g/10mL	10g/10mL	0.93
A4E1630-09	Soil	NWTPH-HCID	05/24/24 10:40	05/29/24 05:24	10.1g/10mL	10g/10mL	0.99
A4E1630-10	Soil	NWTPH-HCID	05/24/24 16:05	05/29/24 05:24	10.39g/10mL	10g/10mL	0.96
A4E1630-11	Soil	NWTPH-HCID	05/24/24 16:00	05/29/24 05:24	10.42g/10mL	10g/10mL	0.96

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

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

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24F0173							
A4E1630-17	Water	NWTPH-Dx/SG	05/24/24 15:13	06/06/24 06:22	1050mL/5mL	1000mL/5mL	0.95
A4E1630-18	Water	NWTPH-Dx/SG	05/24/24 15:39	06/06/24 06:22	920mL/5mL	1000mL/5mL	1.09

Prep: EPA 3546 w/SG+Acid (NWTPH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24F0182							
A4E1630-01	Soil	NWTPH-Dx/SG	05/24/24 13:08	06/06/24 08:31	11.01g/5mL	10g/5mL	0.91
A4E1630-02	Soil	NWTPH-Dx/SG	05/24/24 13:15	06/06/24 08:31	11.09g/5mL	10g/5mL	0.90
A4E1630-03	Soil	NWTPH-Dx/SG	05/24/24 12:10	06/06/24 08:31	11.12g/5mL	10g/5mL	0.90
A4E1630-04	Soil	NWTPH-Dx/SG	05/24/24 12:20	06/06/24 08:31	11.08g/5mL	10g/5mL	0.90
A4E1630-05	Soil	NWTPH-Dx/SG	05/24/24 11:35	06/06/24 08:31	11.01g/5mL	10g/5mL	0.91

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

SAMPLE PREPARATION INFORMATION

Diesel and/or Oil Hydrocarbons by NWTPH-Dx with Acid/Silica Gel Cleanup

Prep: EPA 3546 w/SG+Acid (NWTPH)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A4E1630-06	Soil	NWTPH-Dx/SG	05/24/24 11:38	06/06/24 08:31	11.1g/5mL	10g/5mL	0.90
A4E1630-07	Soil	NWTPH-Dx/SG	05/24/24 11:50	06/06/24 08:31	11.06g/5mL	10g/5mL	0.90
A4E1630-08	Soil	NWTPH-Dx/SG	05/24/24 10:30	06/06/24 08:31	11.12g/5mL	10g/5mL	0.90
A4E1630-09	Soil	NWTPH-Dx/SG	05/24/24 10:40	06/06/24 08:31	11.12g/5mL	10g/5mL	0.90

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

Prep: EPA 5030C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24F0177							
A4E1630-17	Water	NWTPH-Gx (MS)	05/24/24 15:13	06/06/24 09:24	5mL/5mL	5mL/5mL	1.00
A4E1630-18	Water	NWTPH-Gx (MS)	05/24/24 15:39	06/06/24 09:24	5mL/5mL	5mL/5mL	1.00

Prep: EPA 5035A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24F0185							
A4E1630-09	Soil	NWTPH-Gx (MS)	05/24/24 10:40	05/24/24 10:40	3.77g/5mL	5g/5mL	1.33
Batch: 24F0231							
A4E1630-03RE1	Soil	NWTPH-Gx (MS)	05/24/24 12:10	05/24/24 12:10	2.32g/5mL	5g/5mL	2.16

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3510C (Acid Extraction)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24E1093							
A4E1630-15	Water	EPA 8270E	05/24/24 15:00	05/30/24 11:41	1000mL/1mL	1000mL/1mL	1.00
A4E1630-16	Water	EPA 8270E	05/24/24 13:28	05/30/24 11:41	970mL/1mL	1000mL/1mL	1.03
A4E1630-17	Water	EPA 8270E	05/24/24 15:13	05/30/24 11:41	850mL/1mL	1000mL/1mL	1.18
A4E1630-18	Water	EPA 8270E	05/24/24 15:39	05/30/24 11:41	1030mL/1mL	1000mL/1mL	0.97

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24F0080							
A4E1630-01	Soil	EPA 8270E	05/24/24 13:08	06/04/24 10:44	11.05g/2mL	15g/2mL	1.36
A4E1630-04	Soil	EPA 8270E	05/24/24 12:20	06/04/24 10:44	11.72g/2mL	15g/2mL	1.28
A4E1630-05	Soil	EPA 8270E	05/24/24 11:35	06/04/24 10:44	11.11g/2mL	15g/2mL	1.35

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

SAMPLE PREPARATION INFORMATION

Selected Semivolatile Organic Compounds by EPA 8270E

Prep: EPA 3546

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
A4E1630-07	Soil	EPA 8270E	05/24/24 11:50	06/04/24 10:44	11.13g/2mL	15g/2mL	1.35
A4E1630-08	Soil	EPA 8270E	05/24/24 10:30	06/04/24 10:44	11.21g/2mL	15g/2mL	1.34
A4E1630-09RE1	Soil	EPA 8270E	05/24/24 10:40	06/04/24 10:44	11.24g/2mL	15g/2mL	1.33
Batch: 24F0234							
A4E1630-02RE1	Soil	EPA 8270E	05/24/24 13:15	06/07/24 08:52	15.01g/2mL	15g/2mL	1.00
A4E1630-03RE1	Soil	EPA 8270E	05/24/24 12:10	06/07/24 08:52	15.12g/2mL	15g/2mL	0.99
A4E1630-06RE1	Soil	EPA 8270E	05/24/24 11:38	06/07/24 08:52	15.16g/2mL	15g/2mL	0.99

Total Metals by EPA 6020B (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24F0030							
A4E1630-15	Water	EPA 6020B	05/24/24 15:00	06/03/24 12:50	45mL/50mL	45mL/50mL	1.00
Batch: 24F0084							
A4E1630-16	Water	EPA 6020B	05/24/24 13:28	06/04/24 10:48	45mL/50mL	45mL/50mL	1.00
A4E1630-16RE1	Water	EPA 6020B	05/24/24 13:28	06/04/24 10:48	45mL/50mL	45mL/50mL	1.00
A4E1630-17	Water	EPA 6020B	05/24/24 15:13	06/04/24 10:48	45mL/50mL	45mL/50mL	1.00
A4E1630-17RE1	Water	EPA 6020B	05/24/24 15:13	06/04/24 10:48	45mL/50mL	45mL/50mL	1.00
A4E1630-18	Water	EPA 6020B	05/24/24 15:39	06/04/24 10:48	45mL/50mL	45mL/50mL	1.00
A4E1630-18RE1	Water	EPA 6020B	05/24/24 15:39	06/04/24 10:48	45mL/50mL	45mL/50mL	1.00

Prep: EPA 3051A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 24E0996							
A4E1630-01	Soil	EPA 6020B	05/24/24 13:08	05/29/24 10:15	0.491g/50mL	0.5g/50mL	1.02
Batch: 24F0052							
A4E1630-02	Soil	EPA 6020B	05/24/24 13:15	06/03/24 16:36	0.502g/50mL	0.5g/50mL	1.00
A4E1630-03	Soil	EPA 6020B	05/24/24 12:10	06/03/24 16:36	0.472g/50mL	0.5g/50mL	1.06
A4E1630-04	Soil	EPA 6020B	05/24/24 12:20	06/03/24 16:36	0.462g/50mL	0.5g/50mL	1.08
A4E1630-05	Soil	EPA 6020B	05/24/24 11:35	06/03/24 16:36	0.511g/50mL	0.5g/50mL	0.98
A4E1630-06	Soil	EPA 6020B	05/24/24 11:38	06/03/24 16:36	0.487g/50mL	0.5g/50mL	1.03
A4E1630-07	Soil	EPA 6020B	05/24/24 11:50	06/03/24 16:36	0.451g/50mL	0.5g/50mL	1.11
A4E1630-08	Soil	EPA 6020B	05/24/24 10:30	06/03/24 16:36	0.502g/50mL	0.5g/50mL	1.00
A4E1630-09	Soil	EPA 6020B	05/24/24 10:40	06/03/24 16:36	0.48g/50mL	0.5g/50mL	1.04

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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
Batch: 24E1009							
A4E1630-01	Soil	EPA 8000D	05/24/24 13:08	05/29/24 09:15			NA
A4E1630-02	Soil	EPA 8000D	05/24/24 13:15	05/29/24 09:15			NA
A4E1630-03	Soil	EPA 8000D	05/24/24 12:10	05/29/24 09:15			NA
A4E1630-04	Soil	EPA 8000D	05/24/24 12:20	05/29/24 09:15			NA
A4E1630-05	Soil	EPA 8000D	05/24/24 11:35	05/29/24 09:15			NA
A4E1630-06	Soil	EPA 8000D	05/24/24 11:38	05/29/24 09:15			NA
A4E1630-07	Soil	EPA 8000D	05/24/24 11:50	05/29/24 09:15			NA
A4E1630-08	Soil	EPA 8000D	05/24/24 10:30	05/29/24 09:15			NA
A4E1630-09	Soil	EPA 8000D	05/24/24 10:40	05/29/24 09:15			NA
A4E1630-10	Soil	EPA 8000D	05/24/24 16:05	05/29/24 09:15			NA
A4E1630-11	Soil	EPA 8000D	05/24/24 16:00	05/29/24 09:15			NA

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

QUALIFIER DEFINITIONS

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

Apex Laboratories

DCNT	Sample decanted due to the presence of sediment. Sample bottle not rinsed with solvent.
F-03	The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.
PRES	Incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis.
PRO	Sample has undergone sample processing prior to extraction and analysis.
Q-04	Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
Q-16	Reanalysis of an original Batch QC sample.
Q-17	RPD between original and duplicate sample, or spike duplicates, is outside of established control limits.
Q-18	Matrix Spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.
Q-19	Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
Q-29	Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
Q-37	Sample results are less than the Reporting Level (MDL and/or MRL) and Duplicate results exceed this level. See QC Section of the report for Duplicate results. Sample may be non-homogenous, or results may bracket the reporting level.
Q-41	Estimated Results. Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Results are likely biased high.
Q-42	Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)
R-04	Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.
S-06	Surrogate recovery is outside of established control limits.

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ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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).

Apex Laboratories

Darrell Auvil, Client Services Manager

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

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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

Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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

Darrell Auvil, Client Services Manager

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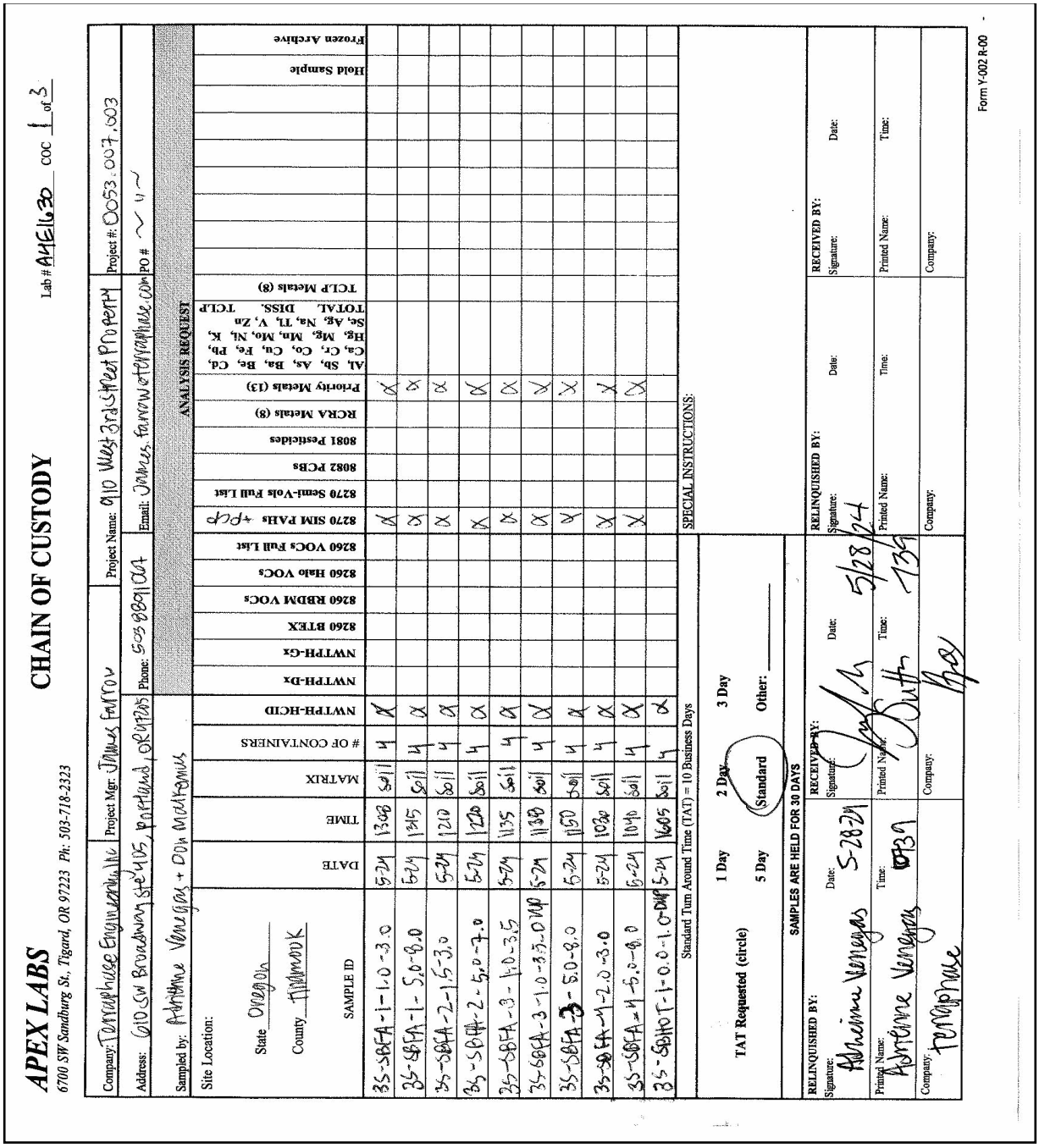
Tigard, OR 97223
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**



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

CHAIN OF CUSTODY

Lab # A4E1630 COC 1 of 3

Company: Terraphase Engineering Inc | Project Mgr: James Farrow | Project Name: 910 West 3rd Street Property | Project #: O053.007.003
Address: 610 SW Broadway Ste 405, Portland, OR 97205 | Phone: 503 891 1801 | Email: James.farrow@terraphase.com | PO # ~ u ~
Sampled by: Adrienne Venegas + Don Matthews

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs +PCP	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
35-SBFA-1-1.0-3.0	5-24	1300	Soil	4	X							X					X				
35-SBFA-1-5.0-8.0	5-24	1345	Soil	4	X							X					X				
35-SBFA-2-1.5-3.0	5-24	1210	Soil	4	X							X					X				
35-SBFA-2-5.0-7.0	5-24	1220	Soil	4	X							X					X				
35-SBFA-3-1.0-3.5	5-24	1135	Soil	4	X							X					X				
35-SBFA-3-1.0-3.5-DUP	5-24	1130	Soil	4	X							X					X				
35-SBFA-3-5.0-8.0	5-24	1150	Soil	4	X							X					X				
35-SBFA-4-2.0-3.0	5-24	1030	Soil	4	X							X					X				
35-SBFA-4-5.0-8.0	5-24	1040	Soil	4	X							X					X				
35-SBDUP-1-0.0-1.0-DUP	5-24	1605	Soil	4	X							X					X				

Standard Turn Around Time (TAT) = 10 Business Days

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

SPECIAL INSTRUCTIONS:

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY: Signature: Adrienne Venegas	Date: 5-28-24	RECEIVED BY: Signature:	Date:	RELINQUISHED BY: Signature:	Date:	RECEIVED BY: Signature:	Date:
Printed Name: Adrienne Venegas	Time: 0939	Printed Name:	Time:	Printed Name:	Time:	Printed Name:	Time:
Company: Terraphase		Company:		Company:		Company:	

Form Y-002 R-00

Apex Laboratories

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Darrell Auvil, Client Services Manager

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

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

CHAIN OF CUSTODY

Lab # A4E1630 COC 2 of 3

Company: Terraphase Eng. Inc. Project Mgr: James Farrow Project Name: 910 West 3rd Street Property Project #: O053.007.003
Address: 610 SW Broadway Ste 405, Portland, OR Phone: 5038891067 Email: james.farrow@terraphase.com PO #: ~ " ~
Sampled by: Adrienne Venegas + Don McKenney

Site Location: State Oregon County Tillamook

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs + PCP	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
35-SBHOT-1-0.0-1.0	5-24	1600	Soil	4	X							~~X~~			~~X~~		~~X~~	AW			
(*) 35-SBDRUM-1-0.0-1.0	5-24	1615	Soil	4	X							X			X		X				
(*) 35-SBDRUM-1-0.0-1.0-DUP	5-24	1620	Soil	4	X							X			X		X				
(*) 35-SBDRUM-2-0.0-1.0	5-24	1635	Soil	4	X							X			X		X				
35-SBFA-EB-20240524	5-24	1500	H2O	8	X							X					X				
35-SBFA-4-GW-13-18	5-24	1328	H2O	8	X							X					X				
35-SBFA-3-GW-11-16	5-24	1513	H2O	8	X							X					X				
35-SBFA-3-GW-11-16-DUP	5-24	1539	H2O	8	X							X					X				
(*) 35-SBA-COMP-1-0-1	5-24	1030	Soil	2											X						
(*) 35-SBA-COMP-2-0-1	5-24	1050	Soil	2											X						

Standard Turn Around Time (TAT) = 10 Business Days

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

SPECIAL INSTRUCTIONS:
(*) Please hold "35-SBDRUM" and "35-SBA" samples until further notice.

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: Adrienne Venegas Date: 5-28-24	Signature: [signature] Date: 5/28/24	Signature: Date:	Signature: Date:
Printed Name: Adrienne Venegas Time: 0739	Printed Name: J Sutton Time: 739	Printed Name: Time:	Printed Name: Time:
Company: Terraphase	Company: Apex	Company:	Company:

Form Y-002 R-00

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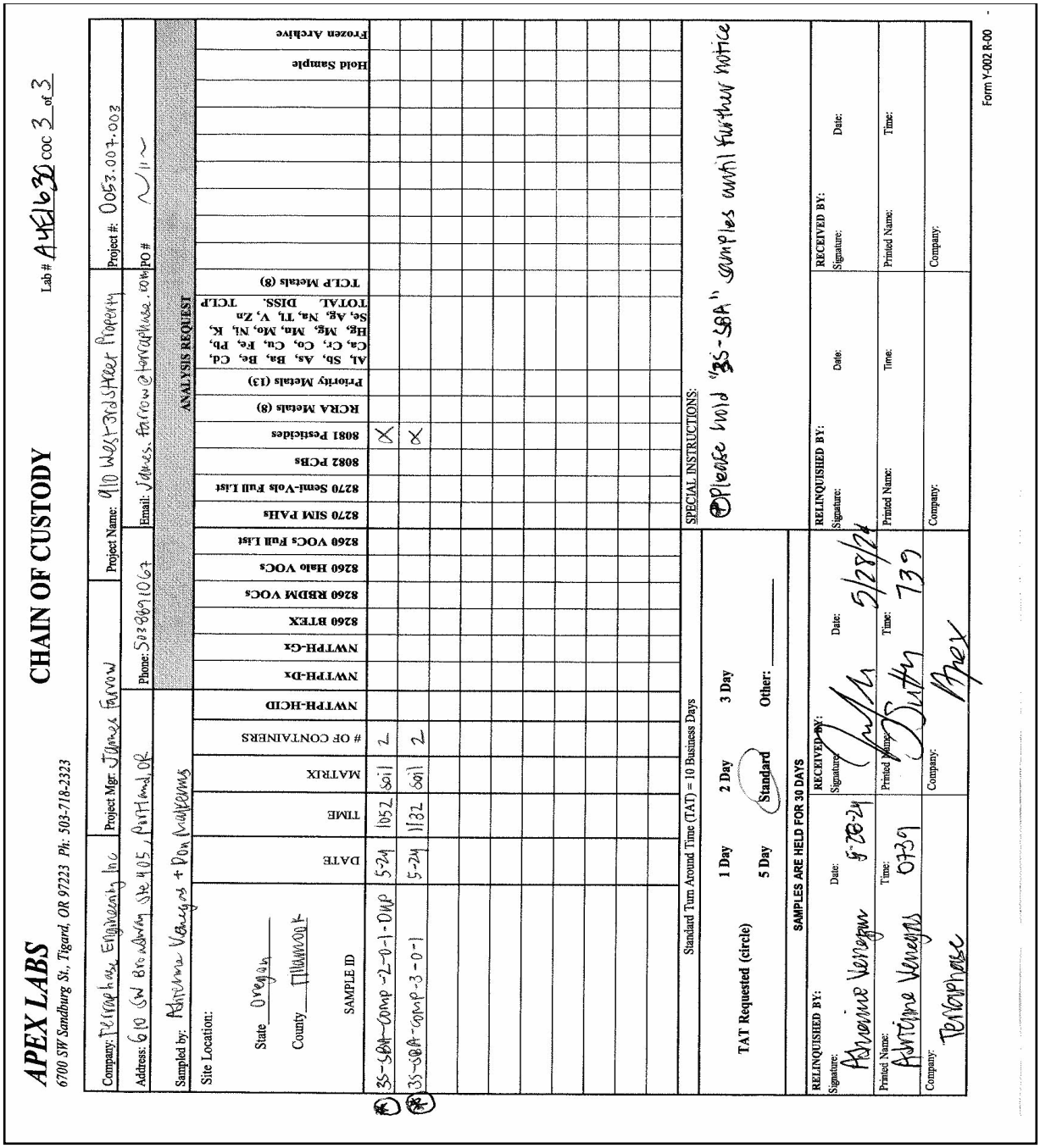
503-718-2323
ORELAP ID: **OR100062**

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**



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

CHAIN OF CUSTODY

Lab # A4E1630 COC 3 of 3

Company: Terraphase Engineering Inc | Project Mgr.: James Farrow | Project Name: 910 West 3rd Street Property | Project #: 0053.007.003
Address: 610 SW Broadway Ste #405, Portland, OR | Phone: 503-894-1067 | Email: James.farrow@terraphase.com | PO #: ~/11~
Sampled by: Adrienne Venegas + Don Williams

ANALYSIS REQUEST

Site Location: State Oregon, County Tillamook	SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	NWTPH-HCID	NWTPH-Dx	NWTPH-Gx	8260 BTEX	8260 RBDM VOCs	8260 Halo VOCs	8260 VOCs Full List	8270 SIM PAHs	8270 Semi-Vols Full List	8082 PCBs	8081 Pesticides	RCRA Metals (8)	Priority Metals (13)	Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Hg, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Tl, V, Zn TOTAL DISS. TCLP	TCLP Metals (8)	Hold Sample	Frozen Archive
(5)	35-SGA-Comp-2-0-1-DUP	5-24	1052	Soil	2											X					
(6)	35-SGA-Comp-3-0-1	5-24	1132	Soil	2											X					

Standard Turn Around Time (TAT) = 10 Business Days
TAT Requested (circle): 1 Day | 2 Day | 3 Day | 5 Day | Standard | Other: ____

SPECIAL INSTRUCTIONS:
Please hold "35-SGA" samples until further notice

SAMPLES ARE HELD FOR 30 DAYS

RELINQUISHED BY:	Date:	Time:	RECEIVED BY:	Date:	Time:
Signature: Adrienne Venegas	5-28-24		Signature:		
Printed Name: Adrienne Venegas		0739	Printed Name:		
Company: Terraphase			Company:		

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

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

Form Y-002 R-00

Apex Laboratories

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Darrell Auvil, Client Services Manager

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

ANALYTICAL REPORT

Terraphase Engineering	Project: **910 West 3rd Street Property**	
610 SW Broadway #406	Project Number: **O053.07.003**	**Report ID:**
Portland, OR 97205	Project Manager: **James Farrow**	**A4E1630 - 06 14 24 1152**

APEX LABS COOLER RECEIPT FORM

Client: Terraphase Engineering Inc. Element WO#: A4E1630

Project/Project #: 910 West 3rd Street Property 0053.007.003

Delivery Info:

Date/time received: 5/28/24 @ 739 By: JS

Delivered by: Apex__Client X ESS__FedEx__UPS__Radio__Morgan__SDS__Evergreen__Other__

From USDA Regulated Origin? Yes____ No X

Cooler Inspection Date/time inspected: 5/28/24 @ 742 By: JS

Chain of Custody included? Yes V No____

Signed/dated by client? Yes X No____

Contains USDA Reg. Soils? ~~Yes X~~ JS 5/28 No X Unsure (email RegSoils) ____

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	1.3	1.6	1.8				
Custody seals? (Y/N)	N	N	N				
Received on ice? (Y/N)	Y	Y	Y				
Temp. blanks? (Y/N)	Y	Y	Y				
Ice type: (Gel/Real/Other)	Real	Real	Real				
Condition (In/Out):	In	In	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: 5/28/24 @ 11:32 By: ZKM

All samples intact? Yes X No___ Comments: ____

Bottle labels/COCs agree? Yes X No___ Comments: ____

COC/container discrepancies form initiated? Yes___ No X

Containers/volumes received appropriate for analysis? Yes X No___ Comments: ____

Do VOA vials have visible headspace? Yes X No___ ~~NA X~~ 5/28

Comments 1/3 VOAs for 35-SBFA-3-GW-11-16, HS

Water samples: pH checked: Yes X No___ ~~NA X~~ SBFH pH appropriate? Yes___ No X ~~NA X~~ pH ID: A23I172

Comments: 2/2 HCL for both 5/28 35-SBFA-4-GW-B-18 & 35-SBFA-3-GW-11-16 pH of 7

Labeled by: ZKM Witness: KAB Cooler Inspected by: ZKM 5/28 ~~ZKM~~ JS

Form Y-003 R-02

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Darrell Auvil, Client Services Manager

Appendix D

Data Validation Reports

Data Validation Report

Project Name: 910 West 3rd Street Property	**Lab Reference Number:** 2406323
Project Number: O053.007.002	**Laboratory:** Eurofins Air Toxics, LLC
Validated by: Jessica Corral	**Matrix:** Air
Sampling Date: 6/7/2024	**Number of Samples:** 3
Data Validation Report Date: 7/5/2024	**Analytical Report Date:** 6/21/2024

The quality control (QC) elements that were reviewed are listed below.

Data Package Completeness	√	Surrogate Compound Recovery	NA
Verification of EDD to Hardcopy Data Package	√	Sample Duplicate Analysis	NA
Chain-of-Custody and Sample Preservation	1	Blank Spike/Blank Spike Duplicate Sample Analyses	NA
Holding Times	√	Matrix Spike/Matrix Spike Duplicate Sample Analyses	NA
Retention Time Windows	NE	Trip Blank Sample Analysis	NA
Initial Calibration	NE	Equipment Blank Sample Analysis	NA
Initial Calibration Verification	NE	Field Duplicate Sample Analysis	√
Continuing Calibration	NE	Reference Material Analysis	NE
Method Blank Analysis	√	Compound Quantitation	√
Laboratory Control Samples	√		

√ – Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

1 – Quality control results are discussed below, but no data were qualified.

2 – Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed in this Data Validation Report.

NA – Not applicable

NE – Not evaluated

P – Pending

Overall Assessment

All data, as qualified, are acceptable for use.

Data Package Completeness

The data package included all required elements: chain-of-custody, sample receipt checklist, case narrative, results, and QC results.

Verification of EDD to Hardcopy Data Package

Sample results and related quality control data were received in both an electronic and hardcopy format. Electronic data were verified against the laboratory report; no errors were found.

Chain-of-Custody

All sample identification (ID) numbers listed on the chain-of-custody record are consistent with the sample ID reported in the EDD and hardcopy data package.

A revised Chain of Custody (COC) was provided by Terraphase on 6/10/2024.

Sample Preservation

Sample canisters arrived at the laboratory intact.

Holding Times

All samples were analyzed within the holding time.

Retention Time Windows

Not evaluated.

Initial Calibration

Not evaluated.

Initial Calibration Verification

Not evaluated.

Continuing Calibration

The continuing calibration verification samples were not evaluated, however the laboratory did not note any discrepancies.

Method Blank Analysis

No target compounds were detected in the method blank samples.

Laboratory Control Samples

All percent recovery values for the laboratory control sample and laboratory control sample duplicate were within acceptable criteria established by the laboratory for the respective testing methods.

Surrogate Compound Recovery

Surrogate compound recovery was not performed for this sample batch.

Sample Duplicate Analysis

Sample duplicate analysis was not performed for this sample batch.

Blank Spike/Blank Spike Duplicate Sample Analyses

Blank spike and blank spike duplicate sample analyses were not performed for this sample batch.

Matrix Spike/Matrix Spike Duplicate Sample Analyses

Matrix spike and matrix spike duplicate analyses were not performed for this sample batch.

Trip Blank Sample Analysis

A trip blank sample was not collected for this sample batch.

Equipment Blank Sample Analysis

An equipment blank sample was not collected for this sample batch.

Field Duplicate Analysis

Sample 3S-SV-1-REP was collected as field duplicate of 3S-SV-1. All RPDs were within the accepted 50% limit.

Reference Material Analysis

No reference material analysis was performed.

Compound Quantitation

The laboratory did not apply any flags to project samples in this sample batch.

Sample Index

Sample Name	Lab ID	Matrix	Date Collected
3S-SV-4	2406323-01A	Air	6/7/24
3S-SV-1	2406323-02A	Air	6/7/24
3S-SV-1-REP	2406323-03A	Air	6/7/24

END OF REPORT

Data Validation Report

Project Name: 910 West 3rd Street	**Lab Reference Number:** A4E1630
Project Number: O053.007.003	**Laboratory:** Apex Laboratories
Validated by: Marie Mueller	**Matrix:** Soil and Water
Sampling Date: 5/24/2024	**Number of Samples:** 15
Data Validation Report Date: 6/18/2024	**Analytical Report Date:** 6/14/2024

The quality control (QC) elements that were reviewed are listed below.

Data Package Completeness	1	Surrogate Compound Recovery	1
Verification of EDD to Hardcopy Data Package	√	Sample Duplicate Analysis	1
Chain-of-Custody and Sample Preservation	1	Blank Spike/Blank Spike Duplicate Sample Analyses	NA
Holding Times	√	Matrix Spike/Matrix Spike Duplicate Sample Analyses	1
Retention Time Windows	NE	Trip Blank Sample Analysis	NA
Initial Calibration	NE	Equipment Blank Sample Analysis	1
Initial Calibration Verification	NE	Field Duplicate Sample Analysis	1
Continuing Calibration	1	Reference Material Analysis	NE
Method Blank Analysis	1	Compound Quantitation	2
Laboratory Control Samples	1		

√ – Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.

1 – Quality control results are discussed below, but no data were qualified.

2 – Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed in this Data Validation Report.

NA – Not applicable

NE – Not evaluated

P – Pending

Overall Assessment

All data, as qualified, are acceptable for use.

Data Package Completeness

The data package was received without a case narrative. The data package included all other required elements: chain-of-custody, sample receipt checklist, results, and QC results.

Verification of EDD to Hardcopy Data Package

Sample results and related quality control data were received in both an electronic and hardcopy format. Electronic data were verified against the laboratory report; no errors were found.

Chain-of-Custody

All sample identification (ID) numbers listed on the chain-of-custody record are consistent with the sample ID reported in the EDD and hardcopy data package.

Sample Preservation

Samples were received intact with cooler temperatures of 1.3, 1.6, and 1.8 degrees Celsius. Proper preservation includes samples chilled to ≤6.0 degrees Celsius.

Some samples were decanted due to the presence of sediment. Those sample bottles were not rinsed with solvent. Impacted data were “DCNT” flagged by the laboratory.

Some samples had incomplete field preservation. Additional preservative was added to adjust the pH within the appropriate range for this analysis. Impacted data were “PRES” flagged by the laboratory.

Some samples underwent sample processing prior to extraction and analysis. Impacted data were “PRO” flagged by the laboratory.

VOA vials were noted to have visible headspace, and the laboratory commented, “1/3 VOAs for 3S-SBFA-3-GW-11-16, HS.”

The pH was checked by the laboratory for the water samples and it was noted that “2/2 HCL for both 3S-SBFA-4-GW-13-18 and 3S-SBFA-3-GW-11-16 pH of 7.”

Holding Times

All samples were analyzed within the holding time.

Retention Time Windows

Not evaluated.

Initial Calibration

Not evaluated.

Initial Calibration Verification

Not evaluated.

Continuing Calibration

Continuing calibration was not evaluated, however the continuing calibration verification sample was above the upper control limit for the surrogate Nitrobenzene-d5.

Method Blank Analysis

No target compounds were detected in the method blank samples.

For blank sample in batch 24F0084, sample ID 24F0084-BLK1, the analytes were found to be under method detection limits and were flagged with “Q-16” indicating reanalysis of original Batch QC sample.

Laboratory Control Samples

For the LCS/LCSD batch 24F0173, surrogate recovery was within limits set by the laboratory. The LCSD was “Q-19” flagged because the blank spike duplicate sample was analyzed in place of matrix spike/duplicate samples due to limited sample amount available for analysis.

For the LCS/LCSD in batch 24E1093, the surrogate Nitrobenzene-d5 was flagged by the laboratory with “Q-41” indicating estimated results. The recovery of Continuing Calibration Verification sample was above upper control limit for this analyte. Results are likely biased high. The surrogate recoveries were within laboratory limits.

For LCSD batch 24E1093, percent recoveries and calculated relative percent difference (RPD) were within limits set by the laboratory, surrogate recovery was within limits set by the laboratory. The LCSD was “Q-19” flagged because the blank spike duplicate sample was analyzed in place of matrix spike/duplicate samples due to limited sample amount available for analysis.

The LCS in batch 24F0080 was flagged with “Q-18” indicating that matrix spike results for this extraction batch are not reported due to the high dilution necessary for analysis of the source sample.

Fluorene and carbazole in LCS batch 24F0080 were “Q-29” flagged because the recovery for the Lab Control Spike is above the upper control limit. Data may be biased high.

For the LCS in batch 24F0080 the surrogate Nitrobenzene-d5 was flagged by the laboratory with “Q-41” indicating estimated results. The recovery of Continuing Calibration Verification sample was above upper control limit for this analyte. Results are likely biased high. The surrogate recoveries were within laboratory limits.

In the LCS for batch 24F0084-BS2, several analytes were found to be under method detection limits and were flagged with “Q-16” indicating reanalysis of an original Batch QC sample.

All other percent recovery values for laboratory control samples (LCSs) were within acceptable criteria established by the laboratory for the respective testing methods.

Surrogate Compound Recovery

For the LCS/LCSD in batch 24E1093, the surrogate Nitrobenzene-d5 was flagged by the laboratory with “Q-41” indicating estimated results; the recovery of Continuing Calibration Verification sample was above upper control limit for this analyte. Results are likely biased high. The surrogate recoveries were within laboratory limits.

For the LCS and sample duplicate in batch 24F0080, the surrogate Nitrobenzene-d5 was flagged by the laboratory with “Q-41” indicating estimated results, the recovery of Continuing Calibration Verification sample was above upper control limit for this analyte. Results are likely biased high. The surrogate recoveries were within laboratory limits.

Sample 3S-SBFA-4-GW-13-18 surrogate 2-Fluorobiphenyl was below the limits set by the laboratory and was flagged with “S-06” indicating surrogate recovery is outside of established control limits.

Surrogate nitrobenzene-d5 was “Q-41” flagged in several project samples to indicate estimated results because the recovery of the continuing calibration verification sample was above the upper control limit. Surrogate recovery values were within limits set by the lab, but results are likely biased high.

All other percent recovery values for surrogate compounds were within acceptable criteria established by the laboratory for the respective testing methods.

Sample Duplicate Analysis

Batch 24E0998 duplicate sample (24E0998-DUP1) oil range organics result was detected and flagged “F-03” indicating the result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.

Batch 24F0182 duplicate samples 24F0182-DUP1 and 24F0182-DUP2 oil range organics results were flagged “F-03” indicating the result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.

Batch 24F0080 duplicate sample 24F0080-DUP1 the surrogate Nitrobenzene-d5 was flagged by the laboratory with “Q-41” indicating estimated results, the recovery of Continuing Calibration Verification sample was above upper control limit for this analyte. Results are likely biased high. The surrogate recoveries were within laboratory limits.

Batch 24F0234 duplicate sample 24F0234-DUP1 analytes benz(a)anthracene, benzo(k)fluoranthene, and fluorene results were flagged “Q-17” indicating RPD between original and duplicate sample, or spike duplicates, is outside of established control limits.

Batch 24E0996 duplicate sample 24E0996-DUP1 analytes chromium results were flagged “Q-04” indicating spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.

Batch 24F0030 duplicate sample 24F0030-DUP2 analytes lead, mercury, and thallium results were flagged “Q-16” indicating reanalysis of an original Batch QC sample.

Batch 24F0084 duplicate sample 24F0084-DUP2 analyte results for Total Metals EPA 6020B were flagged “Q-16” indicating reanalysis of an original Batch QC sample.

All other RPDs for sample duplicates were within acceptable criteria established by the laboratory for the respective testing methods.

Blank Spike/Blank Spike Duplicate Sample Analyses

Blank spike and blank spike duplicate sample analyses were not performed for this sample batch.

Matrix Spike/Matrix Spike Duplicate Sample Analyses

The matrix spike sample (24F0084-MS2) in batch 24F0084, all analytes for total metals by EPA 6020B were noted “Q-16” by the laboratory indicating reanalysis of an original Batch QC sample.

All percent recoveries and calculated RPDs for matrix spikes were within acceptable criteria established by the laboratory for the respective testing methods.

Trip Blank Sample Analysis

A trip blank sample was not collected for this sample batch.

Equipment Blank Sample Analysis

Equipment blank sample 3S-SBFA-EB-20240524 was collected on May 24, 2024 and is associated with the lab report for samples collected on that date.

Equipment Blank Analysis

Analyte	Detection	Discussion
Chromium	15.7 µg/L	Chromium was detected in project samples at concentrations greater than 5 times the estimated equipment blank. Therefore, no results were qualified.
Copper	3.98 µg/L	Copper was detected in project samples at concentrations greater than 5 times the estimated equipment blank. Therefore, no results were qualified.
Lead	0.309 µg/L	Lead was detected at concentrations greater than 5 times the estimated equipment blank concentration. Therefore, no results were qualified.
Nickel	3.32 µg/L	Nickel was detected in project samples at concentrations greater than 5 times the estimated equipment blank. Therefore, no results were qualified.

No other target compounds were detected in the equipment blank sample.

Field Duplicate Analysis

Samples 3S-SBFA-3-1.0-3.5-DUP, 3S-SBHOT-1-0.0-1.0-DUP, and 3S-SBFA-3-GW-11-16-DUP were collected as field duplicates of 3S-SBFA-3-1.0-3.5, 3S-SBHOT-1-0.0-1.0, and 3S-SBFA-3-GW-11-16, respectively. All RPDs were within the accepted 35% limit for water and 50% limit for soil, except for the following:

- Oil Range organics was detected in 3S-SBFA-3-1.0-3.5 and 3S-SBFA-3-1.0-3.5-DUP at concentrations of 407 mg/kg dry and 1300 mg/kg dry, respectively. The calculated RPD is 105%.
- Several analytes were detected in 3S-SBFA-3-1.0-3.5-DUP but not detected in 3S-SBFA-3-1.0-3.5 above the method detection limit; therefore, no RPD could be calculated for Acenaphthene, Acenaphthylene, Anthracene, Benz(a)anthracene, Benzo(a) pyrene, Benzo(b)fluoranthene, Chrysene, Dibenzofuran, Fluoranthene, Fluorene, Naphthalene, Phenanthrene and Pyrene.
- Oil Range organics was detected in 3S-SBFA-3-GW-11-16 and 3S-SBFA-3-GW-11-16-DUP at concentrations of 7.36 mg/L and 4.72 mg/L, respectively. The calculated RPD is 44%.
- Lead was detected at 3S-SBFA-3-GW-11-16-DUP at 1.33 µg/L , however lead was not detected in 3S-SBFA-3-GW-11-16, therefore no RPD could be calculated.

Reference Material Analysis

No reference material analysis was performed.

Compound Quantitation

The laboratory applied the following flags:

F-03 The result for this hydrocarbon range is elevated due to the presence of individual analyte peaks in the quantitation range that are not representative of the fuel pattern reported.

Results for the following samples were F-03-flagged:

Sample Name	Analytes
3S-SBFA-1-1.0-3.0	Oil Range Organics, Oil
3S-SBFA-1-5.0-8.0	Oil Range Organics, Oil
3S-SBFA-2-1.5-3.0	Oil Range Organics, Oil
3S-SBFA-2-5.0-7.0	Oil Range Organics, Oil
3S-SBFA-3-1.0-3.5	Oil Range Organics, Oil
3S-SBFA-3-1.0-3.5-DUP	Oil Range Organics, Oil
3S-SBFA-3-5.0-8.0	Oil Range Organics, Oil
3S-SBFA-4-2.0-3.0	Oil Range Organics, Oil
3S-SBFA-4-5.0-8.0	Oil Range Organics, Gasoline Range Organics, Oil
3S-SBFA-3-GW-11-16	Oil Range Organics
3S-SBFA-3-GW-11-16-DUP	Oil Range Organics

Q-37 Sample results are less than the Reporting Level (MDL and/or MRL) and Duplicate results exceed this level. See QC Section of the report for Duplicate results. Sample may be non-homogenous, or results may bracket the reporting level.

Result for the following sample was Q-37-flagged:

Sample Name	Analytes
3S-SBFA-1-5.0-8.0	Benz(a)anthracene, Benzo(k)fluoranthene

Q-42 Matrix Spike and/or Duplicate analysis was performed on this sample. % Recovery or RPD for this analyte is outside laboratory control limits. (Refer to the QC Section of Analytical Report.)

Result for the following sample was Q-42-flagged:

Sample Name	Analytes

3S-SBFA-1-5.0-8.0	Benz(a)anthracene, Benzo(k)fluoranthene, Fluorene

R-04 Reporting levels elevated due to preparation and/or analytical dilution necessary for analysis.

Results for the following samples were R-04-flagged:

Sample Name	Analytes
3S-SBFA-3-1.0-3.5	SVOCs

Sample Index

Sample Name	Lab ID	Matrix	Date Collected
3S-SBFA-1-1.0-3.0	A4E1630-01	Soil	5/24/2024
3S-SBFA-1-5.0-8.0	A4E1630-02	Soil	5/24/2024
3S-SBFA-2-1.5-3.0	A4E1630-03	Soil	5/24/2024
3S-SBFA-2-5.0-7.0	A4E1630-04	Soil	5/24/2024
3S-SBFA-3-1.0-3.5	A4E1630-05	Soil	5/24/2024
3S-SBFA-3-1.0-3.5-DUP	A4E1630-06	Soil	5/24/2024
3S-SBFA-3-5.0-8.0	A4E1630-07	Soil	5/24/2024
3S-SBFA-4-2.0-3.0	A4E1630-08	Soil	5/24/2024
3S-SBFA-4-5.0-8.0	A4E1630-09	Soil	5/24/2024
3S-SBHOT-1-0.0-1.0-DUP	A4E1630-10	Soil	5/24/2024
3S-SBHOT-1-0.0-1.0	A4E1630-11	Soil	5/24/2024
3S-SBFA-EB-20240524	A4E1630-15	Water	5/24/2024
3S-SBFA-4-GW-13-18	A4E1630-16	Water	5/24/2024
3S-SBFA-3-GW-11-16	A4E1630-17	Water	5/24/2024
3S-SBFA-3-GW-11-16-DUP	A4E1630-18	Water	5/24/2024

END OF REPORT

Appendix E

Well Data

Til 629

SOIL CONSERVATION SERVICE

WELL SCHEDULE

Tillamook

W½ Sec 25 T1-S R-10W

Work Unit

Land Owner ~~Julia Coffiman~~ Address ~~½ mi west of Tillamook~~ Well No.

Location: State County Tillamook ¼ Sec.

Source Confidential

Drilling Commenced Completed

Driller Address

Topography

Elevation ft. Datum Meas. point

Type of Well Method of Drilling

Depth Diameter: top bottom

Chief Aquifer from to

Others

T N S; R E N

Casing: Type Depth Diameter Screen

Water Level ft. above / below ; ft. above / below

Pump Power

Yield Drawdown ft. pumping G.P.M. Time

Use Quality Samples

Graphic Log

Geological Formation Record

Written Log by:

Correlation by:

Casing Record

From Feet	To Feet	Thickness ft.	Character of formation and remarks
			Depth 180' Water Raised to Within 3 ft of surface yield 1200 gal per hr.
			Three wells in the vicinity of Edwards, from 63 to 103' deep encountered similar conditions

STATE ENGINEER
Salem, Oregon

TILL 630

Well Record

STATE WELL NO. 1/10W-25E(1)
COUNTY Tillamook
APPLICATION NO. GR-3593

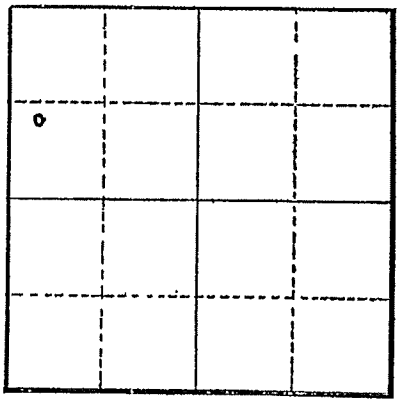
OWNER: Alfred H. Marolf
MAILING ADDRESS: Star Rt. West, Box 13
CITY AND STATE: Tillamook, Oregon

LOCATION OF WELL: Owner's No. .....

SW ¼ NW ¼ Sec. 25 T. 1 N. S., R. 10 E. W., W.M.

Bearing and distance from section or subdivision corner 490' E. & 240' S. of SW Cor. of NW¼NW¼, Section 25

Altitude at well .....



TYPE OF WELL: Drilled Date Constructed Oct., 1954

Depth drilled 75' Depth cased 75'

Section 25

CASING RECORD:

8 inch casing set to 75 feet

FINISH:

Perforated from 38 feet to 75 feet

AQUIFERS:

Sediments

WATER LEVEL:

3 feet below surface

PUMPING EQUIPMENT: Type Wyss pump centrifugal H.P. 75
Capacity 208 G.P.M.

WELL TESTS:
Drawdown 15 ft. after ..... hours 500 G.P.M.
Drawdown ..... ft. after ..... hours ..... G.P.M.

USE OF WATER Irrigation Temp. ..... °F. ....., 19.....
SOURCE OF INFORMATION Well Registration Statement
DRILLER or DIGGER .....
ADDITIONAL DATA:
Log X Water Level Measurements ..... Chemical Analysis ..... Aquifer Test .....

REMARKS:

State Printing 89316

WATER WELL REPORT
STATE OF OREGON

TILL 631

RECEIVED
OCT 22 1981
WATER RESOURCES DEPT
SALEM, OREGON

State Well No. 1S/10W-25bc
State Permit No. .....
Deepening

(1) OWNER:
Name L Plantenga
Address 510 3rd St
City Tillamook State Or 97141

(2) TYPE OF WORK (check):
New Well ☐ Deepening ☑ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Air ☑ Driven ☐
Rotary Mud ☐ Dug ☐
Cable ☐ Bored ☐

(4) PROPOSED USE (check):
Domestic ☑ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐
Thermal: ☐ Withdrawal ☐ Reinjection ☐

(5) CASING INSTALLED:
Steel ☑ Plastic ☐
Threaded ☐ Welded ☑
8 " Diam. from +1 ft. to 99 ft. Gauge .250
" Diam. from ..... ft. to ..... ft. Gauge .....

LINER INSTALLED:
" Diam. from ..... ft. to ..... ft. Gauge .....

(6) PERFORATIONS:
Perforated? ☑ Yes ☐ No
Type of perforator used air knife
Size of perforations 1/4 in. by 2 in.
500 perforations from 60 ft. to 95 ft.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☑ No
Manufacturer's Name .....
Type ..... Model No. .....
Diam. ..... Slot Size ..... Set from ..... ft. to ..... ft.
Diam. ..... Slot Size ..... Set from ..... ft. to ..... ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☑ Yes ☐ No If yes, by whom?
Yield: 500 gal./min. with 38 ft. drawdown after 1 hrs.
" " " "
Air test gal./min. with drill stem at ft. hrs.
Bailer test gal./min. with ft. drawdown after hrs.
Artesian flow g.p.m.
Temperature of water 56 Depth artesian flow encountered ..... ft.

(9) CONSTRUCTION:
Special standards: Yes ☐ No ☑
Well seal—Material used Cement
Well sealed from land surface to 18 ft.
Diameter of well bore to bottom of seal 12 in.
Diameter of well bore below seal 8 in.
Number of sacks of cement used in well seal 8 sacks
How was cement grout placed? Pumped
.....
.....
Was pump installed? Yes Type Turb. HP 30 Depth 70 ft.
Was a drive shoe used? ☑ Yes ☐ No Plugs ..... Size: location ..... ft.
Did any strata contain unusable water? ☐ Yes ☑ No
Type of Water? depth of strata
Method of sealing strata off
Was well gravel packed? ☐ Yes ☑ No Size of gravel: .....
Gravel placed from ..... ft. to ..... ft.

(10) LOCATION OF WELL:
County Tillamook Driller's well number
SW ¼ NW ¼ Section 25 T. 1S R. 10W W.M.
Tax Lot # Lot Blk Subdivision
Address at well location: same

(11) WATER LEVEL: Completed well.
Depth at which water was first found 55 ft.
Static level 3 ft. below land surface. Date 9-30-81
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:
Diameter of well below casing 8
Depth drilled 100 ft. Depth of completed well 100 ft.
Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. Report each change in position of Static Water Level and indicate principal water-bearing strata.

MATERIAL	From	To	SWL
well at 60 ft Cased.			
Blue clay	65	75	
River rock - Gravel - Sand	75	100	3

Work started 9-29 19 81 Completed 9-30 19 81
Date well drilling machine moved off of well 9-30 19 81

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Joseph Trussell (Drilling Machine Operator) Date 9-30, 1981
Drilling Machine Operator's License No. 837

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Bud Trussell Well Drilling (Person, firm or corporation) (Type or print)
Address Box 336 Banks Or. 97106
[Signed] Joseph Trussell (Water Well Contractor)
Contractor's License No. 711 Date 9-30, 1981

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the WATER RESOURCES DEPARTMENT, SALEM, OREGON 97310 within 30 days from the date of well completion.

SP*12658-690

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

RECEIVED
JUN 30 1986
WATER RESOURCES DEPT
SALEM, OREGON

FILE 633

1S/10W-26aa

(1) OWNER:

Owner's Well Number:

Name Tilla-Bay Farms, Inc.

Address 620 Fenk Rd.

City Tillamook, State Oregon Zip 97141

(2) TYPE OF WORK:

☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD:

☒ Rotary Air ☐ Rotary Mud ☐ Cable ☐ Other

(4) PROPOSED USE:

☐ Domestic ☐ Community ☐ Industrial ☒ Irrigation

☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Depth of Completed Well 110 ft.

Special Standards date of approval

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
10"	0	18	Cement	0	18	8
6"	18	110	—	—	—	—

How was seal placed? Method ☐ A ☐ B ☒ C ☐ D ☐ E

☐ Other

Backfill placed from ft. to ft. Material

Gravel placed from ft. to ft. Size of gravel

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	6	+1	79	.250	☒	☐	☒	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
					☐	☐	☐	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Final location of shoe(s) 79'

(7) PERFORATIONS/SCREENS:

☐ Perforations Method

☐ Screens Type Material

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Pumping level	Drill stem at	Time
			½ hr
60		80	1 hr

Temperature of water 54 Depth Artesian Flow Found

Was a water analysis done? ☐ Yes By whom

Did any strata contain water not suitable for intended use? ☒ Too little

☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other

Depth of strata:

(9) LOCATION OF WELL by legal description:

County Tillamook Latitude ' " Longitude ' "

Township 1S N or S, Range 10W E or W, WM.

Section 26 NE ¼ NE ¼

Tax Lot Lot Block Subdivision

Street Address of Well (or nearest address) SAME

(10) STATIC WATER LEVEL:

½ ft. below land surface. Date 6-18-86

Artesian pressure lb. per square inch. Date

(11) WELL LOG:

Ground elevation 35'

Material	From	To	WB?	SWL
Topsoil	0	1		
Gray Clay + Sm. Boulders	1	10	2	½'
Gray Clay	10	26	0	
Gray Clay + Fine Sand	26	79	1	
Brown Clay + Fine Sand	79	99	1	
Black Fine Sand + Med. Gravel	99	110	60	½'

Date started 6-16-86 Completed 6-18-86

(unbonded) Water Well Constructor Certification:

I constructed this well in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

Signed Date

(bonded) Water Well Constructor Certification:

I accept responsibility for construction of this well and its compliance with all Oregon water well standards. This report is true to the best of my knowledge and belief.

Signed Larry C Every Date 6-19-86

Company Larry Every Well Drilling Inc Co. Job No. 16

9805/C 10/85

STATE OF OREGON

WATER WELL REPORT

(as required by ORS 537.765)

DEC 21 1987

TILL 640

1S/10W-36ab

WATER RESOURCES DEPT
SALEM, OREGON

Well Number:

(1) OWNER:

Name: Ben Hathaway
Address: 3950 Idaville Rd.
City: Tillamook State: OR Zip: 97141

(2) TYPE OF WORK:

☒ New Well ☐ Deepen ☐ Recondition ☐ Abandon

(3) DRILL METHOD

☐ Rotary Air ☒ Rotary Mud ☐ Cable
☐ Other

(4) PROPOSED USE:

☐ Domestic ☐ Community ☐ Industrial ☒ Irrigation
☐ Thermal ☐ Injection ☐ Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval Yes ☐ No ☒ Depth of Completed Well 69 ft.
Explosives used Yes ☐ No ☒ Type ____ Amount ____

HOLE Diameter	From	To	SEAL Material	From	To	Amount sacks or pounds
12¼	0	69	Cement	0	40	12 sacks
6	69	100				+ gel

How was seal placed: Method ☐ A ☐ B ☒ C ☐ D ☐ E
☐ Other
Backfill placed from 69 ft. to 100 ft. Material HiVis gel
Gravel placed from ____ ft. to ____ ft. Size of gravel ____

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8"	+3½	45	.250	☒	☐	☒	☐
	6"	40	45	.250	☒	☐	☒	☐
Screen		45	65		☐	☐	☐	☐
	6"	65	69		☒	☐	☒	☐
Liner:					☐	☐	☐	☐
					☐	☐	☐	☐

Location of shoe(s) ____

(7) PERFORATIONS/SCREENS:

☐ Perforations Method ____
☐ Screens Type Johnson Material Galv. steel

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
45	65	.020		6"	Pipe	☒	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐
						☐	☐

(8) WELL TESTS: Minimum testing time is 1 hour

☐ Pump ☐ Bailer ☒ Air ☐ Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
~~XX~~ 60		40	1 hr.
75		45	"

Temperature of water 56° Depth Artesian Flow Found ____
Was a water analysis done? ☐ Yes By whom ____
Did any strata contain water not suitable for intended use? ☐ Too little
☐ Salty ☐ Muddy ☐ Odor ☐ Colored ☐ Other ____
Depth of strata: ____

(9) LOCATION OF WELL by legal description:

County Tillamook Latitude ____ Longitude ____
Township 1S N or S, Range 10 W E or W, WM.
Section 36 NW ¼ NE ¼
Tax Lot ____ Lot ____ Block ____ Subdivision ____
Street Address of Well (or nearest address) 1450 Tone Rd.
Tillamook, OR

(10) STATIC WATER LEVEL:

9 ft. below land surface. Date 12/17/87
Artesian pressure ____ lb. per square inch. Date ____

(11) WATER BEARING ZONES:

Depth at which water was first found 40

From	To	Estimated Flow Rate	SWL
40	67	75	9

(12) WELL LOG:

Ground elevation ____

Material	From	To	SWL
Brown silty sand	0	12	
Blue-gray silt - logs	12	20	
Blue clay-occ.sand streak	20	28	
Blue gray clay-occ. silty	28	35	
Gray gravel, cemented, w/clay	35	40	
Brown gravel & sand Occ.loose	40	67	9
Gray silty clay	67	80	
Gray clay/shale	80	100	

Date started 12/8/87 Completed 12/17/87

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon well construction standards. Materials used and information reported above are true to my best knowledge and belief.

WWC Number ____
Signed ____ Date ____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. all work performed during this time is in compliance with Oregon well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 573
Signed [signature] Date 12/18/87

WHITE COPIES - WATER RESOURCES DEPARTMENT YELLOW COPY - CONSTRUCTOR PINK COPY - CUSTOMER 9809C 10/86

50225

JUN 2 0 1997

WATER RESOURCES DEPT.
SALEM, OREGON

Well ID# 209274

STATE OF OREGON
WATER SUPPLY WELL REPORT
(as required by ORS 537.765)

(START CARD) # 88575

Instructions for completing this report are on the last page of this form.

(1) OWNER: Well Number 2

Name Jenck Farms

Address 745 Third St.

City Tillamook State Oregon Zip 97141

(2) TYPE OF WORK

[X] New Well [ ] Deepening [ ] Alteration (repair/recondition) [ ] Abandonment

(3) DRILL METHOD:

[X] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Auger

[ ] Other

(4) PROPOSED USE:

[X] Domestic [ ] Community [ ] Industrial [ ] Irrigation

[ ] Thermal [ ] Injection [ ] Livestock [ ] Other

(5) BORE HOLE CONSTRUCTION:

Special Construction approval [ ] Yes [X] No Depth of Completed Well 110 ft.

Explosives used [ ] Yes [X] No Type ____ Amount ____

HOLE Diameter	From	To	SEAL Material	From	To	Sacks or pounds
12	0	61	Cement	0	61	45
8	61	110	—	—	—	—

How was seal placed: Method [ ] A [ ] B [X] C [ ] D [ ] E

[ ] Other

Backfill placed from ____ ft. to ____ ft. Material ____

Gravel placed from ____ ft. to ____ ft. Size of gravel ____

(6) CASING/LINER:

	Diameter	From	To	Gauge	Steel	Plastic	Welded	Threaded
Casing:	8	+25	92	.250	[X]	[ ]	[X]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]
Liner:					[ ]	[ ]	[ ]	[ ]
					[ ]	[ ]	[ ]	[ ]

Final location of shoe(s) 92

(7) PERFORATIONS/SCREENS:

[ ] Perforations Method ____

[ ] Screens Type ____ Material ____

From	To	Slot size	Number	Diameter	Tele/pipe size	Casing	Liner
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]
						[ ]	[ ]

(8) WELL TESTS: Minimum testing time is 1 hour

[ ] Pump [ ] Bailer [X] Air [ ] Flowing Artesian

Yield gal/min	Drawdown	Drill stem at	Time
250	89	90	1 hr.

Temperature of water 54 Depth Artesian Flow Found ____

Was a water analysis done? [ ] Yes By whom ____

Did any strata contain water not suitable for intended use? [ ] Too little

[ ] Salty [ ] Muddy [ ] Odor [ ] Colored [ ] Other ____

Depth of strata: ____

(9) LOCATION OF WELL by legal description:

County Tillamook Latitude ____ Longitude ____

Township 1S N or S Range 10W E or W. WM.

Section 25 NW 1/4 SW 1/4

Tax Lot 700 Lot ____ Block ____ Subdivision ____

Street Address of Well (or nearest address) JAME

(10) STATIC WATER LEVEL:

1 ft. below land surface. Date 6-6-97

Artesian pressure ____ lb. per square inch. Date ____

(11) WATER BEARING ZONES:

Depth at which water was first found 5

From	To	Estimated Flow Rate	SWL
5	10	1	
92	110	250	1

(12) WELL LOG:

Ground Elevation ____

Material	From	To	SWL
Topsoil	0	1	
Blue Clay	1	35	
Blue Clay + Med. Beach Sand	35	55	
Gray Clay	55	92	
Gray Clay w/ Lg. Gravel + Med. Sand	92	110	1

Date started 6-4-97 Completed 6-6-97

(unbonded) Water Well Constructor Certification:

I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

WWC Number ____

Signed ____ Date ____

(bonded) Water Well Constructor Certification:

I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

WWC Number 1221

Signed Larry C Early Date 6-6-97

ORIGINAL & FIRST COPY-WATER RESOURCES DEPARTMENT SECOND COPY-CONSTRUCTOR THIRD COPY-CUSTOMER

OF OREGON
UPPLY WELL REPORT
(...uired by ORS 537.545 & 537.765 and OAR 690-205-0210)

TILL 53338
1/4/2024

WELL I.D. LABEL# L 153619
START CARD # 1072341
ORIGINAL LOG #

(1) LAND OWNER
Owner Well I.D.
First Name | Last Name
Company R & R DAIRY
Address 915 TONE ROAD
City TILLAMOOK State OR Zip 97141

(2) TYPE OF WORK
[X] New Well [ ] Deepening [ ] Conversion
[ ] Alteration (complete 2a & 10) [ ] Abandonment(complete 5a)

(2a) PRE-ALTERATION
Casing: Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd
Seal: Material | From | To | Amt | sacks/lbs

(3) DRILL METHOD
[X] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Auger [ ] Cable Mud
[ ] Reverse Rotary [ ] Other

(4) PROPOSED USE
[ ] Domestic [ ] Irrigation [ ] Community
[ ] Industrial/ Commericial [X] Livestock [ ] Dewatering
[ ] Thermal [ ] Injection [ ] Other

(5) BORE HOLE CONSTRUCTION
Special Standard [ ] (Attach copy)
Depth of Completed Well 120.00 ft.

BORE HOLE

Dia	From	To
12	0	18
8	18	120

SEAL

Material	From	To	Amt	sacks/lbs
Bentonite	0	18	17	S
		Calculated	10.21	
		Calculated		

Seal placement method [ ] A [ ] B [ ] C [ ] D [ ] E [X] Other: POURED AND PRODDEI
Backfill placed from ft. to ft. Material
Filter pack from ft. to ft. Material Size
Explosives used: [ ] Type Amount
Seal Placement Begin Date 12/18/2023 Begin Time 14 00

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
Proposed Amount | Actual Amount

(6) CASING/LINER

Casing	Liner	Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
(•)	( )	8	[X]	3	117	.250	(•)	( )	[X]	[ ]
( )	(•)	6	[ ]	87	100	.250	(•)	( )	[X]	[ ]
( )	( )		[ ]				( )	( )	[ ]	[ ]
( )	( )		[ ]				( )	( )	[ ]	[ ]
( )	( )		[ ]				( )	( )	[ ]	[ ]

Shoe [ ] Inside [X] Outside [ ] Other Location of shoe(s) 117
Temp casing [ ] Yes Dia From + [ ] To

(7) PERFORATIONS/SCREENS
Perforations Method
Screens Type WIRE WRAP Material STAINLESS STEEI

Perf/ Screen	Casing/ Liner	Screen Dia	From	To	Scrn/slot width	Slot length	# of slots	Tele/ pipe size
Screen	Liner	7	100	120	.008			7

(8) WELL TESTS: Minimum testing time is 1 hour
( ) Pump ( ) Bailer (•) Air ( ) Flowing Artesian

Yield gal/min	Drawdown	Drill stem/Pump depth	Duration (hr)
300		80	1

Temperature 54 °F Lab analysis [ ] Yes By
Water quality concerns? [ ] Yes (describe below) TDS amount 110 ppm

From	To	Description	Amount	Units

(9) LOCATION OF WELL (legal description)
County TILLAMOOK Twp 1.00 S N/S Range 10.00 W E/W WM
Sec 25 SE 1/4 of the SW 1/4 Tax Lot 400
Tax Map Number Lot
Lat ° ' " or 45.44885572 DMS or DD
Long ° ' " or -123.85614940 DMS or DD
(•) Street address of well ( ) Nearest address
915 TONE ROAD, TILLAMOOK, OR 97141

(10) STATIC WATER LEVEL

	Date	SWL(psi)	+	SWL(ft)
Existing Well / Pre-Alteration			[ ]	
Completed Well	12/20/2023		[ ]	2

Flowing Artesian? [ ] Dry Hole? [ ]

WATER BEARING ZONES Depth water was first found 64.00

SWL Date	From	To	Est Flow	SWL(psi)	+	SWL(ft)
12/20/2023	64	120	300		[ ]	2

(11) WELL LOG
Ground Elevation 11.63 FT

Material	From	To
TOP SOIL	0	3
SILTY GRAY CLAY	3	11
GRAY BLUE CLAY	11	29
SANDY GRAVEL	29	64
GRAVEL MEDIUM WITH COARSE BROWN SAN	64	120

Construction Begin Date 12/12/2023 Begin Time 08 00 End Date 12/20/2023

(unbonded) Water Well Constructor Certification
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.

License Number 2071 Date 1/4/2024
Signed MITCHELL HERINCKX (E-filed)

(bonded) Water Well Constructor Certification
I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.

License Number 2023 Date 1/4/2024
Signed MICHAEL APPLEBEE (E-filed)
Contact Info (optional) ALPINE RESOURCES 503-647-2969