Cleanup Action Construction Completion Report

Carpenter Road Site
Lacey, Washington

Prepared for
Washington State Department of Ecology

On Behalf of
City of Olympia

March 28, 2025

1101 Fawcett Avenue, Suite 200
Tacoma, Washington 98402
253.383.4940

GeoEngineers

Cleanup Action Construction Completion Report

Carpenter Road Site
Lacey, Washington

File No. 0415-068-11
March 28, 2025

Prepared for:

Washington State Department of Ecology
Central Regional Office
1250 West Alder Street
Union Gap, Washington 98903

Attention: Frank P. Winslow, LHG

On Behalf of:

City of Olympia
900 Plum Street SE
Olympia, Washington 98507

Attention: Jim Rioux

Prepared by:

GeoEngineers, Inc.
1101 Fawcett Avenue, Suite 200
Tacoma, Washington 98402
253.383.4940

Shashi Shankar
Senior Environmental Scientist

Abhijit R. Joshi, PE
Associate Environmental Engineer

Iain H. Wingard
Principal Environmental Scientist

SS:ARJ:IHW:atk

Disclaimer: Any electronic form, facsimile, or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Table of Contents

1.0 Introduction 1
1.1 Purpose and Report Organization 1
2.0 Background Information 2
2.1 Site Location, Description and History 2
2.2 Current and Future Site Use 3
2.3 Nature and Extent of Contamination 3
3.0 Cleanup Objectives and Requirements 3
3.1 Cleanup Action Objectives 3
3.2 Cleanup Standards 4
3.2.1 Soil Cleanup Level 4
3.2.2 Soil Points of Compliance 4
3.2.3 Applicable Regulatory Requirements 4
4.0 Cleanup Action 5
4.1 Project Team 5
4.2 Site Preparation 6
4.2.1 Utility Locate 6
4.2.2 Site Access. Security and Traffic Controls 6
4.2.3 Temporary Environmental Controls 6
4.3 Remedial Excavation 7
4.3.1 Remedial Excavation and Stockpiling 7
4.3.2 Verification Soil Sampling and Analysis at the Excavation Limits 8
4.3.3 Recovery of Bullet/Bullet Fragments from Soil Stockpile and Off-Site Disposal 10
4.3.4 On-Site Soil Treatment and Disposal Characterization 10
4.3.5 Transport and Disposal of Treated Soil 11
4.4 Ecology Blocks 11
4.5 Building Demolition 11
4.5.1 Interior Miscellaneous Building Structures and Components 12
4.5.2 Metal Building Structure and Components 12
4.5.3 Asphalt and Concrete 13
4.5.4 Building Utilities 14
4.6 Wastewater Management 14
4.7 Air Monitoring Results 15
4.8 Site Restoration and Cleanup 16
4.8.1 Site Grading and Seeding 16
4.8.2 Removal of Temporary Site Control Elements and Equipment 16
5.0 Compliance Monitoring 16
5.1 Protection Monitoring 17
5.2 Performance Monitoring 17
5.3 Confirmational Monitoring 17
6.0 Limitations 18
7.0 References 18

List of Tables

Table 1. Verification Soil Sample Results
Table 2. Disposal Charaterization Sample Results
Table 3. Post-Cleanup Ecology Block Wipe Sample Results

List of Figures

Figure 1. Vicinity Map
Figure 2. Overview of Cleanup Action
Figure 3. Pre-Construction Site Conditions – Outside Building
Figure 4. Pre-Construction Site Conditions – Inside Building
Figure 5. Demoliton Limit, Excavation Limit, and Verification Soil Sampling Locations

Appendices

Appendix A. Permits and Substantive Requirements
Appendix B. Laboratory Reports for Verification Soil Samples
Appendix C. Data Validation Report
Appendix D. Dispsoal Weight Tickets for Segregated Soil and Bullets (Hazardous Waste)
Appendix E. EnviroBlend CS Safety Data Sheet (SDS) and Treatability Study Report
Appendix F. Laboratory Reports for Waste Disposal Charaterization Samples
Appendix G. Disposal Weight Tickets for Treated Excavated Materials (Non-Hazardous Waste)
Appendix H. Laboratory Reports for Wipe Samples
Appendix I. Disposal Weight Tickets for Demoltion Debris (Hazardous Waste)
Appendix J. Disposal Weight Tickets for Concrete Debris (Non-Hazardous Waste)
Appendix K. Dispsoal Weight Tickets for Concrete and Asphalt Debris (Hazardous Waste)
Appendix L. Laboratory Report for Wastewater Sample
Appendix M. Disposal Weight Tickets for Wastewater
Appendix N. Air Monitoring Data

1.0 Introduction

This report documents the cleanup action construction activities completed by the City of Olympia (City) at the Carpenter Road Site (Site). The Site address is 6530 Martin Way East, Lacey, Washington, 98516. A vicinity map for the Site is shown in Figure 1. The Site contained a building which was a former City of Olympia police training facility that was used as an indoor firing range. The firing range activities resulted in lead contaminated dust on the interior building components and lead contaminated soil both inside and outside the building as detailed in the combined Remedial Investigation/Feasibility Study (RI/FS) Report and Cleanup Action Plan (CAP) (GeoEngineers 2022a). The City completed the cleanup action to demolish the building and remove contaminated soil and demolition debris as an initial phase of the overall redevelopment effort, which includes regrading and construction of new solid waste operations facility infrastructure, offices, maintenance shops, truck washing facilities and parking areas.

The cleanup activities were completed by the City under the Washington State Department of Ecology's (Ecology's) Voluntary Cleanup Program (VCP). As part of the VCP, the RI/FS and CAP were reviewed and an opinion letter on the cleanup action was issued by Ecology on March 22, 2022 (Ecology 2022) to the City. The opinion provided by Ecology states that upon the completion of the cleanup action described in the RI/FS and CAP (GeoEngineers 2022a), no further remedial action (NFA) will likely be necessary to clean up the Site[1].

The cleanup action construction was completed at the Site between September 2024 and January 2025. Prior to performing the cleanup construction activities, a Materials Management and Compliance Monitoring Plan (MMCMP; GeoEngineers 2022b) was prepared by the City to meet the requirements of Ecology's opinion letter (Ecology 2022). The MMCMP was reviewed and approved by Ecology. In addition to the MMCMP, the City also prepared project plans and specifications for project bidding and contractor procurement purposes. The cleanup action construction was administered by the City and was completed in accordance with the requirements established in the MMCMP, and project plans and specifications. Best Management Practices (BMPs) were implemented to protect the community, workers and the environment during construction.

1.1 PURPOSE AND REPORT ORGANIZATION

The purpose of this report is to document the cleanup action activities completed on the Site. This report is organized into the following sections:

- Section 1.0 introduces the document with a brief description of the purpose and organization of the report.
- Section 2.0 describes the Site location, future, current and historical land use and nature and extent of contamination.
- Section 3.0 presents the cleanup action objectives and requirements applicable to the cleanup action.
- Section 4.0 describes the cleanup action construction activities completed.

[1] Determination of no further action by Ecology will be contingent on sampling results confirming that Site cleanup levels were achieved at the points of compliance.

- Section 5.0 presents a summary of compliance monitoring activities applicable to the cleanup action.
- Section 6.0 describes the limitations of the use of this report.
- Section 7.0 lists the references used in preparing this report.

Multiple figures, tables and appendices are provided with detailed information supporting the report sections described above.

2.0 Background Information

2.1 SITE LOCATION, DESCRIPTION AND HISTORY

The Site is located north of Martin Way East and east of Carpenter Road NE in Lacy, Washington (Figure 1). The southern portion of the property is generally flat. The elevation slopes up from the southern to the northern portion of the property. Prior to the remedial action construction, the elevation ranged from approximately 145 feet NAVD88 in the southwest portion of the property to approximately 220 feet in the northeast portion of the property (Figure 2).

The central portion of the property was the former location of an indoor firing range that operated within an approximately 18,250-square foot metal building which is where contamination existed at concentrations greater than Model Toxics Control Act (MTCA) cleanup levels prior to the cleanup action. The Site encompassed the indoor firing range building, and the areas located adjacent to the northwest and northeast sides of the building (Figure 2).

The former indoor firing range building was constructed in 1987 according to Thurston County assessor records, and was used as a firing range from 1987 to 2023. The building was comprised of metal framing, metal roofing and metal siding on the south side. Sloped soil berms were present on the west, north and east sides of the building. The floor of the building was comprised of concrete pavement underlain by asphalt pavement on the west side, and asphalt pavement on the east side. Multiple wood frame structures with sheetrock walls and ceilings were present inside the metal building. The wood frame structures included a meeting room, bathrooms, storage and training rooms. Several cinder block walls were also present within the metal building, including a wall separating the two firing lanes in the building (i.e., Shooting Pit A on the west side and Shooting Pit B on the east side). Bullet trap structures constructed of heavy gage galvanized metal were located on the north end of each firing lane (i.e., a total of two bullet trap structures). Projectiles (i.e., bullets) were also previously fired into the sloped soil berm on the north end of the building. The building was also equipped with a ventilation system with intakes on the southern wall of the building and exhaust fans/vents in the ceiling/roof on the northern end of the building.

As a result of the cleanup action the building was demolished and contaminated demolition debris and soil were removed from the Site in 2024/2025.

The pre-construction site conditions outside the former building are shown in Figure 3. The pre-construction site conditions inside the former building are shown in Figure 4.

2.2 CURRENT AND FUTURE SITE USE

The property is zoned Open Space-Institutional (OS-I), Mixed Use High Density Corridor (MHDC) Thurston County 2022. Following the cleanup action, the City is planning to regrade the property and construct a new solid waste management operations facility as part of redevelopment of the property. The majority of the property will be covered by new buildings and/or paved surfaces. Vegetated/landscaped areas will be constructed around the perimeter of the property and a stormwater detention pond will be constructed in the southern portion of the property.

2.3 NATURE AND EXTENT OF CONTAMINATION

As identified in Ecology's opinion letter (Ecology 2022), lead was determined to be the indicator hazardous substance under WAC 173-340-703 for the cleanup of the Site. The following is the summary of lead contamination at the Site prior to the cleanup action as noted in the MMCMP (GeoEngineers 2022b).

BUILDING INTERIOR/EXTERIOR	AREA	NATURE OF LEAD CONTAMINATION
Interior	North wall sloped soil berm	Lead bullets in soil, lead dust on soil
	East and west walls sloped soil berms	Lead dust on soil
	Within firing range	Lead dust on concrete, asphalt, and on Ecology blocks and other materials and between the concrete floor and underlying, pre-existing asphalt floor located on the western side of the building (Shooting Pit A)
	French floor drain in the northeastern/northern portion of Shooting Pit B	Lead contamination in soil within the alignment of French floor drain
Exterior	Soils adjacent to the northeast and northwest sides of the building structure	Runoff with dust from the roof discharging from gutter downspouts
	Structure Roof	Potential lead dust on structure roof

The maximum vertical extent of soil contamination was estimated to be approximately 30-inches below ground surface (bgs).

As identified in the MMCMP (GeoEngineers 2022b), groundwater is not impacted with Site contamination and therefore groundwater is not considered a media of concern at the Site.

3.0 Cleanup Objectives and Requirements

3.1 CLEANUP ACTION OBJECTIVES

The cleanup action objectives (CAO) identified for the Site in the RI/FS and CAP (GeoEngineers, 2022a) include the following:

- Demolish the existing building and control lead-contaminated dust during demolition in a manner that does not pose unacceptable risks to human health and the environment.
- Cleanup lead-contaminated soil located inside and outside building to meet the cleanup standards (Section 3.2).
- Complete Site cleanup to support redevelopment of the property for use as a new solid waste management operations facility.

3.2 CLEANUP STANDARDS

Cleanup standards include (1) chemical concentrations in environmental media that are protective of human health and the environment; and (2) locations where the cleanup levels must be met (points of compliance). As identified in Ecology's opinion letter (Ecology 2022), the following are the Site cleanup levels and points of compliance:

3.2.1 Soil Cleanup Level

As noted in Section 2.3, Ecology selected lead as the indicator hazardous substance under WAC 173-340-703 for the cleanup of the Site. Ecology-approved lead cleanup level applicable to the Site is 220 milligrams per kilogram (mg/kg). The cleanup level for lead was used to guide the removal of soil from the base and sidewalls of the excavations during the cleanup construction activities.

3.2.2 Soil Points of Compliance

Under Model Toxics Control Act (MTCA), the standard point of compliance for the soil cleanup levels based upon human health via direct contact is throughout the Site from the ground surface to 15 feet bgs per Washington Administrative Code (WAC) 173-340-740(6)(d).

3.2.3 Applicable Regulatory Requirements

The cleanup action construction activities were completed through Ecology's VCP in accordance with MTCA regulations (Chapter 173-340 WAC). Additionally, the cleanup action was completed in accordance with the following regulatory requirements.

- The City completed a State Environmental Policy Act (SEPA) checklist and a SEPA determination for the project. Thurston County reviewed the SEPA checklist and issued a Mitigated Determination of Non-Significance (MDNS). The SEPA checklist and MDNS are included in Appendix A.
- The City completed an Olympic Region Clean Air Agency (ORCAA) notification and obtained a demolition permit from Thurston County prior to starting the cleanup action construction activities at the Site. The demolition permit is included in Appendix A.
- The City obtained a clearing and grading construction permit from Thurston County Public Works prior to starting cleanup action construction activities at the Site. The clearing and grading permit is included in Appendix A.

- A Determination of Low Risk of Cultural Resource was made for the Site cleanup action by Ecology in consultation with DAHP and concerned tribes. The determination was made by Ecology on April 20, 2022, to meet the requirements of Washington State Governor's Executive Order 21-02 and is included in Appendix A. An Inadvertent Discovery Plan (IDP) was also prepared and submitted to Ecology to meet the requirements of the Washington State Department of Archaeology and Historic Preservation (DAHP). The IDP was included in the construction plans and specifications for use during the cleanup action.
- The City completed a Notice of Intent for coverage under Ecology's Construction Stormwater General Permit (CSWGP) for the cleanup action because the cleanup action is part of the larger regrading and redevelopment plan which is expected to disturb more than one acre of land. Ecology reviewed the application and issued the CSWGP on June 28, 2023 (Appendix A).
- Construction activities were performed in accordance with the requirements of the Washington Industrial Safety and Health Act (WISHA; RCW 49.17) and the federal Occupational Safety and Health Act (OSHA; 29 CFR 1910, 1926).
- The contaminated soil and demolition debris that was removed was managed, handled, transported and disposed of in accordance with the applicable regulatory requirements and requirements of the permitted disposal facilities.

4.0 Cleanup Action

The cleanup action construction work was completed between September 2024 and January 2025. The following sections present the project team and describe the cleanup action activities that were completed.

4.1 PROJECT TEAM

The cleanup action construction work was contracted and administered by the City. Key members of the project team are listed below:

AGENCY/COMPANY	CONTACT AND PROJECT ROLE
Owner	
City of Olympia	Jim Rioux, Project Manager
	Brittney George, Contracts Administrator
	Mark Clawson, Field Inspector
Regulatory Agency	
Department of Ecology	Frank P. Winslow, Site Manager
Owners Consultant	
GeoEngineers, Inc. (Environmental Engineer)	Iain Wingard, Project Principal
	Abhijit Joshi, PE, Project Manager/Engineer
	Paul Robinette, Field Representative
EHSI (Health and Safety)	Mike Harris, Certified Industrial Hygienist (CIH)
	Reese Myers, Field Representative

AGENCY/COMPANY	CONTACT AND PROJECT ROLE
OnSite Environmental Inc. (Environmental Laboratory)	David Baumeister, Project Manager
Construction General Contractor	
Titan Earthwork LLC (Titan)	Nick Seeley, Project Manager
	Julia Gilsoul, Field Engineer
	Ethan Roland, Site Superintendent

4.2 SITE PREPARATION

The following sections describe site preparation activities performed during the cleanup action construction.

4.2.1 Utility Locate

Prior to the start of construction, utility locates were completed at the Site. The Washington State Utilities Underground Location Center (UULC) and a private utility locating service completed utility locates.

4.2.2 Site Access. Security and Traffic Controls

Site access, security and traffic controls were installed and maintained throughout the construction activities. A combination of existing and temporary fencing was used around the perimeter of the work area to secure the area and limit access by the general public to the work areas. The existing gate along the internal asphalt road leading from Carpenter Road NE to the Site was used as a gated access point for construction personnel, vehicles and equipment.

Traffic controls and signage were positioned along Carpenter Road NE to notify vehicular and pedestrian traffic of construction activities. The material export and import haul route to and from the Site within the City of Lacey utilized Carpenter Road NE and Martin Way East From Martin Way East, trucks accessed Interstate Freeway 5 (I-5) South to reach the off-site disposal facilities.

4.2.3 Temporary Environmental Controls

The following temporary environmental controls and best management practices (BMPs) were implemented during construction:

- Existing internal asphalt pavement and gravel surfaces were used and maintained during construction for the movement of vehicles, trucks and trailers and to minimize erosion, sediment tracking and generation of dust.
- Straw wattles and silt fence were used as work area perimeter stormwater BMPs.
- A sealed decontamination tent was installed at the entrance of the building to allow construction workers to decontaminate personal protective equipment (PPE) and clothing prior to entering or leaving the building.
- High Efficiency Particulate Air (HEPA) air filters were used to ventilate the building interiors and maintain air quality during cleanup work performed inside the building.

- Material management areas were established inside the building on existing concrete/asphalt surfaces for handling, stockpiling and managing contaminated debris and soil. Separate bunkers were built within the material management areas for segregating and temporarily storing different waste streams from the construction activities. Material management areas and stockpiling BMPs including perimeter barriers and stockpile covers were implemented as described in the MMCMP.
- During demolition activities, clean soil surfaces inside the building (soil surfaces that did not contain contamination greater than the cleanup level including within the remedial excavation limits that had been remediated to meet cleanup levels) were covered with plastic sheeting to prevent cross-contamination of the clean soil surfaces.
- Drainage sumps were installed within the existing asphalt/concrete paved surfaces of the building at appropriate locations to effectively collect wastewater generated from decontamination and cleanup activities. Asphalt berms were installed as necessary to channel wastewater to the sumps. Pumps and above ground piping were installed to transfer collected wastewater to a temporary 20,000-gallon storage tank.
- Construction tools and equipment that came in contact with contaminated material were cleaned/pressure washed inside the building on paved surfaces prior to leaving the Site and wastewater was channeled to the sumps.
- BMPs including wetting ground surfaces and building components, as necessary, were used during construction to minimize generation of particulates/fugitive dust. The contractor utilized a water-based solution containing 3 percent by volume of non-toxic/biodegradable cleaner (Simple Green) as a dust suppressant. The water-based dust suppressant was applied in a manner to prevent the generation of run-off.
- Construction noise generated by a variety of construction equipment, including truck engines, generators and earthmoving equipment was limited to daylight hours between 7:00 a.m. and 7:00 p.m., Monday through Friday. No exceptions or request for variances to the City's allowable work hours were made during construction and no complaints were received.
- A spill containment/cleanup kit was maintained on Site to address any accidental spills. No accidental spills and no spills from construction equipment were noted during construction.

BMPs consistent with Ecology's *Stormwater Management Manual for Western Washington (Ecology 2019)* were used to control erosion and stormwater pollution during construction. Temporary environmental controls and BMPs were maintained throughout the duration of the project and inspected by the contractor and the City on a regular basis to ensure their effectiveness.

4.3 REMEDIAL EXCAVATION

Remedial excavation activities were completed between September 2024 and November 2024 in accordance with the MMCMP and project plans and specifications. Activities related to soil excavation, stockpiling, soil treatment and off-site transport and disposal are described in the following sections.

4.3.1 Remedial Excavation and Stockpiling

In accordance with the MMCMP, soil excavation was completed both outside and inside the building to remove lead contaminated soil from the following areas:

- Outside the Building
  - Remedial excavation areas A, B and C located in the northwestern corner of the building; and
  - Remedial excavation areas D, E and F located in the northeastern corner of the building.
- Inside the Building
  - Remedial excavation areas G, H and I located on the west wall sloped soil berm;
  - Remedial excavation areas J and K located on the north wall sloped soil berm;
  - Remedial excavation area L located on the east wall sloped soil berm;
  - Remedial excavation area M located in the northwest corner of the alignment of the existing French floor drain.

Soil removal was completed using an excavator. Soil removal was completed to the preliminary limits of excavation in accordance with the MMCMP, and project plans and specifications. At the preliminary limits of the remedial excavations, field screening using an X-ray Fluorescence (XRF) device was completed to evaluate lead concentrations during most remedial excavations. However, the XRF device was not utilized during remedial excavation for three days due to unavailability of the device. Confirmation soil samples were collected from the sidewalls and base of the excavation areas and submitted for laboratory analysis to confirm that each excavation area met the cleanup level.

When using the XRF for field screening, over-excavation was completed, as necessary, until XRF measurements indicated that the lead concentrations at the excavation limits were below the cleanup level. At the excavation limits where XRF measurements were below the cleanup level, and at locations were the XRF was not used for field screening, verification soil sampling and analysis was completed to determine the final limits of remedial excavation as described in Section 4.3.2. Soil excavation activities continued until the laboratory results of verification soil samples obtained from the excavation base and sidewalls confirmed that the cleanup levels were met. The final limits of remedial excavation, including final depth for each remedial excavation area, are shown in Figure 5.

In addition to completing the remedial excavation in remedial excavation area M (northwest corner of the alignment of the existing French floor drain), the remaining portion of the French floor drain was exposed by removing the asphalt pavement covering the drain and the pea gravel within the drain to expose the soil underneath the drain. Then the soil underneath the pea gravel was field screened using the XRF devise in accordance with MMCMP. Additional contamination, other than the contamination present in remedial excavation area M, was not identified along the alignment of French floor drain.

A total of 494.58 tons of contaminated soil was removed and temporarily stockpiled within the material management area. Groundwater was not encountered during excavation activities.

4.3.2 Verification Soil Sampling and Analysis at the Excavation Limits

Verification soil sampling and analysis at the excavation limits was completed in accordance with the MMCMP. Excavation sidewall samples were collected at a frequency of one sample per 40 linear feet of sidewall, and excavation base samples were collected at a frequency of one sample per 625 square feet of base. Sidewall samples were collected from the middle of the sidewall height from all excavation sidewalls. Moreover, along the exterior sidewall of the excavation areas located outside the building (not including the sidewall that abuts the building), additional sidewall samples were collected from 0- to 2-inch interval as per the requirements of MMCMP.

A total of 74 sidewall verification samples (S001 through S068, S009-1, S011-1, S011-2, S063-1, S064-1 and S065-1) and 23 base verification samples (B001 to B023) were collected from the limits of the excavations. The sample nomenclature contains a letter followed by a number. The letter identifies whether the sample was collected from a sidewall ("S") or base ("B"). The number is a sequential number assigned to provide a unique identification to each sample. Additionally, five field duplicate samples (DUP001, DUP002, DUP003, DUP004 and DUP007, which were duplicates of B007, S025, S033, S058 and B023, respectively) were collected for quality assurance/quality control (QA/QC) purposes in accordance with the requirements of the MMCMP.

The verification and duplicate soil samples were submitted to OnSite Environmental, Inc. (OnSite), an Ecology-approved laboratory, for the following chemical analysis in accordance with the soil sampling and analysis procedures presented in the MMCMP:

- Total lead by United States Environmental Protection Agency (EPA) Method 6010D.

The chemical analytical results for verification soil samples, including field duplicates, and XRF measurements are summarized in Table 1. The laboratory reports for verification soil sample chemical analytical results are presented in Appendix B. The laboratory data was validated for quality and usability. Based on data validation, the laboratory data was determined to be of acceptable quality for its intended use. The Data Validation Report is included in Appendix C.

The concentration of lead was greater than the cleanup level in six sidewall samples S009, S011, S011-1, S063, S064 and S065. The concentration of lead was less than the cleanup level in the remaining sidewall samples. Soil represented by S009, S011, S011-1, S063, S064 and S065 was subsequently removed, and follow-up samples were collected from the limits of over-excavation as follows:

- A follow-up sidewall sample S009-1 collected from the location of sample S009 met the cleanup level for lead confirming that soil represented by sample S009 was successfully removed.
- A follow-up sidewall sample S011-2 collected from the location of samples S011 and S011-1 met the cleanup levels for lead confirming that soil represented by samples S011 and S011-1 was successfully removed.
- A follow-up sidewall sample S063-1 collected from the location of sample S063 met the cleanup level for lead confirming that soil represented by sample S063 was successfully removed.
- A follow-up sidewall sample S064-1 collected from the location of sample S064 met the cleanup level for lead confirming that soil represented by sample S064 was successfully removed.
- A follow-up sidewall sample S065-1 collected from the location of sample S065 met the cleanup level for lead confirming that soil represented by sample S065 was successfully removed.

The concentration of lead was less than the cleanup levels in each of the base verification samples.

The final limit of remedial excavation is represented by 68 sidewall verification samples (S001 through S-008, S009-1, S010, S011-2, S012 through S062, S063-1, S064-1, S065-1, S066 through S068) and 23 base verification samples (B001 to B023). Approximate locations of the sidewall and base verification samples representing the final limits of remedial excavation are shown in Figure 5. The results of excavation verification samples that are representative of the final limits of the excavation were reported to Ecology's Environmental Information Management (EIM) database.

4.3.3 Recovery of Bullet/Bullet Fragments from Soil Stockpile and Off-Site Disposal

Soil from the north wall sloped soil berm was stockpiled separately from the rest of the contaminated material for the recovery of bullets/bullet fragments. The contaminated stockpile resulting from excavation of the north wall sloped soil berm contained a mix of soil, gravel and bullets/bullet fragments. To the extent practicable, coarse gravel was separated from the stockpile by using a series of mechanical screens and the resulting material (segregated gravel) was stockpiled separately for treatment (see Section 4.3.4). The remaining contaminated material (mix of fine gravel, soil and bullets/bullet fragments) was transported off-site for permitted disposal at Chemical Waste Management Subtitle C (Hazardous Waste) Landfill located in Arlington, Oregon, under Waste Management's profile number OR362079. Disposal weight tickets issued by Chemical Waste Management are included in Appendix D. Based on the disposal weight tickets, a total of 47.65 tons of material was disposed of. On site management, transport and disposal of hazardous/dangerous waste was completed in accordance with Washington State Dangerous Waste Regulations (Chapter 173-303 Washington Administrative Code [WAC]).

4.3.4 On-Site Soil Treatment and Disposal Characterization

Excavated soil from the remedial excavations, pea gravel generated from the French floor drain excavation, and the segregated gravel as described in Section 4.3.3 were stockpiled on the existing concrete floor within the material management area for on-Site soil treatment. The goal of soil treatment was to reduce the lead Toxicity Characteristics Leaching Procedure (TCLP) concentration of excavated material to a level below the hazardous/dangerous waste criteria of 5 milligrams per liter (mg/l) such that the material can be designated as non-hazardous/non-dangerous waste.

Prior to performing the on-Site treatment, a representative sample of contaminated soil from the Site was collected by the contractor to perform a bench scale treatability study. The treatability study was performed using different dosage rates of a reagent, EnviroBlend® CS, which is manufactured by EnviroBlend®, a subsidiary of Premier Magnesia, LLC, and primarily consists of course-sized magnesium oxide. The results of the treatability study identified an optimal dosage rate of EnviroBlend® CS at 3 percent by mass of treated soil. The initial TCLP lead concentration in the sample was at 610 mg/l. Following the treatability study using EnviroBlend® CS at 3 percent by mass, the TCLP lead concentration in the sample reduced to 0.41 mg/l, which is below the hazardous/dangerous waste criteria of 5 mg/l. The safety data sheet (SDS) for EnviroBlend® CS and the bench scale treatability study report are included in Appendix E.

Treatment was performed on the Site by the contractor by adding approximately 3 percent EnviroBlend® CS by mass of the soil being treated. EnviroBlend® CS was imported on Site in 1-ton super sacs and a total of 10 tons were used for the treatment of stockpiled soil. EnviroBlend® CS was mixed with stockpiled soil using an excavator bucket within the materials management area.

GeoEngineers performed the post-treatment soil stockpile sampling and analysis to characterize treated soil for disposal characterization. Stockpile samples were collected in accordance with the requirements of the MMCMP. The number of soil samples collected for stockpile characterization was determined in general accordance with Ecology's guidance on the typical number of samples needed to adequately characterize stockpiled soil (Ecology 2016). A total of 13 stockpile samples SP-WT-1 through SP-WT-5, SP-EXT-1 through SP-EXT-5 and SP-FRD-1 through SP-FRD-3 were collected to characterize the stockpiled treated soil. Samples were submitted to OnSite for chemical analysis of total and TCLP lead. Based on the results of post-treatment lead TCLP analysis, on site treatment was able to successfully reduce the lead TCLP concentrations to below the hazardous/dangerous waste level (i.e., 5 mg/L). The maximum TCLP lead concentration in post-treatment stockpile soil samples was at 1.2 mg/l. The chemical analytical results of treated stockpile samples are summarized in Table 2 and the laboratory reports are included in Appendix F.

4.3.5 Transport and Disposal of Treated Soil

Treated soil was transported off-site for disposal at the Republic Service's Roosevelt Regional Landfill (RRL) located in Roosevelt, Washington, which is a Resource Conservation and Recovery Act (RCRA) Subtitle D (Non-Hazardous Waste) landfill. Completed landfill profile forms and the results of stockpile sampling and analysis were submitted to Republic Services to obtain disposal authorization. Treated material was disposed of at RRL under profile number 41782415779. The chemical analytical results of material transported off-site for disposal at RRL were less than the hazardous/dangerous waste criteria as discussed in Section 4.3.4. Disposal weight tickets issued by RRL are included in Appendix G. Based on the disposal weight tickets, a total of 456.93 tons of material was disposed of.

4.4 ECOLOGY BLOCKS

Existing concrete ecology blocks designated for reuse were cleaned by the contractor to remove dust adhering to the surface of the blocks. The contractor pressure washed a total of 44 ecology blocks within the materials management area and the water generated from pressure washing was collected in the sumps and managed as described in Section 4.7. GeoEngineers collected a post-cleanup wipe sample from each ecology block in accordance with the MMCMP. Initially 44 wipe samples W01 through W44 were collected. Additionally, two field duplicates (DUP004 and DUP005, which were duplicates of W09 and W41, respectively) were collected. Samples were submitted to OnSite for chemical analysis of lead. Wipe sample results were compared to the Labor & Industries (L&I) criteria of 200 micrograms per square feet (µg/sf).

The concentration of lead exceeded the L&I criteria for one wipe sample W35. The concentration of lead was less than L&I criteria in the remaining wipe samples. Additional pressure washing of the ecology block represented by sample W35 was completed, and a follow-up wipe sample W35-1 was collected and analyzed. The concentration of lead was less than L&I criteria in W35-1.

The chemical analytical results for wipe samples, including field duplicates, are summarized in Table 3 and the laboratory reports are presented in Appendix H. The laboratory data was validated for quality and usability. Based on data validation, the laboratory data was determined to be of acceptable quality for its intended use. The Data Validation Report is included in Appendix C.

Following cleaning and testing, the ecology blocks were moved outside the building and stored in the southwest portion of the City's property pending reuse by the City.

4.5 BUILDING DEMOLITION

Building demolition activities were completed between September 2024 and January 2025 in accordance with the MMCMP and project plans and specifications. In general, demolition was completed in the following sequential order:

- Demolition of interior miscellaneous building structures and components.
- Demolition of the metal structures and components.
- Demolition of asphalt and concrete structures and components.

Additionally, building utilities were disconnected and removed in conjunction with the demolition of the other components of the building identified above.

The approximate building demolition limit is shown in Figure 5. The following sections describe demolition activities, and transport and disposal of demolition debris.

4.5.1 Interior Miscellaneous Building Structures and Components

Interior miscellaneous building structures and components included the following:

- Roof insulation on the firing range building;
- Material including sheetrock, plywood, wood framing, door trim, ceiling and wall insulation, etc. associated with structures inside the building including meeting rooms, bathrooms, storage and tactical training rooms;
- Wooden retaining wall on the west side of the building;
- Foam material within the metal-frame bullet stop;
- Doors and windows;
- Bathroom fixtures including toilet, sink, etc;
- Furniture including lockers, tables, chairs, etc; and
- Other miscellaneous items including, but not limited to, garbage cans, fuel cans and heaters.

These items were demolished, broken into manageable size, and transported off-site for permitted disposal at Chemical Waste Management Subtitle C (Hazardous Waste) Landfill located in Arlington, Oregon, under Waste Management's profile number OR360841. Weight tickets issued by Chemical Waste Management are included in Appendix I. Based on landfill weight tickets, a total of 96.7 tons of material was transported and disposed of. On site management, transport and disposal of hazardous/dangerous waste was completed in accordance with Washington State Dangerous Waste Regulations (Chapter 173-303 WAC).

4.5.2 Metal Building Structures and Components

Metal building structures and components included the following:

- Metal frame of the building including beams and support posts;
- Metal roof and walls of the building;
- Ventilation system including air intake system on the south end of the building and ceiling fans/vents on the north end of the building;
- Metal frame structures used as the bullet stops on the north end of the building in both firing ranges; and
- Metal frame and components of the tactical training rooms located in the northeast portion of the building.

These items were demolished, broken into manageable size and transported off-site for recycling at Sutter Metals located in Lacey, Washington.

Prior to demolition, the contractor completed cleaning of the surfaces of metal structures and components inside the building that had dust on its surfaces. Cleaning was completed using vacuum cleaners with HEPA filters and rags containing Simple Green. In general, dust was cleaned in a top-down manner. Following the cleaning process, the contractor sprayed a demolition primer (Grip-Tack, which is manufactured by Fiberlock Technologies and consists of ammonium hydroxide, water and proprietary polymer) on interior metal structure and component surfaces to coat and encapsulate any remaining dust.

4.5.3 Asphalt and Concrete

Following the demolition of the above-ground components of the building as described in Sections 4.5.1 and 4.5.2, concrete and asphalt structures and pavement were demolished and removed that included the following:

- A concrete masonry unit (CMU) wall that separated the west half from the east half of the building;
- Concrete base walls located along the western and eastern perimeters of the building at the base of sloped soil berms;
- Asphalt floor on the east side of the building;
- Concrete and asphalt floor on the west side of the building; and
- Concrete foundations supporting the building.

The concrete and asphalt floor on the west side of the building was maintained for materials management and was the last building component that was removed and demolished. As noted in the MMCMP, the floor on the west side of the building was concrete that was underlain by an asphalt layer. The concrete and underlying asphalt layers were demolished together, crushed and were placed on a layer of plastic for characterization.

Prior to demolition, the surface of each of the concrete and asphalt structures and pavement were pressure washed. Water generated from pressure washing was collected and managed as described in Section 4.6.

Demolished concrete and asphalt structures and pavement were crushed on-site and temporarily stockpiled in the material management area. Five separate stockpiles were created for characterization purposes that included the following:

- One stockpile of crushed CMU wall;
- Two stockpiles of crushed concrete building foundations and concrete base walls;
- One stockpile of crushed asphalt floor from the east side of the building; and
- One stockpile of crushed concrete floor and underlying asphalt from the west side of the building.

GeoEngineers performed sampling and analysis of the crushed concrete and asphalt stockpiles for disposal characterization purposes. Stockpile samples were collected in accordance with the requirements of the MMCMP. The number of soil samples collected for stockpile characterization was determined in general accordance with Ecology's guidance on the typical number of samples needed to adequately characterize stockpiled soil (Ecology 2016). A total of 17 stockpile samples SP-CMU-1 through SP-CMU-3, SP-C-1 through

SP-C-6, SP-A-1 through SP-A-3 and SP-AC-1 through SP-AC-5 were collected to characterize the stockpiled concrete and asphalt debris. Samples were submitted to OnSite for chemical analysis of total and TCLP lead. The chemical analytical results for concrete and asphalt stockpile samples are summarized in Table 2 and the laboratory reports are presented in Appendix F.

The results of stockpile samples representative of crushed CMU wall and crushed concrete from building foundations and concrete base walls (SP-CMU-1 through SP-CMU-3, and SP-C-1 through SP-C-6) were less than hazardous/dangerous waste TCLP criteria of 5 mg/l and therefore, were transported off-site at the RRL Subtitle D (Non-Hazardous Waste) landfill located in Roosevelt, Washington. Completed landfill profile forms and laboratory data were submitted to the landfill to obtain disposal approval prior to transport and disposal. Material was disposed of at RRL under profile numbers 41782418471 and 41782418897. Disposal weight tickets issued by RRL are included in Appendix J. Based on disposal weight tickets, a total of 287.65 tons of material was transported and disposed of.

The results of one or more stockpile samples representative of crushed asphalt and concrete floors (SP-A-1 through SP-A-3, and SP-AC-1 through SP-AC-5) were greater than hazardous/dangerous waste TCLP criteria of 5 mg/l and therefore, were transported off-site for permitted disposal at Chemical Waste Management Subtitle C (Hazardous Waste) landfill located in Arlington, Oregon, under Waste Management's profile number OR360841. Completed landfill profile forms and laboratory data were submitted to the landfill to obtain disposal approval prior to transport and disposal. Disposal weight tickets issued by Chemical Waste Management are included in Appendix K. Based on disposal weight tickets, a total of 297.4 tons of material was transported and disposed of.

4.5.4 Building Utilities

The building was supplied with power, water and sewer utilities. Puget Sound Energy (PSE) disconnected the power to the building at the nearest junction box and removed the transformer located near the building. The existing underground electrical cables were abandoned in place. The contractor disconnected the water line and capped it south of the former building location. The building was connected to an underground holding tank which was further connected to City sewer. The holding tank was removed by the contractor as part of demolition, and the underground sewer line was capped and abandoned in place.

4.6 WASTEWATER MANAGEMENT

Construction wastewater generated during the cleanup action included water from pressure washing operations and equipment decontamination. As discussed in Section 4.2.3, the contractor installed drainage sumps within the material management area to capture the wastewater generated during the cleanup action. Pumps and above ground piping were installed to transfer collected wastewater to a temporary on-Site 20,000-gallon storage tank.

Sampling and analysis activities to characterize wastewater collected in the storage tank were completed by the contractor. One grab sample (A24L0513-01) of the water was collected and submitted to AmTest Inc., an Ecology-approved laboratory, located in Kirkland, Washington for chemical analysis of the following:

- Total and dissolved lead;
- Total mercury, silver, arsenic, barium, cadmium, chromium and selenium;
- Total solids,

- pH; and
- Semi volatile organic compounds (SVOCs).

The chemical analysis on a wastewater sample was completed in accordance with the requirements of the receiving facilities. The laboratory report containing the chemical analytical results for the wastewater sample is included in Appendix L.

A total of 7,500 gallons of water was disposed of at PRS Group Inc (PRS) located in Tacoma, Washington and 500 gallons of wastewater was disposed of at Marine Vacuum Service, Inc. (MVS) located in Seattle, Washington. Coordination with the receiving facilities was completed by the contractor and approval to dispose wastewater at the facilities was obtained prior to the transport and disposal activities. Wastewater disposal records are included in Appendix M.

4.7 AIR MONITORING RESULTS

The contractor was required to perform personal and area air monitoring at the Site in accordance with the requirements of the project plans and specifications. The contractor-performed air monitoring was completed by a certified industrial hygienist (CIH) with Rose Environmental located in Seattle, Washington. Additionally, the City's construction monitoring team also performed personal and area air monitoring at the Site. The City-performed air monitoring was completed by a CIH with EHSI located in Seattle, Washington. The contractor-performed air monitoring events were completed on September 18, 2024 and October 14, 2024. The City-performed air monitoring events were completed on September 18, 2024 and October 2, 2024. During each monitoring event, at a minimum one personal air sample and two area air samples located adjacent to the work area were collected by each entity performing the monitoring.

Air samples were collected using sampling cassettes provided by the laboratory and submitted to NVL Laboratories, Inc., an Ecology-accredited laboratory, located in Seattle, Washington for lead analysis. Analysis was performed in accordance with NIOSH Method 7302. The following is the summary of the air monitoring events:

- **September 18 Air Monitoring Events:** The air monitoring events completed on September 18th evaluated air quality during demolition activities completed inside the building. The results for personal air monitoring ranged from 52 to 62 µg/m^3 (micrograms per cubic meter). The results for the area air monitoring within the building were either below the laboratory method detection limit of 5.2 µg/m^3 or detected at a maximum concentration of 32 µg/m^3.
- **October 2 Air Monitoring Event:** The air monitoring event completed on October 2nd evaluated air quality during remedial excavation and bullet/bullet fragment segregation activities completed inside the building. The result for personal air monitoring was at 34 µg/m^3. The results for the area air monitoring ranged from 2.5 to 17 µg/m^3.
- **October 14 Air Monitoring Event:** The air monitoring event completed on October 14th evaluated air quality during remedial excavation and soil treatment activities completed inside the building. The results for the personal and area air monitoring were below the laboratory method detection limit of 5.2 µg/m^3.

The monitoring results for the September 18th and October 2nd air monitoring events identified exceedances of the State of Washington Division of Occupational Safety and Health (DOSH) 8-hour time-weighted average (TWA) action level (AL) of 30 µg/m^3 and/or permissible exposure level (PEL) of 50 µg/m^3. The monitoring results for the October 14th air monitoring event were below DOSH 8-hour TWA AL and PEL. The laboratory reports for air monitoring samples are presented in Appendix N. Due to the exceedance of regulatory levels observed in air monitoring samples, both the contractor and City's CIH recommended the use of respiratory protection during construction work performed inside the building.

The construction work inside the building was completed by field personnel wearing Occupational Safety and Health Administration (OSHA) Level C PPE, which included the use of an air-purifying respirator and disposable chemical-resistant overalls (e.g., Tyvek suit) in addition to other OSHA Level D PPE including hard hat, safety boots, eye and hearing protection and high-visibility clothing.

4.8 SITE RESTORATION AND CLEANUP

4.8.1 Site Grading and Seeding

Following the completion of remedial excavation and building demolition activities, the contractor performed site grading. Site grading was completed in accordance with the requirements of the Thurston County grading permit and project plans and specifications. The west, north and east wall sloped soil berms of the former building were graded to a slope of 2.5 horizontal to 1 vertical (2.5H:1V; 40 percent grade) or gentler. The central area of the former building where floors previously existed was graded to a gentle slope with an approximate 2 percent grade towards the south so that stormwater flows towards the existing infiltration pond. Following grading activities, disturbed areas at the Site where excavation and demolition activities were performed were hydroseeded. Hydroseeding was performed in accordance with the requirements of the Thurston County grading permit and project plans and specifications. The seed mix consisted of 50 percent perennial ryegrass, 40 percent chewings fescue, 5 percent white clover and 5 percent colonial bentgrass. Seed mix was supplied by Clearwater Seed located in Chehalis, Washington. Additionally, mulch was also applied as part of hydroseeding operations using High Performance (HP) wood mulch with tackifier manufactured by Profile® Products, LLC located in Illinois. Since the seeding was completed during the winter (January 2025), jute matting was installed along the steeper west, north and east slopes of the former building for additional erosion protection.

4.8.2 Removal of Temporary Site Control Elements and Equipment

Following completion of the cleanup action and restoration activities, the temporary site control elements including temporary chain link fencing, cones, barricades, straw wattles and other site security, traffic control and TESC measures were removed. Equipment, materials and waste resulting from construction work were removed.

5.0 Compliance Monitoring

The WAC Chapter 173-340-410 identifies three types of compliance monitoring applicable to a cleanup action including protection monitoring, performance monitoring and confirmational monitoring.

- Protection monitoring is performed to confirm that human health and the environment are adequately protected during the construction phase of the cleanup action.
- Performance monitoring is performed to confirm that the cleanup action has attained cleanup standards.
- Confirmational monitoring is performed to confirm the long-term effectiveness of the cleanup action.

5.1 PROTECTION MONITORING

Protection monitoring included monitoring of worker health and safety and environmental protection practices such as stormwater, erosion and sediment controls. Personnel engaged in work that involved hazardous material excavation, demolition and handling were required to comply with the provisions of WAC 173-340-810 (MTCA Cleanup Regulation, Worker Safety and Health) and be Hazardous Waste Operations and Emergency Response (HAZWOPER), OSHA and Washington Industrial Safety and Health Act (WISHA) certified. Each entity (contractor and engineer) engaged in construction and construction observation were responsible for the development of their own health and safety plan (HASP) and implementing its requirements for their employees.

OSHA Level C PPE was used by field personnel when performing construction work that posed exposure risk to air-borne contaminants. Level C PPE included the use of an air-purifying respirator and disposable chemical-resistant overalls (e.g., Tyvek suit) in addition to other OSHA Level D PPE including hard hat, safety boots, eye and hearing protection and high-visibility clothing. OSHA Level D PPE was used by field personnel when performing work that did not pose exposure risk to air-borne contaminants.

In addition, environmental protection measures were implemented and maintained throughout the duration of the cleanup action including all necessary stormwater management, temporary erosion and sediment control measures to meet the requirements of the applicable regulations. Environmental protection measures implemented during the cleanup action construction are presented in Section 4.2.3.

5.2 PERFORMANCE MONITORING

Performance monitoring involved collection and analysis of verification soil samples from the base and sidewalls of remedial excavation areas to verify the removal of soil exceeding the cleanup level. Verification soil sampling and analysis activities completed during the cleanup action construction are described in Section 4.3.2. Based on the chemical analytical results of verification soil samples, cleanup standards were achieved at the limits of remedial excavation. The cleanup action also met the cleanup action objectives.

5.3 CONFIRMATIONAL MONITORING

As noted in the combined RI/FS Report and CAP (GeoEngineers 2022a), long-term confirmational monitoring is not considered applicable for the cleanup action, since the cleanup action resulted in a complete removal of the contaminated soil present at the Site and since groundwater at the Site is not a media of concern.

6.0 Limitations

This report has been prepared for the exclusive use of the City of Olympia and the Washington State Department of Ecology. No other party may rely on the product of our services unless we agree in advance and in writing to such reliance. Any use of information, conclusions and recommendations provided herein for extensions of the project or for any other project, without review and written authorization by GeoEngineers, Inc., shall be at the user's sole risk. Any unauthorized use of (or reliance on) this report shall release GeoEngineers from any liability resulting from such use (or reliance).

Within the limitations of scope, schedule and budget, GeoEngineers, Inc.'s services have been provided in a manner consistent with that level of care and skill exercised by members of the profession currently practicing in the same locality under similar conditions as this project. No warranty or other conditions expressed or implied should be understood. GeoEngineers, Inc. assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented or otherwise not fully disclosed or available.

Any electronic form, facsimile or hard copy of the original document (email, text, table and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

7.0 References

Washington State Department of Ecology Guidance for Remediation of Petroleum Contaminated Sites, Toxics Cleanup Program, Publication No. 10-09-057, June 2016.

Ecology (Washington State Department of Ecology), 2019. Stormwater Management Manual for Western Washington, prepared by Washington State Department of Ecology Water Quality Program, dated July 2019. Publication Number 19-10-021.

Ecology (Washington State Department of Ecology), 2022. Opinion Letter on Proposed Cleanup, Carpenter Road Olympia PD Shooting Range, Lacey, Washington; dated March 22, 2022.

GeoEngineers, 2022a. Remedial Investigation/Feasibility Study (RI/FS) and Cleanup Action Plan (CAP), Carpenter Road Site, Lacey, Washington; Prepared for Washington State Department of Ecology and dated March 22, 2022.

GeoEngineers, 2022b. Materials Management and Compliance Monitoring Plan (MMCMP), Carpenter Road Site, Lacey, Washington; Prepared for City of Olympia and dated July 6, 2022.

Tables

Table 1

Verification Soil Sample Results

Carpenter Road Site Cleanup Action

Lacey, Washington

Sample Identification	Laboratory Sample Identification	Sample Depth (ft bgs)	Sample Date	XRF Results[1] (mg/kg)	Total Lead[2] (mg/kg)
Sidewall Verification Samples					
				Soil Cleanup Level (mg/kg):	**220**
S001	10-021-05	0.5	10/01/24	43	**13**
S002	10-021-06	0.5	10/01/24	11	5.4 U
S003	10-021-07	0.5	10/01/24	17	**11**
S004	10-021-08	0.5	10/01/24	17	**24**
S005	10-021-09	0.5	10/01/24	34	**20**
S006	10-052-05	0.75	10/02/24	9	**130**
S007	10-052-06	0.75	10/02/24	8	5.2 U
S008	10-052-07	0.75	10/02/24	ND	5.4 U
S009	10-052-08	0.75	10/02/24	59	**300**
S009-1	10-217-04	1	10/15/24	58	**190**
S010	10-052-09	0.75	10/02/24	ND	5.2 U
S011	10-052-10	0.75	10/02/24	115	**1,300**
S011-1	12-017-01	0.75	12/02/24	NM	**440**
S011-2	12-092-01	0.75	12/09/24	NM	**33**
S012	10-052-12	0.75	10/03/24	12	**6.2**
S013	10-103-07	0.25	10/03/24	7	5.6 U
S014	10-103-08	0.5	10/03/24	80	**61**
S015	10-103-09	0.25	10/03/24	110	**210**
S016	10-103-10	0.25	10/03/24	13	5.2 U
S017	10-103-11	0.25	10/03/24	27	**14**
S018	10-103-12	0.25	10/03/24	ND	5.5 U
S019	10-103-13	0.25	10/03/24	33	**160**
S020	10-103-14	0.25	10/03/24	147	**61**
S021	10-103-15	0.25	10/03/24	97	**43**
S022	10-103-16	1	10/03/24	ND	5.3 U
S023	10-103-17	1	10/03/24	ND	5.6 U
S024	10-103-18	1	10/03/24	ND	5.3 U
S025	10-103-19	0.25	10/03/24	ND	5.3 U
DUP002 (Parent Sample S025)	10-103-24	0.25	10/03/24	ND	5.2 U
S026	10-103-20	1	10/03/24	7	5.3 U
S027	10-103-21	0.2	10/03/24	16	**7.2**
S028	10-103-22	0.2	10/03/24	12	**6.1**
S029	10-103-23	0.2	10/03/24	ND	5.3 U
S030	10-217-01	0.5	10/15/24	18	**7.8**
S031	10-217-02	0.5	10/15/24	44	**37**
S032	10-217-03	0.5	10/15/24	23	**13**
S033	10-391-08	0.75	10/29/24	ND	5.3 U
DUP003 (Parent Sample S033)	10-391-21	0.75	10/29/24	ND	5.3 U
S034	10-391-09	0.25	10/29/24	ND	5.4 U
S035	10-391-10	0.25	10/29/24	39	**30**
S036	10-391-11	0.75	10/29/24	27	5.3 U
S037	10-391-12	0.5	10/29/24	19	**11**
S038	10-391-13	0.75	10/29/24	17	**11**
S039	10-391-14	0.5	10/29/24	48	**22**
S040	10-391-15	0.5	10/29/24	14	**9.8**
S041	10-391-16	0.75	10/29/24	21	5.4 U
S042	10-391-17	0.75	10/29/24	ND	5.3 U
S043	10-391-18	0.75	10/29/24	10	**8.4**
S044	10-391-19	0.5	10/29/24	ND	**7.4**
S045	10-391-20	0.5	10/29/24	ND	5.3 U
S046	10-424-02	0.5	10/30/24	51	**22**

S047	10-424-03	0.25	10/30/24	13	**7.8**
S048	10-424-04	0.5	10/30/24	8	5.4 U
S049	10-424-05	0.5	10/30/24	69	**27**
S050	10-424-06	0-0.25	10/30/24	9	5.2 U
S051	10-424-07	0-0.25	10/30/24	ND	5.2 U
S052	10-424-08	0-0.25	10/30/24	49	**40**
S053	10-424-09	0-0.25	10/30/24	36	**18**
S054	10-424-10	0-0.25	10/30/24	27	**11**
S055	10-424-11	0-0.25	10/30/24	13	**17**
S056	10-424-12	0-0.25	10/30/24	16	**5.6**
S057	10-424-13	0-0.25	10/30/24	8	5.4 U
S058	10-424-14	0-0.25	10/30/24	ND	5.3 U
DUP004 (Parent Sample S058)	10-424-16	0-0.25	10/30/24	ND	5.3 U
S059	10-424-15	0-0.25	10/30/24	32	5.3 U
S060	11-111-01	0-0.25	11/07/24	NM	**6.7**
S061	11-111-02	0-0.25	11/07/24	NM	5.4 U
S062	11-111-03	0.75	11/07/24	NM	5.3 U
S063	12-107-02	0.75	12/02/24	NM	**780**
S063-1	12-092-02	0.75	12/09/24	NM	**56**
S064	12-107-03	0.75	12/02/24	NM	**760**
S064-1	12-092-03	0.75	12/09/24	NM	**17**
S065	12-107-04	0.75	12/02/24	NM	**1,300**
S065-1	12-092-04	0.75	12/09/24	NM	**150**
S066	12-107-05	1	12/02/24	NM	**8.4**
S067	12-107-06	1	12/02/24	NM	**17**
S068	12-107-07	1	12/02/24	NM	**26**
Base Verification Samples					
				Soil Cleanup Level (mg/kg):	**220**
B001	10-021-01	1	10/01/24	7	5.3 U
B002	10-021-02	1	10/01/24	ND	5.3 U
B003	10-021-03	1	10/01/24	ND	**57**
B004	10-021-04	1	10/01/24	ND	5.2 U
B005	10-052-01	1.5	10/02/24	67	**200**
B006	10-052-02	1.5	10/02/24	ND	**14**
B007	10-052-03	1.5	10/02/24	ND	5.3 U
DUP001 (Parent Sample B007)	10-052-11	1.5	10/02/24	ND	5.2 U
B008	10-052-04	1.5	10/02/24	ND	**9.2**
B009	10-103-01	0.5	10/03/24	11	**7.9**
B010	10-103-02	0.5	10/03/24	16	**13**
B011	10-103-03	2	10/03/24	38	**7.5**
B012	10-103-04	2	10/03/24	ND	5.5 U
B013	10-103-05	0.25	10/03/24	ND	5.4 U
B014	10-103-06	0.25	10/03/24	155	**77**
B015	10-391-01	1.5	10/29/24	9	5.4 U
B016	10-391-02	0.5	10/29/24	78	**85**
B017	10-391-03	1	10/29/24	12	**9.9**
B018	10-391-04	1.5	10/29/24	9	5.3 U
B019	10-391-05	1.5	10/29/24	9	5.3 U
B020	10-391-06	1.5	10/29/24	8	5.3 U
B021	10-391-07	1	10/29/24	ND	5.3 U
B022	10-424-01	1	10/30/24	ND	5.4 U
B023	12-017-08	2.5	12/02/24	NM	5.5 U
DUP007 (Parent Sample B023)	12-017-08	2.5	12/02/24	NM	5.5 U

Notes:

[1] Olympus Delta handheld XRF (X-ray Fluorescence) analyzer was used for field screening measurements.

[2] Total lead analyzed by OnSite Environmental (OnSite) located in Redmond, Washington using United States Environmental Protection. Agency (EPA) Method 6010D.

ft bgs = feet below the ground surface.

mg/kg = milligram per kilogram

U = Laboratory qualifier indicating analyte was not detected at a concentration greater than the listed practical quantitation limit.

ND = XRF measurements were non-detect.

NM = XRF measurements not collected in the field due to non availability of the XRF device.

Bold indicates analyte was detected.

Orange shading indicates analyte was detected at a concentration greater than the soil cleanup level. Soil represented by this result was removed until the subsequent sample result was less than the soil cleanup level.

Table 2

Disposal Characterization Sample Results

Carpenter Road Site Cleanup Action

Lacey, Washington

Sample Identification	Laboratory Sample Identification	Sample Date	Total Lead[1] (mg/kg)	TCLP Lead[2] (mg/l)
Post-Treatment Soil Stockpile Samples				
			Hazardous/Dangerous Waste Criteria (mg/l):	**5**
SP-WT-1	10-217-05	10/15/24	**4,700**	0.20 U
SP-WT-2	10-217-06	10/15/24	**15,000**	**0.27**
SP-WT-3	10-217-07	10/15/24	**13,000**	**0.99**
SP-WT-4	10-217-08	10/15/24	**4,500**	0.20 U
SP-WT-5	10-217-09	10/15/24	**12,000**	**1.2**
SP-EXT-1	10-425-01	10/30/24	**5,700**	1.0 U
SP-EXT-2	10-425-02	10/30/24	**820**	1.0 U
SP-EXT-3	10-425-03	10/30/24	**190**	1.0 U
SP-EXT-4	10-425-04	10/30/24	**100**	1.0 U
SP-EXT-5	10-425-05	10/30/24	**200**	1.0 U
SP-FRD-1	12-038-02	12/03/24	**550**	0.2 U
SP-FRD-2	12-038-03	12/03/24	**210**	0.2 U
SP-FRD-3	12-038-04	12/03/24	**460**	0.2 U
Crushed Concrete and Asphalt Stockpile Samples				
			Hazardous/Dangerous Waste Criteria (mg/l):	**5**
SP-CMU-1	12-259-01	12/16/24	**35**	0.2 U
SP-CMU-2	12-259-02	12/16/24	**59**	0.2 U
SP-CMU-3	12-259-03	12/16/24	**19**	0.2 U
SP-C-1	12-092-08	12/09/24	**8.3**	0.2 U
SP-C-2	12-092-09	12/09/24	**23**	0.2 U
SP-C-3	12-092-10	12/09/24	**12**	0.2 U
SP-C-4	01-002-01	12/31/24	**28**	0.2 U
SP-C-5	01-002-02	12/31/24	**18**	0.2 U
SP-C-6	01-002-03	12/31/24	**17**	0.2 U
SP-A-1	12-092-05	12/09/24	**400**	**7.3**
SP-A-2	12-092-06	12/09/24	**510**	**12**
SP-A-3	12-092-07	12/09/24	**220**	**6**
SP-AC-1	12-315-01	12/19/24	**290**	**5.5**
SP-AC-2	12-315-02	12/19/24	**240**	0.2 U
SP-AC-3	12-315-03	12/19/24	**280**	0.2 U
SP-AC-4	12-315-04	12/19/24	**280**	0.2 U
SP-AC-5	12-315-05	12/19/24	**350**	**9.9**

Notes:

[1] Total lead analyzed by OnSite Environmental (OnSite) located in Redmond, Washington using United States E Agency (EPA) Method 6010D.

[2] TCLP lead analyzed by OnSite using United States Environmental Protection Agency (EPA) Method 1311/601

mg/kg = milligram per kilogram

mg/l = milligram per liter

TCLP = Toxicity Characteristic Leaching Procedure

U = Laboratory qualifier indicating analyte was not detected at a concentration greater than the listed practica

Bold indicates analyte was detected.

Orange shading indicates analyte was detected at a concentration greater than the hazardous/danger

Table 3

Post-Cleanup Ecology Block Wipe Sample Results

Carpenter Road Site Cleanup Action

Lacey, Washington

Sample Identification	Laboratory Sample Identification	Sample Date	Total Lead[1] (µg/wipe)	Wipe Area (sf)	Total Lead[2] (µg/sf)
			Labor and Industries (L&I) Criteria (µg/sf):		**200**
W01	11-111-04	11/07/24	**270**	4	**68**
W02	11-111-05	11/07/24	**520**	4	**130**
W03	11-168-01	11/12/24	**23**	4	**6**
W04	11-168-02	11/12/24	**130**	4	**33**
W05	11-168-03	11/12/24	**14**	4	**4**
W06	11-168-04	11/12/24	**110**	4	**28**
W07	11-168-05	11/12/24	**20**	4	**5**
W08	11-168-06	11/12/24	**12**	4	**3**
W09	11-168-07	11/12/24	10 U	4	10 U
DUP005 (Parent sample W09)	11-168-23	11/12/24	**15**	4	**4**
W10	11-168-08	11/12/24	10 U	4	10 U
W11	11-168-09	11/12/24	10 U	4	10 U
W12	11-168-10	11/12/24	10 U	4	10 U
W13	11-168-11	11/12/24	10 U	4	10 U
W14	11-168-12	11/12/24	**64**	4	**16**
W15	11-168-13	11/12/24	**29**	4	**7**
W16	11-168-14	11/12/24	10 U	4	10 U
W17	11-168-15	11/12/24	10 U	4	10 U
W18	11-168-16	11/12/24	10 U	4	10 U
W19	11-168-17	11/12/24	**80**	4	**20**
W20	11-168-18	11/12/24	10 U	4	10 U
W21	11-168-19	11/12/24	**17**	4	**4**
W22	11-168-20	11/12/24	10 U	4	10 U
W23	11-168-21	11/12/24	**220**	4	**55**
W24	11-168-22	11/12/24	10 U	4	10 U
W25	11-190-11	11/12/24	**160**	4	**40**
W26	11-190-12	11/12/24	**53**	4	**13**
W27	11-190-13	11/12/24	**97**	4	**24**
W28	11-190-14	11/12/24	**250**	4	**63**
W29	11-190-15	11/12/24	**11**	4	**3**
W30	11-190-16	11/12/24	**110**	4	**28**
W31	11-190-17	11/12/24	**170**	4	**43**
W32	11-190-18	11/12/24	**120**	4	**30**
W33	11-190-19	11/12/24	**53**	4	**13**
W34	11-190-20	11/12/24	**160**	4	**40**

W35	11-190-01	11/12/24	**1,700**	4	**425**
W35-1	11-333-01	11/21/24	10 U	4	10 U
W36	11-190-02	11/12/24	**140**	4	**35**
W37	11-190-03	11/12/24	**140**	4	**35**
W38	11-190-04	11/12/24	**59**	4	**15**
W39	11-190-05	11/12/24	**220**	4	**55**
W40	11-190-06	11/12/24	**150**	4	**38**
W41	11-190-07	11/12/24	**33**	4	**8**
DUP006 (Parent sample W41)	11-190-21	11/12/24	**28**	4	**7**
W42	11-190-08	11/12/24	**180**	4	**45**
W43	11-190-09	11/12/24	**190**	4	**48**
W44	11-190-10	11/12/24	**110**	4	**28**

Notes:

[1] Total lead analyzed by OnSite Environmental (OnSite) located in Redmond, Washington using United States Environmental Protection Agency (EPA) Method 6010D.

[2] Wipe samples were collected from a 12-inch x 12-inch area on four sides of each ecology block, for a total of 4 sf of ecology block area sampled per wipe. Laboratory analytical results reported in µg/wipe were divided by 4 to convert the results to µg/sf.

µg = microgram

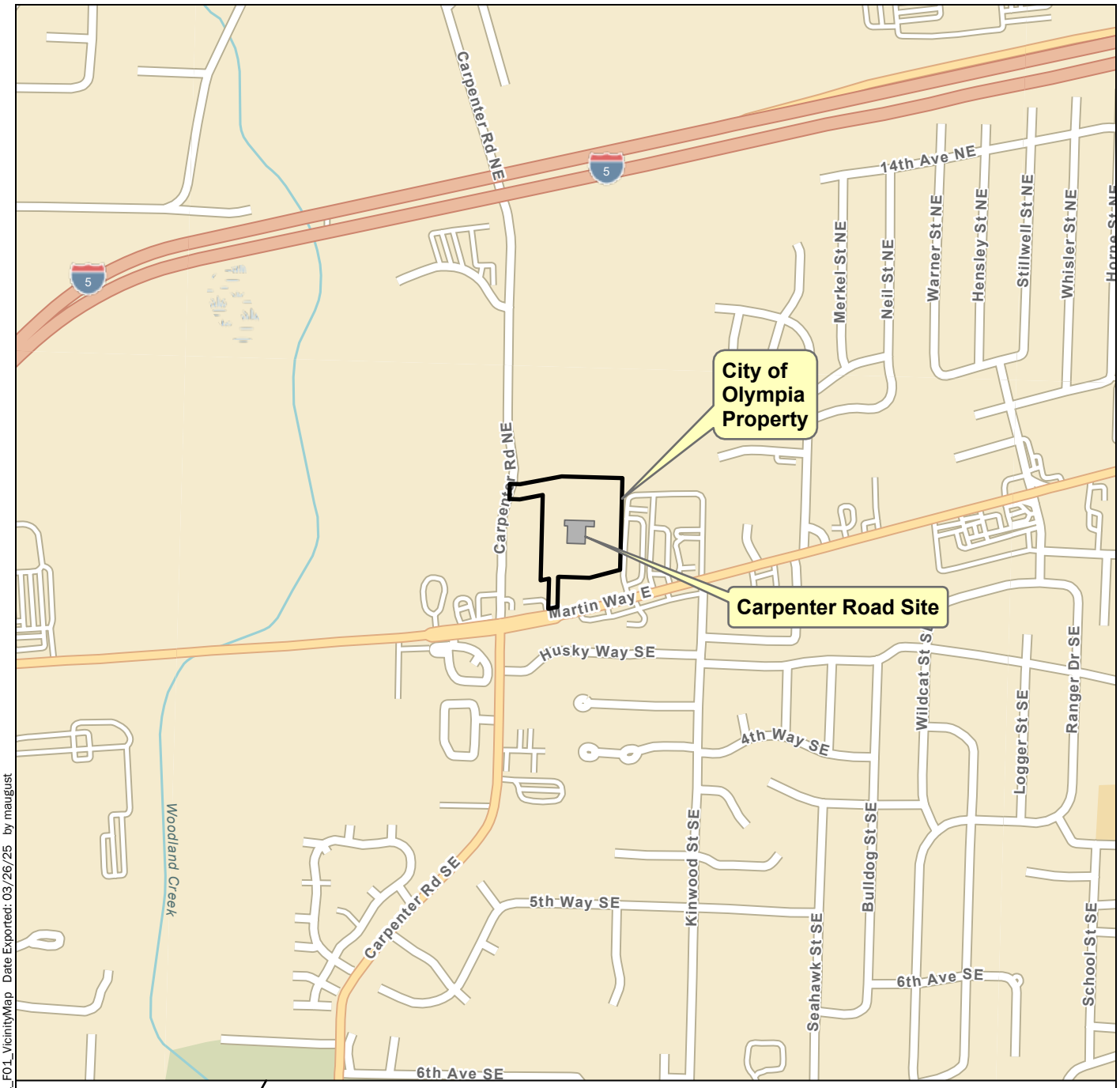
sf = square feet

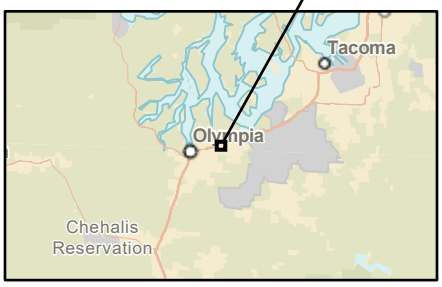
U = Laboratory qualifier indicating analyte was not detected at a concentration greater than the listed practical quantitation limit.

Bold indicates analyte was detected.

Orange shading indicates analyte was detected at a concentration greater than the L&I criteria. Additional pressure washing of the ecology block represented by this result was completed until subsequent sample result was below the L&I criteria.

Figures





N

0 1,000

Feet

Notes:

1. The locations of all features shown are approximate.
2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Data Source: ESRI

Projection: NAD 1983 StatePlane Washington South FIPS 4602 Feet

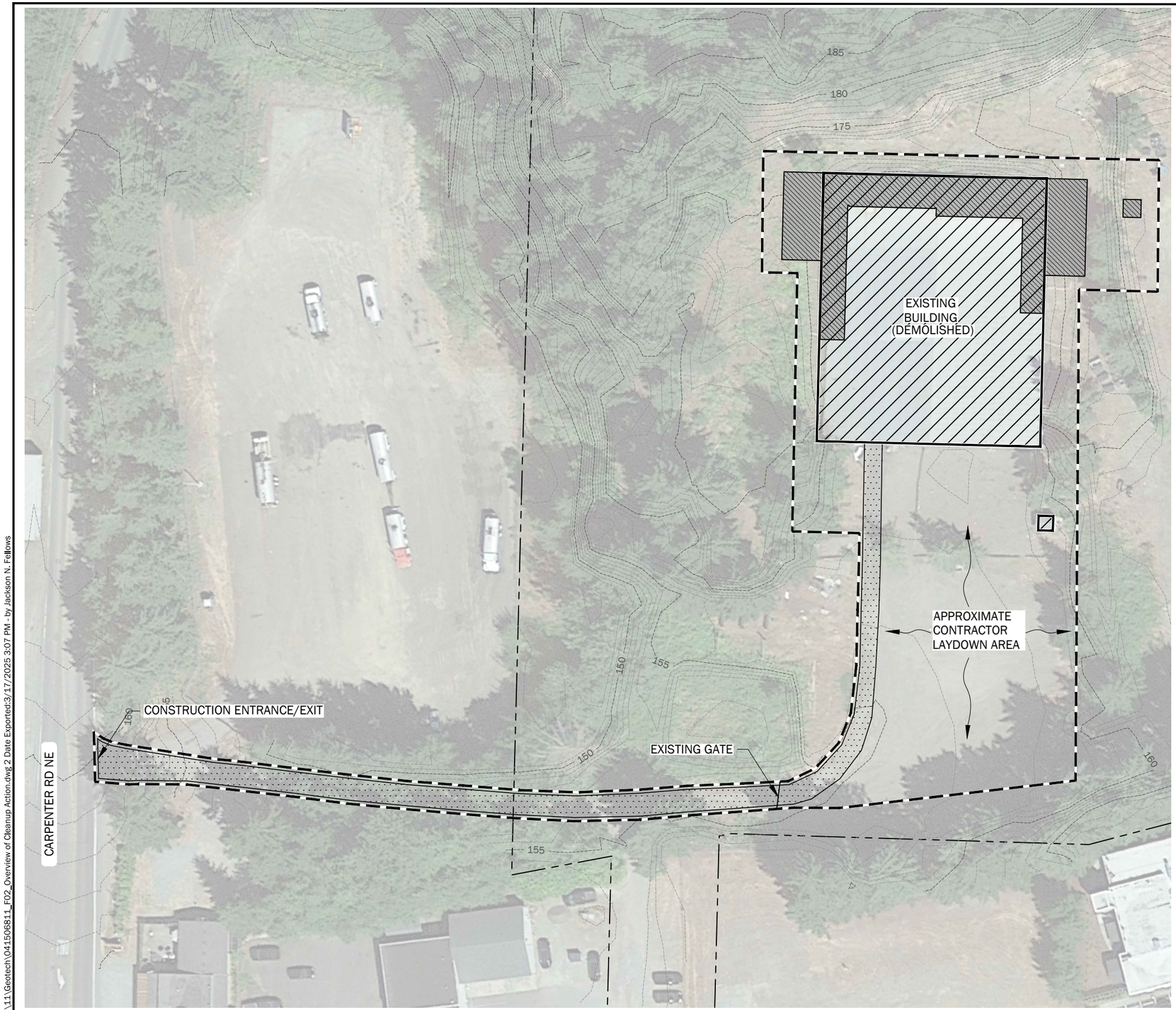
Vicinity Map

Carpenter Road Site Cleanup Action
Lacey, Washington

GeoEngineers

Figure 1

P:\0\0415068\GIS\041506801_Project\041506801_Project.aprx\041506811_F01_VicinityMap Date Exported: 03/26/25 by maugust



LEGEND

- CITY OF OLYMPIA PROPERTY BOUNDARY
- APPROXIMATE PROJECT LIMITS
- EXISTING CONTOUR (FEET NGVD 29)
- REMEDIAL EXCAVATION LIMIT
- BUILDING DEMOLITION LIMIT
- APPROXIMATE INTERNAL HAUL ROUTE

Coordinate System: WA State Plane, North Zone, NAD83, US Foot

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

N

0 60

Feet

Overview of Cleanup Action

Carpenter Road Site Cleanup Action
Lacey, Washington

GeoEngineers

Figure 2

P:\0\04150068\CAD\11\Geotech\041506811_F02_Overview of Cleanup Action.dwg 2 Date Exported:3/17/2025 3:07 PM - by Jackson N. Fellows



LEGEND

- CITY OF OLYMPIA PROPERTY BOUNDARY
- APPROXIMATE PROJECT LIMITS
- EXISTING CONTOUR (FEET NGVD 29)
- EXISTING CHAIN LINK FENCE
- POWER VAULT
- TRANSFORMER
- LIGHT JUNCTION BOX
- LIGHT POLE
- TELECOMMUNICATIONS PEDESTAL
- FIRE HYDRANT
- WATER VALVE
- SANITARY SEWER/SEPTIC MAN HOLE
- SANITARY SEWER/SEPTIC CLEAN OUT
- FIR OR DECIDUOUS TREE AS NOTED
- SANITARY SEWER
- WATER LINE
- UNDERGROUND POWER
- OVERHEAD POWER
- UNDERGROUND TELECOMMUNICATIONS
- ASPHALT
- GRAVEL

Coordinate System: WA State Plane, North Zone, NAD83, US Foot

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

N

0 60

Feet

Pre-Construction Site Conditions Outside the Building

Carpenter Road Site Cleanup Action
Lacey, Washington

GeoEngineers

Figure 3

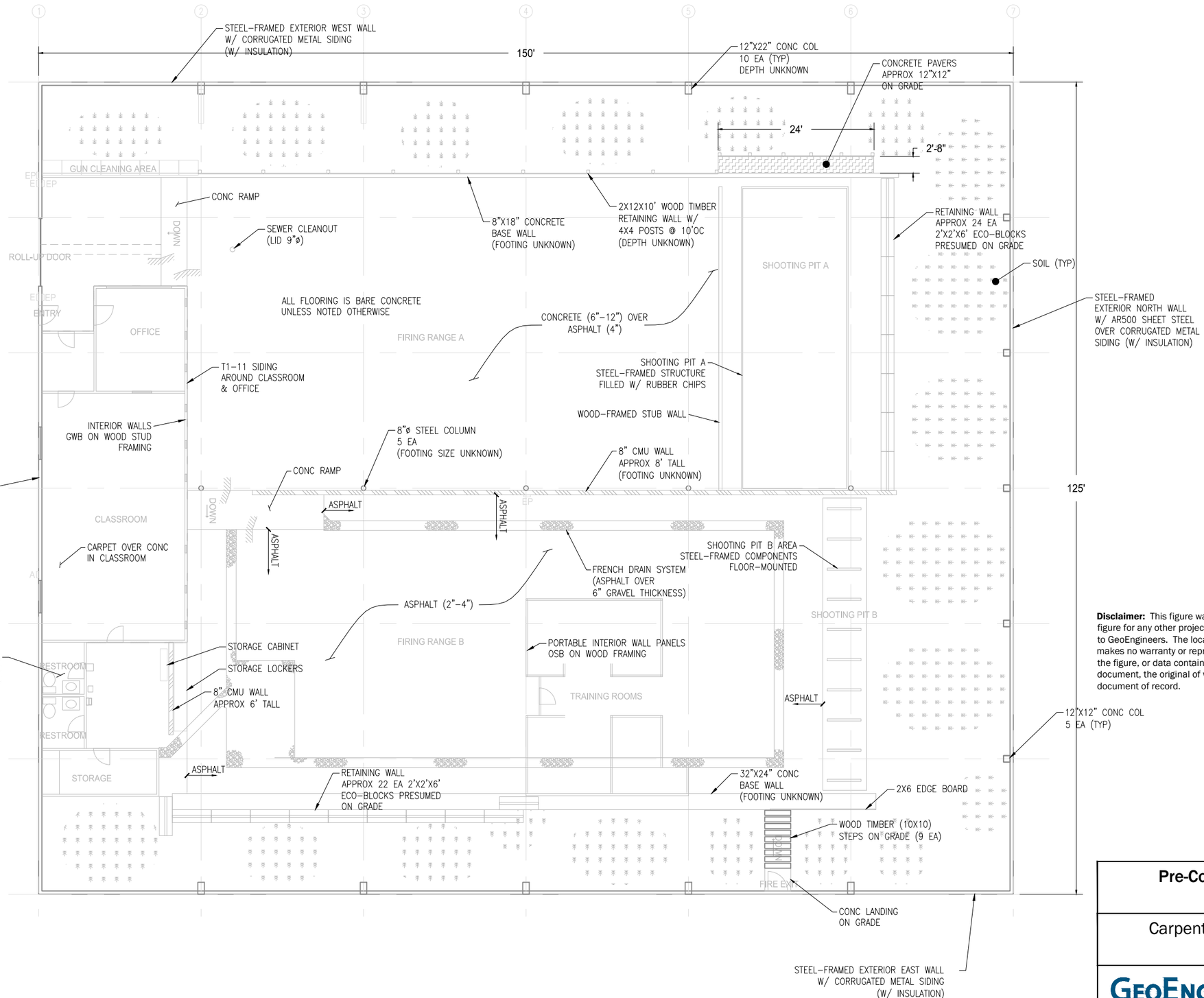
P:\0\0415068\CAD\11\Geotech\041506811_F03_Pre-Construction Site Conditions - Outside Building.dwg 3 Date Exported:3/17/2025 3:09 PM - by Jackson N. Fellows

LEGEND:

- A ALARM PANEL
- E ELECTRICAL METER
- EP ELECTRICAL PANEL
- CMU
- CONC PAVER
- FRENCH DRAIN
- SOIL

ABBREVIATIONS:

CMU – CONCRETE MASONRY UNIT
COL – COLUMN
CONC – CONCRETE
GWB – GYPSUM WALL BOARD
OC – ON CENTER
OSB – ORIENTED STRAND BOARD
SIM – SIMILAR
TYP – TYPICAL



Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

N

0 16
Feet

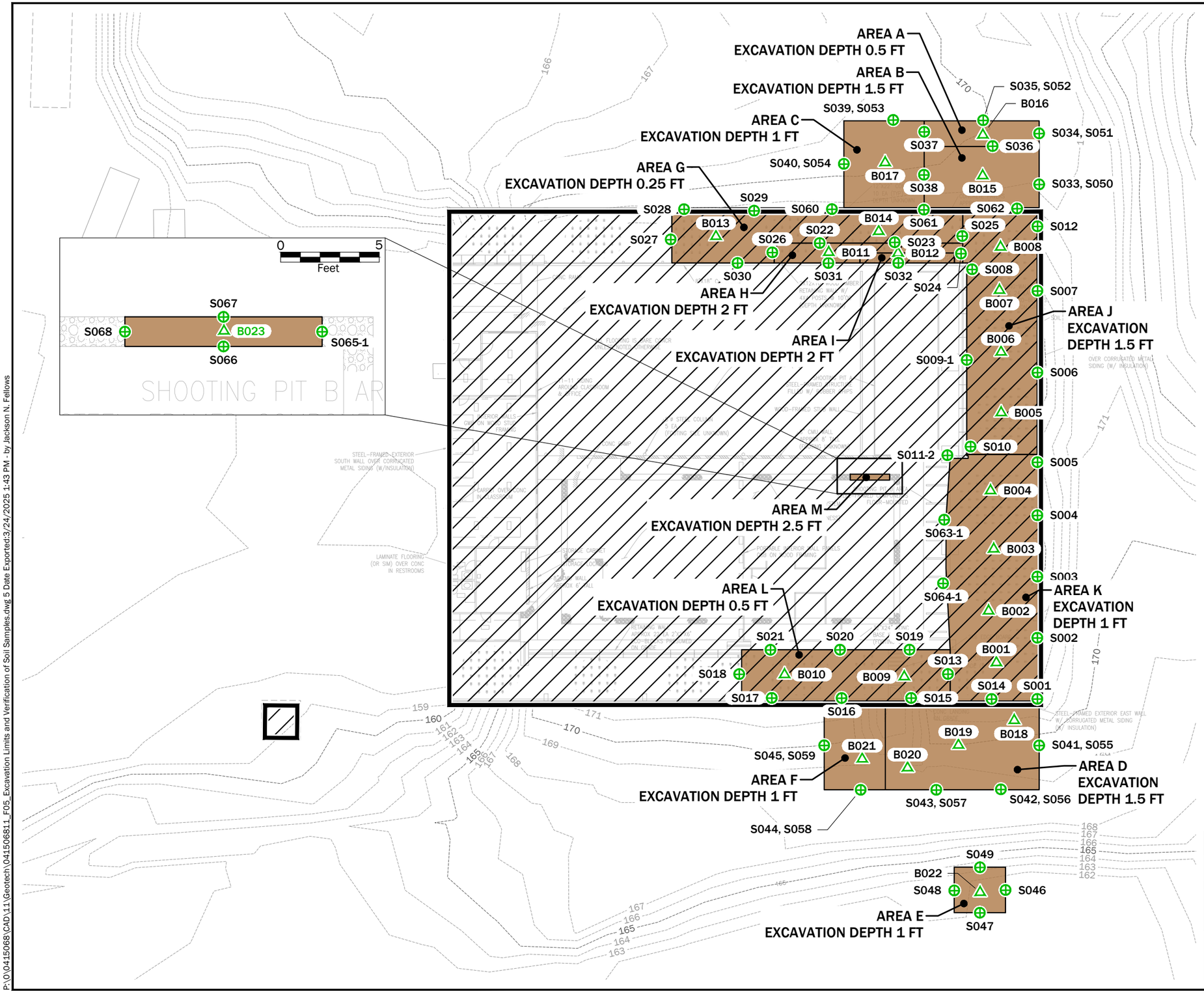
Pre-Construction Site Conditions Inside the Building

Carpenter Road Site Cleanup Action
Lacey, Washington

GeoEngineers

Figure 4

P:\0\0415068\CAD\11\Geotech\0415068111_F04_Pre-Construction Site Conditions - Inside Building.dwg 4 Date Exported:3/17/2025 3:10 PM - by Jackson N. Fellows



Legend

- BUILDING DEMOLITION LIMIT
- REMEDIAL EXCAVATION LIMIT
- PRE-CLEANUP ACTION CONTOUR (FEET NGVD 29)
- **B001** BASE VERIFICATION SAMPLE WITH CHEMICAL ANALYTICAL RESULT LESS THAN THE CLEANUP LEVEL. REFER TO TABLE 1 OF CONSTRUCTION COMPLETION REPORT FOR RESULTS.
- **S001** SIDEWALL VERIFICATION SAMPLE WITH CHEMICAL ANALYTICAL RESULT LESS THAN THE CLEANUP LEVEL. REFER TO TABLE 1 OF CONSTRUCTION COMPLETION REPORT FOR RESULTS.

Coordinate System: WA State Plane, North Zone, NAD83, US Foot

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

Demolition Limit, Excavation Limit, and Verification Soil Sampling Locations

Carpenter Road Site Cleanup Action
Lacey, Washington

GeoEngineers

Figure 5

P:\0\0415068\CAD\11\Geotech\0415068811_F05_Excavation Limits and Verification of Soil Samples.dwg 5 Date Exported:3/24/2025 1:43 PM - by Jackson N. Fellows

Appendices

Appendix A
Permits and Substantive Requirements

Community Planning & Economic Development 2000 Lakeridge Dr. S.W.
Olympia, WA 98502 (360)786-5490 /
(360)754-2939 (Fax)
TDD Line (360) 754-2933
Email:
permit@co.thurston.wa.us
www.co.thurston.wa.us/permitting

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

THURSTON COUNTY
Community Planning and Economic Development
ENVIRONMENTAL CHECKLIST

*** * * * OFFICIAL USE ONLY * * * ***

Folder Sequence # _____

Project # : _____

Related Cases: _____

Date Received:_____ **By:** _____

*** * * * OFFICIAL USE ONLY * * * ***

A. Background

1. Name of proposed project, if applicable:

   Olympia Waste ReSource Facility

2. Name of applicant:

   City of Olympia

3. Address and phone number of applicant and contact person:

   City of Olympia
   PO Box 1967 Olympia, WA
   98507 Jeff Johnstone, Project Manager

4. Date checklist prepared:

   May 19, 2022

5. Agency requesting checklist:

   Thurston County

6. Proposed timing or schedule (including phasing, if applicable):

   Site Plan Approval – Spring 2022
   Grading Permit - Summer 2022 through 2024
   Site Cleanup and Remediation - 2022
   Site Development – Summer 2024

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   No further activity is proposed in the future.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

   Geotechnical Engineering Services Report prepared by GeoEngineers dated May 31, 2017
   Environmental Investigation Report prepared by GeoEngineers dated July 3, 2017
   Remedial Investigation/Feasibility Study (RI/FS) and Cleanup Action Plan (CAP) dated Feb.2, 2022
   Engineering Design Report for the cleanup action (to be prepared)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

   No

10. List any government approvals or permits that will be needed for your proposal, if known.

Thurston County Demolition Permit, Grading Permit, Site Development Permit, and Building Permit. ORCAA Notice of Construction.

The proposed action includes a cleanup action under Washington State Department of Ecology's (Ecology's) Voluntary Cleanup Program (VCP) and therefore will be subject to Ecology's review and approval of Remedial Investigation/Feasibility Study (RI/FS) and Cleanup Action Plan (CAP), and Engineering Design Report (EDR). Ecology's review and approval will also be needed for cleanup action completion report.

The project will also require a Class 4 Forest Land Conversion.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The City of Olympia proposes to develop the project parcel into a Waste Resource Operations Facility. The purpose of this facility is to provide maintenance for Waste Resource solid waste vehicles. Improvements include the construction of 2 buildings (approximately 65,000 sf total), one shall include administration, operations, covered parking, and covered cart storage and repair. The other building will include wash bay, fueling, welding shop, paint/prep booth, and vehicle maintenance and repair. Other site features entail container storage areas, parking, stormwater facilities, and an additional driveway off of Carpenter Road.

Prior to Site development activities, the City of Olympia plans to complete a cleanup action to address lead contamination observed on building components and soil inside and outside of the building that have been impacted by firing range activities.

This project is planned to be constructed in several phases due to funding constraints. The general phasing and permit pathway includes obtaining SPR approval in the Spring of 2022. Design Review of the buildings will not be included within the SPR submittal and will be provided during the Construction Document submittal. Following SPR approval the project team will submit for a Grading Permit to begin leveling the site. Site grading is anticipated to take between 18 and 24 months. Concurrently with site grading remediation will begin on the existing fire range structure. Following site grading and remediation the project team will develop full architectural and engineering plans for the final facility. Submittal of the final plans for approval is planned to occur prior to completion of grading work.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

Address: 6530 E Martin Way, Olympia, WA 98516
Abbreviated Legal: Section 15 Township 18 Range 1 W NE4 NW4

B. Environmental Elements

1. Earth

a. General description of the site: (check one):

- [x] Flat
- [ ] Rolling
- [ ] Hilly
- [x] Steep Slopes
- [ ] Mountainous
- [ ] Other:

b. What is the steepest slope on the site (approximate percent slope)?

33%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

Fill soils: silty sand with gravel, gravel with silt and sand, and silty gravel with sand.

Outwash soils: sand with variable silt and gravel content, and gravel with variable silt and sand content.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No, there is no history of unstable soils within the project vicinity

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The grading of the site will result in a net cut of approximately 102,660 cubic yards. The cleanup action will result in remedial excavation of approximately 500 to 750 cubic yards of contaminated soil.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes, any disturbance to the existing soils could temporarily expose the soils and erosion may occur. Erosion will be managed in accordance with Department of Ecology Best Management Practices (BMPs) to meet NPDES requirements.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 66% of the site will be covered with asphalt pavement and buildings.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Silt Fences, Inlet Protection, and other Erosion Control best management practices as identified in the project Stormwater Pollution Prevention Plan will be implemented during construction. Following construction all stormwater will be managed through catch basins, stormwater filters, and infiltrated on-site.

2. *Air*

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Dust and heavy equipment exhaust are to be expected during construction. After Construction is complete, automobile exhaust can be expected.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No off-site sources of emissions are known or expected to affect this proposal

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Emissions during construction will be reduced as much as possible by following approved Best Management Practices and limiting running equipment to times of use.

To control dust generating from excavation activities, controls such as wetting or covering of soil will be used, as necessary. If wetting is employed, care will be taken to apply the appropriate amount of water needed to control dust. Visual monitoring will take place and water application will cease if over-saturation is noted (i.e. puddling and surface runoff).

The cleaning of lead contaminated dust from building components, if performed, will be completed using vacuum cleaning (using high-efficiency particulate air [HEPA] filters) or wet cleaning (wet wiping or washing) methods. Dry sweeping method will not be permitted to prevent dust generation.

3. *Water*

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No surface water bodies are located in the vicinity of the site.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No work is proposed over, in or adjacent to a surface water body.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Not Applicable

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No, this proposal is not proposing surface water withdrawals or diversions.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No, this project does not lie within a 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No, this project will not involve any waste discharge into surface waters.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No. All project will be served by the City of Lacey water system.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

The development will be served by City of Lacey Sewer System. No waste material will be discharged into the ground.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The stormwater runoff from the site will be collected through catch basins and storm drains. The water from pollution generating surfaces will be conveyed to a stormwater filter for treatment. After treatment, the water will then be directed to an infiltration pond onsite where the water will infiltrate into the ground.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Unlikely, the stormwater will go through enhanced treatment prior to infiltrating into the ground.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No, the project will keep the existing drainage patterns within the vicinity of the site.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

The project will be designed in accordance with Thurston County Drainage Design and Erosion Control Manual and all stormwater will be managed on-site.

4. *Plants*

a. Check the types of vegetation found on the site:

____ deciduous tree: alder, maple, aspen, other
_X_ evergreen tree: fir, cedar, pine, other
_X_ shrubs
_X_ grass
____ pasture
____ crop or grain
____ Orchards, vineyards or other permanent crops.
____ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____ water plants: water lily, eelgrass, milfoil, other
____ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

All trees and vegetation on-site are proposed to be removed. A Class 4 Forest Land Conversion will be required and has been submitted.

c. List threatened and endangered species known to be on or near the site.

None known to be on or near the project site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Lawn/landscaped areas are proposed around the facility and will designed in accordance with Thurston County Standards

e. List all noxious weeds and invasive species known to be on or near the site.

No noxious weeds or invasive species are known to be on or near the project site.

5. *Animals*

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: hawk, heron, eagle, songbirds, other:
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other _____

Hawks, eagle, deer, racoon, American robin, black capped chickadee, European starling, house sparrow, squirrel, etc.

b. List any threatened and endangered species known to be on or near the site.

None known

c. Is the site part of a migration route? If so, explain.

No formal migration routes transect with the project site.

d. Proposed measures to preserve or enhance wildlife, if any:

Proposed project will attempt to minimize disturbances to wildlife.

e. List any invasive animal species known to be on or near the site.

No invasive animal species were observed or recorded on-site.

6. *Energy and Natural Resources*

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Electrically energy and natural gas will be used to meet the project's energy needs.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No, the project will not affect the potential use of solar energy for adjacent properties.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Energy efficient fixtures and construction techniques may be utilized by the builder.

7. *Environmental Health*

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

1) Describe any known or possible contamination at the site from present or past uses.

The Site contains City of Olympia Police Department's training facility building that has been used as firing range since its construction (1987). This use of building has resulted in lead contaminated soil both inside and outside the building and lead contaminated dust on building components.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Approximately 500 to 750 cubic yards of lead contaminated soil is estimated to be present inside and outside the building. Depth of lead contaminated soil is estimated to be approximately 6 inches to 2 feet. Also interior components of firing range building including metal frame, roof and walls, insulation, ventilation system, sheet rock/dry wall, plywood, asphalt/concrete floors, etc. are contaminated with lead dust. Lead contamination in soil and dust exceed regulatory criteria.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

During construction diesel fuel used to power construction equipment will be used. Following construction diesel fuel, mechanical maintenance supplies such as oils, and paint supplies will be stored onsite. A fuel island and associated underground storage tanks (less than 10,000 gallons) is also proposed.

4) Describe special emergency services that might be required.

During Construction there is potential for a fuel/contaminated material spill or construction accident. After construction the development will be served by standard emergency services.

5) Proposed measures to reduce or control environmental health hazards, if any:

Best management practices for construction hazards will be implemented during construction. Construction workers engaged in cleanup activities will be required to be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained. Air monitoring will be performed during cleanup construction to monitor exposure to lead contaminated dust. Health and Safety Plans and Spill Prevention, Control and Countermeasures (SPCC) Plans will be prepared and implemented during cleanup construction activities.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

No existing noises will affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

In short term, construction equipment will cause noise. Long term effects will include the noise associated with normal vehicle traffic, and the occasional use of the backup generator. Construction noise will be limited to daylight hours.

3) Proposed measures to reduce or control noise impacts, if any:

Construction will be restricted to daytime operations to limit noise impacts. Permanent measure will primarily include compliance with local noise ordinances.

8. *Land and Shoreline Use*

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The site has been used as a police firing range for the Olympia police in the past. The adjacent sites are used as commercial businesses and will not be affected by the proposed project.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

Not applicable, the project site has not been used as working farmland or working forest land.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

Not applicable, there are no surrounding working farm or forest lands.

c. Describe any structures on the site.

There is an existing 18,240 square foot building on-site.

d. Will any structures be demolished? If so, what?

The existing building will be demolished.

e. What is the current zoning classification of the site?

The site is zoned under Lacey Urban Growth Area as Open Space Institutional (OS-I)

f. What is the current comprehensive plan designation of the site?

Open Space Institutional

g. If applicable, what is the current shoreline master program designation of the site?

Not Applicable

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

Approximately 30-40 employees

j. Approximately how many people would the completed project displace?

No displacement will occur as part of this project

k. Proposed measures to avoid or reduce displacement impacts, if any:

No displacement is anticipated; therefore, no /reduction measures are proposed.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project use is allowed in its zoning code.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

This project will not impact agricultural or forest lands; therefore, no reduction/control measures are proposed.

9. *Housing*

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

This project does not propose any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No existing units will be eliminated.

c. Proposed measures to reduce or control housing impacts, if any:

No existing units are within the disturbed area; therefore, no reduction/control measures are proposed.

10. *Aesthetics*

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The proposed buildings have an approximate height of 40ft and the exterior materials may include CMU or metal siding. The building design is currently conceptual and will be refined during the Design Review process with Thurston County.

b. What views in the immediate vicinity would be altered or obstructed?

Views from within the project site would be altered due to the new development.

c. Proposed measures to reduce or control aesthetic impacts, if any:

This project should not cause any aesthetic impacts; therefore, no reduction/control measures are proposed.

11. *Light and Glare*

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The site will have building lights and parking lot lights. These lights will primarily occur during operation hours (4:30 am to 6 pm)

b. Could light or glare from the finished project be a safety hazard or interfere with views?

The light or glare is not anticipated to be a safety hazard or impact neighboring views.

c. What existing off-site sources of light or glare may affect your proposal?

No off-site light sources should affect the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

The project proposes to have cut-off light fixtures to direct light down to reduce light pollution.

12. *Recreation*

a. What designated and informal recreational opportunities are in the immediate vicinity?

There are no recreational opportunities in the vicinity.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No, this proposal will not displace any existing recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

This project will not impact recreational opportunities in the area; therefore, no reduction/control measures are proposed.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.

The existing building was constructed in 1987 and is therefore not over 45 years old.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No evidence of Indian or historic use has been observed and the site has already been partially developed.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Not applicable

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Clearing and grading of the site is proposed. A grading permit through Thurston County is required.

14. *Transportation*

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

The site is currently accessed through Carpenter Road (to the west of the site). An additional access off of Carpenter Road is proposed.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

Yes, the site is served by Intercity Transit. Carpenter road is on route 65 and Martin Way is on route 62A. There is an existing bus stop near the current access off Carpenter Road.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

There are currently no parking spaces on-site. The project proposes to create 61 parking spaces.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

There will be 14 trips a day. The peak hours being between 7:00-8:00 a.m. with a total of 11 vehicles, and between 4:30-5:30 p.m. of a total of 3. Of these peak hours 45% is truck traffic. These were modeled using the existing Olympia Maintenance Center to anticipate the proposed traffic volumes.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No, the project will not affect the movement of agricultural and forest products in the area.

h. Proposed measures to reduce or control transportation impacts, if any:

This project will cause minimal transportation impacts; therefore, no reduction/control measures are proposed.

15. *Public Services*

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No, the project will not create an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The proposed project is not anticipated to impact public services.

16. *Utilities*

a. Check utilities currently available at the site:

electricity ☑ natural gas ☐ water ☑ refuse service ☐ telephone ☐ sanitary sewer ☐

septic system ☑ Other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Water, sanitary sewer, storm water, electrical service, natural gas, and phone/communication are proposed to be installed within the project site.

C. *Signature*

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Name of signee JEFF JOHNSTONE

Position and Agency/Organization PROJECT MANAGER / CITY OF OLYMPIA

Date Submitted: 5/20/2022

THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS

Carolina Mejia Barahona
District One
Gary Edwards
District Two
Tye Menser
District Three

COMMUNITY PLANNING &
ECONOMIC DEVELOPMENT DEPARTMENT

Creating Solutions for Our Future

Joshua Cummings, Director

MITIGATED DETERMINATION OF NONSIGNIFICANCE

State Environmental Policy Act (SEPA)
PROJECT NUMBER NO. 2022101139

September 9, 2022

Point of Contact: Steve Schmitz, P.E.
612 Woodland Square Loop SE, Suite 100
Lacey WA 98503
360 292-7230
Steve.smitz@kpff.com

Applicant: Steve Schmitz, P.E.

Owner: City of Olympia

Description of Proposal: The applicant seeks an Administrative Site Plan Review for approval of a Waste Resources Operations Facility. The facility would include a 34,752 sq. ft. administration and operations building and a 30,443 sq. ft. maintenance and wash building. A 2,335 sq. ft. fuel building is also proposed. Total hard surface, including paved areas is 67% of the site. Landscaping is proposed. There is an existing 18,240 sq. ft. police training building on site which will be demolished. Lead contamination from previous firing range activities will be addressed through the site preparation process. Site grading is proposed to level building sites. Total cut and fill is approximately 110,484 cubic yards. A Class 4 Forest Land Conversion is also proposed in order to remove approximately 66 MBF of timber. The site zoning is Open Space / Institutional (OSI) in the Lacey Urban Growth Area.

Location of Proposal: 6530 Martin Way East, Olympia, WA 98516

Section/Township/Range: Section 15 Township 18 Range 1W NE4 NW4 W.M.

Tax Parcel Numbers & Legal Description: 11815210500;
Legal Description - 15-18-1W NE4 NW4.

Threshold Determination: The lead agency for this proposal has determined that the attached mitigating conditions, along with required compliance with applicable County,

State and Federal codes will mitigate all probable significant adverse impacts upon the environment. An Environmental Impact Statement is not required under RCW 43.21C.030(2)(C). This decision was made after review by the Lead Agency of a completed Environmental Checklist and other information on file with the Lead Agency. This information is available to the public on request.

Mitigating Conditions: See Attached

Jurisdiction: Thurston County

Lead Agency: Community Planning and Economic Development Department

Responsible Official: Brett Bures, Planning Manager

Date of Issuance: September 9, 2022
Comment Deadline: September 23, 2022
Appeal Deadline: September 30, 2022

Scott McCormick 09/09/22
Scott McCormick, Associate Planner Date

Appeals: Threshold determinations may be appealed pursuant to TCC 17.09.160 if a written notice of appeal, meeting the requirements of TCC 17.09.160(D), and the appropriate appeal fee are received by the Thurston County Community Planning & Economic Development Department prior to 4:00 p.m. on the appeal deadline date shown above. Per TCC 17.09.160(B), only aggrieved parties who submit written comments during the comment period may appeal.

Note: The issuance of this Mitigated Determination of Non-Significance does not constitute project approval. The applicant must comply with all applicable requirements of the Thurston County Critical Areas Ordinance, all applicable zoning ordinances and Forest Land Conversion Ordinance, as well as applicable State and Federal requirements prior to project initiation.

Thurston County Community Planning & Economic Development Department
Building #1, Administration
2000 Lakeridge Drive SW
Olympia, WA 98502
(360) 867-2116 office
Email: scott.mccormick@co.thurston.wa.us

cc: Department of Ecology
Adjacent Property Owners (300')
Tribes: Nisqually, Chehalis and Squaxin Tribes
Thurston Regional Planning TRPC
City of Olympia
City of Lacey

MDNS Attachments
SEPA Project #2022101139

Information Reviewed

The environmental threshold determination and conditions are substantially based on analysis of information obtained from the following documents. Documents and other related information is available for public review from 8:00 a.m. to 4:00 p.m. at the Building Development Center on the second floor of Building #1, Thurston County Courthouse, 2000 Lakeridge Drive SW, Olympia, Washington. Please contact Thurston County Community Planning & Economic Development Department at (360) 867-2116 / (360) 999-8210 or email scott.mccormick@co.thurston.wa.us with questions.

List of documents and comments reviewed, documents and environmental characteristics considered:

1. Master Application
2. Admin. Site Plan Review Application
3. SEPA Environmental Checklist
4. Site Plans
5. Landscaping Plans
6. Integrated Pest Management Plan
7. Comments from the Nisqually Tribe dated
8. Comments from the Squaxin Tribe
9. Comments from the WA Dept. of Ecology
10. Comments from Thurston County Environmental Health
11. Comments from Thurston County Public Works
12. Comments from ORCAA

Mitigation Discussion

The conditions and permitting requirements will adequately address all elements of the environment as listed in WAC 197-11-444. Community Planning & Economic Development (CPED) finds that there will be no significant impact to any specific element of the environment as a result of the proposed project.

Mitigating Conditions

1. The Applicant and subsequent property owners must comply with all requirements of state and/or federal law to avoid disturbance and alteration of artifacts, remains, or other cultural resources on site during development. In the event of inadvertent disturbance or alteration, the Applicant must immediately stop work and contact the Tribe and the State Department of Archaeology and Historic Preservation. An inadvertent discovery plan is required for the project in the event that cultural resources are found during site work.

2. During construction, all releases of oils, hydraulic fluids, fuels, other petroleum products, paints, solvents, and other deleterious materials must be contained and

removed in a manner that will prevent their discharge to waters and soils of the state. The cleanup of spills should take precedence over other work on the site.

3. All activities onsite shall fully comply with noise limitations outlined in WAC 173-60.

4. All activities shall be in substantial compliance with the submitted plans.

5. Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent stormwater runoff from carrying soil and other pollutants into surface water or storm drains that lead to waters of the state. Sand, silt, clay particles, and soil will damage aquatic habitat and are considered to be pollutants. To the extent possible, land-disturbing activities associated with the project should be performed during dry weather to reduce opportunities for erosion to occur.

6. The project shall comply with the WA Dept. of Ecology Opinion on cleanup of toxic substances dated March 22, 2022.

7. WA Department of Ecology Conditions:

Sample the soil and analyze for arsenic and lead following the 2019 Tacoma Smelter Plume Guidance. The soil sampling results shall be sent to Ecology for review. If lead or arsenic are found at concentrations above the Model Toxics Control Act MTCA) cleanup levels (Chapter 173- 340 WAC); the owners, potential buyers, construction workers, and others shall be notified of their occurrence. The MTCA cleanup level for arsenic is 20 parts per million(ppm) and lead is 250 ppm. If lead, arsenic and/ or other contaminants are found at concentrations above MTCA cleanup levels, the applicant shall:
A. Develop soil remediation plan and enter into the Voluntary Cleanup Program with Ecology. For more information on the Voluntary Cleanup Program, visit Ecology website at:
https:ecology.wa.gov/Spills-Cleanup/Contaminationcleanup/Cleanup-process/Cleanup-options/Voluntary-cleanup- program.
B. Obtain an opinion letter from Ecology stating that the proposed soil remediation plan will likely result in no further action under MTCA. The applicant shall provide to the local permitting agency the opinion letter from Ecology.
C. Prior to finalizing site development permits, provide to the local land use permitting agency" No Further Action" determination from Ecology indicating that the remediation plans were successfully implemented under MTCA.

If soils are found to be contaminated with arsenic, lead, or other contaminants, extra precautions shall be taken to avoid escaping dust, soil erosion, and water pollution during grading and site construction. Site design shall include protective measures to isolate or remove contaminated soils from public spaces, yards, and children' s play areas. Contaminated soils generated during site construction shall be managed and disposed of in accordance with state and local regulations, including the Solid Waste Handling Standards regulation(Chapter 173- 350 WAC).

For information about soil disposal contact the local health department in the jurisdiction where soils will be placed.

8. The proposed project is subject to compliance with the following policies and regulations, including any applicable mitigation requirements: Thurston County Comprehensive Plan, Zoning Ordinance (TCC 20), Critical Areas Ordinance (TCC 24), Stormwater Drainage Design and Erosion Control Manual (TCC 15.05), Uniform Building Code (TCC 14), State Environmental Policy Act (SEPA) Ordinance (TCC 17.09.).

Notes:

- This permit does not include approval for stumping and grading. A separate grading / construction permit is needed for these activities.

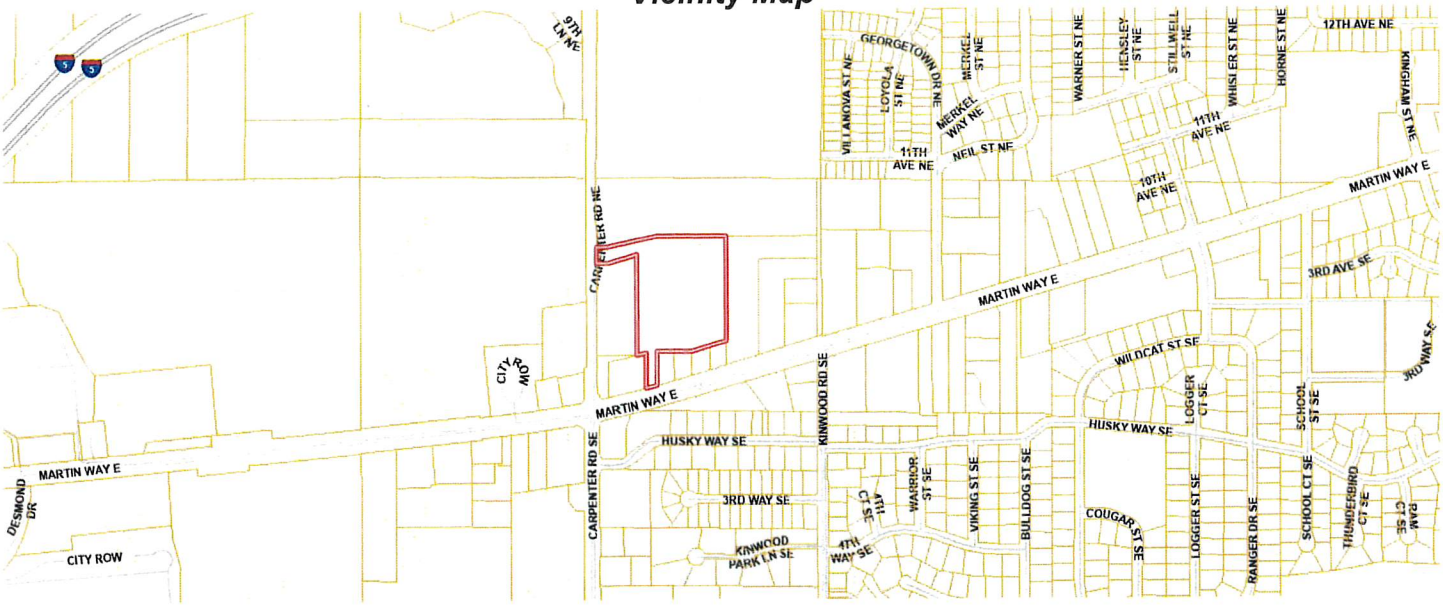
- Washington State Water Quality Laws, Chapter 90.48 RCW, Water Pollution Control and WAC 173-201A, Water Quality Standards for Surface Waters of the State of Washington, define quality of state waters. Any discharge of sediment-laden runoff or of other pollutants to waters of the state is in violation of these state laws and may be subject to enforcement action.

- This project may require a construction stormwater permit (also known as National Pollution Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction). This permit is required for projects which meet both of the following conditions:
  - One or more acres of soil surface area will be disturbed by construction activities.
  - The site already has offsite discharge to waters of the state or storm drains or will have offsite discharge during construction.

Summary

The Thurston County Community Planning & Economic Development Department has determined that the requirements for environmental analysis, protection, and mitigation have been adequately addressed in the above conditions and notes, in conjunction with the requirements of the Thurston County Critical Areas Ordinance (Title 24) and the Comprehensive Plan adopted under chapter 36.70A RCW, and in other applicable local, State, or Federal laws or rules, as provided by RCW 43.21C.240 and WAC 197-11-158. Other than the conditions listed above, this Department will not require additional mitigation measures under SEPA.

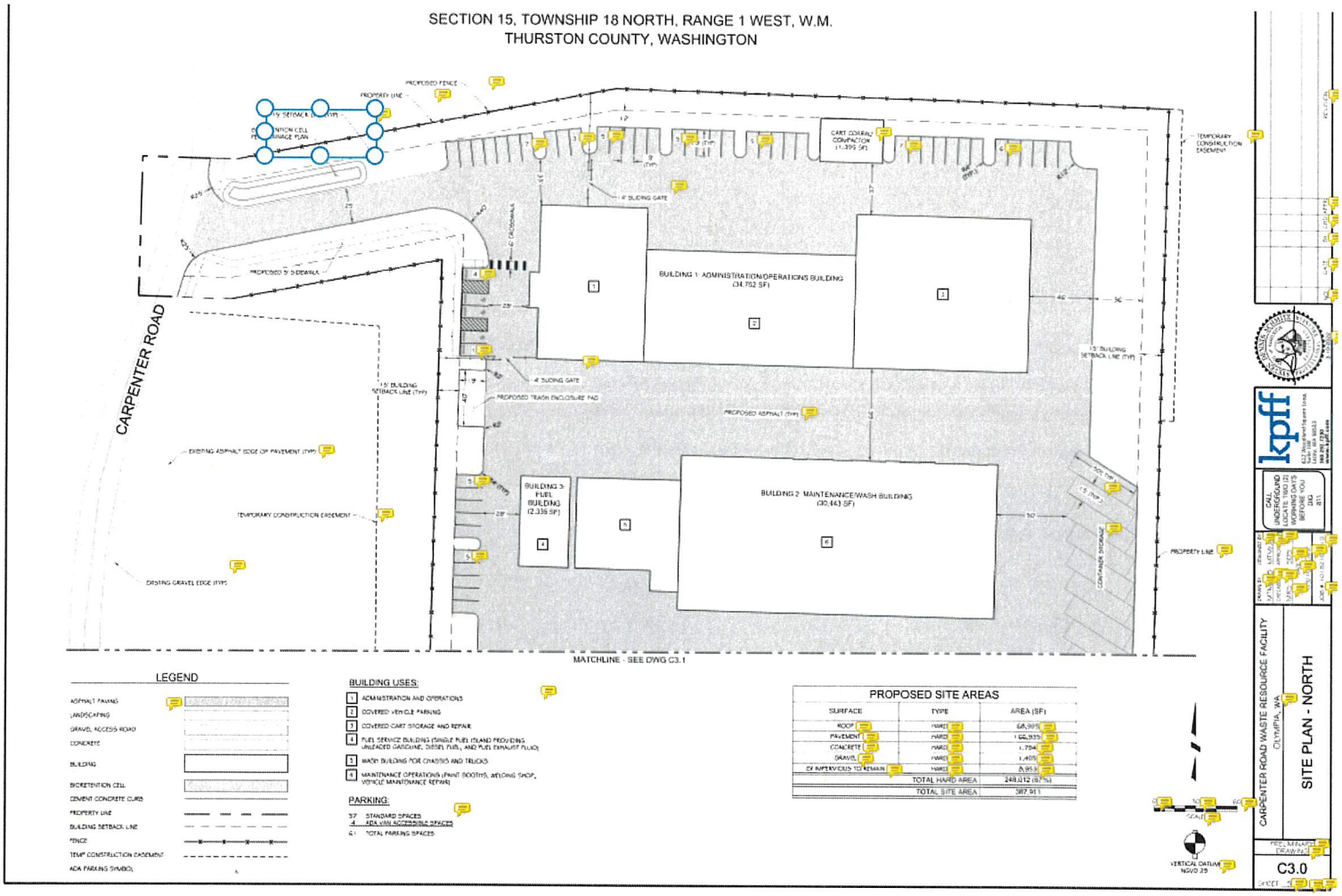
Vicinity Map



2020 Aerial Imagery



Site Plans


SECTION 15, TOWNSHIP 18 NORTH, RANGE 1 WEST, W.M.
THURSTON COUNTY, WASHINGTON
CARPENTER ROAD
BUILDING 1: ADMINISTRATION/OPERATIONS BUILDING (34,752 SF)
BUILDING 2: MAINTENANCE/WASH BUILDING (30,443 SF)
BUILDING 3: FUEL BUILDING (2,336 SF)
MATCHLINE - SEE DWG C3.1
LEGEND
BUILDING USES:
PARKING:
PROPOSED SITE AREAS
SURFACE
TYPE
AREA (SF)
TOTAL HARD AREA
TOTAL SITE AREA
CARPENTER ROAD WASTE RESOURCE FACILITY
OLYMPIA, WA
SITE PLAN - NORTH
C3.0

THURSTON COUNTY
WASHINGTON
SINCE 1852

Thurston County CPED - Bldg Dev Center
3000 Pacific Ave SE Suite 100 Olympia, WA 98501
Phone (360) 786-5490

Nonresidential Permit # 24106954

Property Tax #:	**11815210500**		
Site Address:	**6530 MARTIN WAY E**	Plans Approved By:	
City:	**OLYMPIA**	Issued Date:	**07/17/2024**
Subdivision:	Lot #:	Issued By:	**Andrew Pullar**
Sub Type:	**Warehouse**	Expire Date:	**07/17/2025**
Work Proposed:	**Demolition**		
Permit Description:	**Demolition of 18,250 SQ FT metal building**		

Applicant:	Jim Rioux/City of Olympia	Phone:(360) 753-8484
Address:	601 4th Ave E Olympia Wa 98507	
Owner:	CITY OF OLYMPIA	Phone:(360) 753-8422
Address:	PO BOX 1967 ATTN ACCOUNTS PAYABLE	
Point of Contact:	Jim Rioux/City of Olympia	Phone:(360) 753-8484
Address:	601 4th Ave E Olympia Wa 98507	

Info

Zoning: OS-I - Open Space/Institutional Jurisdiction: LACUGA
Occupancy Classification (Dominant): A-1 Square Footage Floor 1: 0

Project Conditions

- On April 8, 2014, the U.S. Fish and Wildlife Service listed the Mazama Pocket Gopher under the Endangered Species Act. The subject parcel contains potential pocket gopher habitat. It is the responsibility of the landowner to comply with applicable federal regulations. Approval of this and other County permits may be superseded by federal law. Endangered species cannot be harmed at any time, even after permit issuance. If any are found during construction, the applicant should contact the U. S. Fish and Wildlife Service (USFWS).

Access Issues:	**locked gate**
Directions:	**I5N take exit 109 continue on martin Way E until arriving at the property**

PROPERTY OWNERS ARE RESPONSIBLE FOR DETERMINING AND MARKING ALL PROPERTY LINE LOCATIONS AND RELATED EASEMENTS.

_____ I certify that I am exempt from the requirements of state contractor's registration under RCW 18.27.090

The information furnished by me is true and correct to the best of my knowledge and all work will conform to applicable Thurston County Code. I grant employees of Thurston County access to the above property and structures for review and inspection. I will call 786-5489 for applicable inspections listed on the reverse side of this form. I will read all comments on the approved plans. I will refer to the checklist for all numbers noted on the approved plans. Failure to note any code requirements is not a waiver of that requirement.

Owner/Agent/Builder:_____ **Date:**_____

Print Date: July 17, 2024

Project #: **2024102245**

Thurston County CPED - Bldg Dev Center
Nonresidential Permit # 24106954

REQUIRED INSPECTIONS

Permit # 24106954

Listed below are the required inspections for your project. To schedule, cancel or obtain results for an inspection, call the automated inspection line at (360) 786-5489. Use the corresponding code listed below to the left of the inspection when using the automated inspection line. Inspections requested by 4pm can be scheduled for the following day. Same day inspections will **not** be accepted and particular inspection times are **not** guaranteed. Please make sure you are ready **before** you schedule the inspection.

Code	Inspection Type
160	FINAL - To be made after all finished grading and the building is completed and ready for occupancy. Address must be posted on the structure to be visible from the road, if not then also placed at the road.

Print Date: July 17, 2024

Project #: **2024102245**

THURSTON COUNTY
WASHINGTON

THURSTON COUNTY BUILDING PERMIT

24-106954 BC

Nonresidential

Sub Type: Warehouse

Site: 6530 MARTIN WAY E OLYMP

Parcel: 11815210500

Applicant: City of Olympia (Jim Rioux)

Owner: CITY OF OLYMPIA

STAFF USE ONLY

Issue Date: 7-17-24

By: AD

INSPECTION CODES

INITIAL SITE WORK	442 – Erosion and Sediment Control (required prior to 111 – Footing/Posthole)	
CONCRETE	111 – Footing/Posthole	122 – Sewer
	112 – Foundation Wall	118 – Groundwork Plumbing
	116 – Underfloor	136 – Groundwork Mechanical
	124 – Strap/Hold Down	136 – LPG Test (Exterior)
	131 – Shear/Wall Nailing	164 – LPG Tank Set
DURING SITE WORK	448 – Construction BMPs (re-inspect erosion/sediment control prior to 146 – Framing)	
ROUGH IN	146 – Framing	700 – County Water Connection
	132 – Plumbing	701 – County Sewer Connection
	136 – Mechanical	714 – Special Inspection
	136 – Gas Test (interior)	
INSULATION	148 – Floor	148 – Walls
	110 – Slab	148 – Ceiling
WALL BOARD	152 – Interior Shear/Braced Walls	151 – Fire Resistance Rated Construction
FINAL	476 – Dev Rev Final Inspection	160 – Mechanical
	160 – Building	160 – Smoke Detector
	160 – Plumbing	160 – Woodstove/Fireplace

THIS STRUCTURE MAY NOT BE USED OR OCCUPIED UNTIL ALL FINAL INSPECTIONS ARE COMPLETED. IRC / IBC SECTION 110.

IMPORTANT INFORMATION

- Do not proceed beyond each stage or cover work until approval is given.
- Call for inspection at least 24 hours in advance.
- This card shall be maintained and available onsite at the time of each inspection and until final approval has been granted.
- Contractors are required to be registered with Washington State per RCW 18.27. To verify registration call (360) 902-5226.

Thurston County Building Development Center | Community Planning & Economic Development
3000 Pacific Avenue SE, Suite 100., Olympia, WA 98502 | 360-786-5490 / FAX 360-754-2939 / TDY-TDD 711 or 1-800-833-6388
For more information, visit www.thurstoncountybdc.com

PERMIT INFORMATION

- **READY FOR INSPECTION?** – All required inspections associated with your project are outlined on the printed building permit provided at time of building permit issuance. The inspections must be requested in the order shown on the permit.

- **WHO IS RESPONSIBLE FOR REQUESTING INSPECTIONS?** – The permit holder or the permit holder's agent is responsible for requesting inspections.

- **HOW DO I SCHEDULE AN INSPECTION?** – Call (360) 786-5489. Have your 8-digit permit number and the 3-digit inspection code shown on the building permit ready prior to calling. Follow the prompts and wait for a confirmation number to be assigned. Prior to requesting a final building inspection, check your permit to confirm all final conditions, if any, have been met.

- **HOW DO I CONTACT A BUILDING INSPECTOR?** – Call (360) 786-5489 between 7 and 8 a.m. Monday through Friday to speak with a building inspector. Press 0 when prompted. Messages are returned within 48 hours.

- **DO I HAVE TO BE PRESENT FOR AN INSPECTION?** – If the structure is occupied, an adult must be present during the inspection.

- **HOW DO I MAKE CHANGES TO MY PLANS?** – Visit the Building Development Center and speak with a Plans Examiner and Permit Technician. Changes to your plans may require a new permit application to be submitted and plan review fees to be paid.

- **WILL MY PERMIT EXPIRE?** – Yes. An approved building inspection must be obtained every twelve months to keep the permit active.

- **CAN I EXTEND MY PERMIT?** – Extension requests must be made prior to the permit expiring. Complete a Request for Extension of Building Permit form and submit the form and extension fee to the Building Development Center. The form is available online at www.thurstoncountybdc.com.

- **HOW CAN I RENEW MY EXPIRED PERMIT?** – Contact the Building Development Center at (360) 754-3355 ext. 7288 or by email at permit@co.thurston.wa.us to inquire about renewing your permit.

- **RE-INSPECTION WHEN CORRECTION NOTICES ARE ISSUED?** – Reinspection fees may be assessed:

  - After a re-inspection when a correction has not been made.
  - When the permit card and approved plans are not available to the inspector.
  - For failure to provide access on the date for which an inspection is requested.
  - For deviating from the plans that result in requiring approval of the change by the plans examiner.

  Inspections will continue after reinspection fees have been paid.

- **WHEN CAN I OCCUPY OR USE MY STRUCTURE?** – After the final building inspection has been completed and approved. Prior to requesting a final building inspection, all "final conditions" noted on the permit and Development Review final inspection must be completed. Carpeting, painting, interior doors, and finish work not regulated by code do not need to be completed for final inspection to occur.

Thurston County Building Development Center | Community Planning & Economic Development
3000 Pacific Avenue SE, Suite 100., Olympia, WA 98502 | 360-786-5490 / FAX 360-754-2939 / TDY-TDD 711 or 1-800-833-6388
For more information, visit **www.thurstoncountybdc.com**

Thurston County Public Works

PROJECT# 2022101139
PERMIT# 23-102296

CONSTRUCTION PERMIT

-Clearing and/or Grading Only-

PERMISSION IS HEREBY GRANTED TO: CITY OF OLYMPIA
ADDRESS:PO BOX 1967 ATTN ACCOUNTS PAYABLE OLYMPIA, WA 98507
SITE ADDRESS: 6530 MARTIN WAY E OLYMPIA WA 98516
PHONE: 3607538422

PERMIT CONDITIONS:

THIS PERMIT IS SUBJECT TO THURSTON COUNTY ROAD STANDARDS, THURSTON COUNTY DRAINAGE DESIGN & EROSION CONTROL MANUAL (DDECM), INTERNATIONAL BUILDING CODE (IBC), IBC APPENDIX J GRADING AND APPLICABLE THURSTON COUNTY CODES; AND ALL TERMS, CONDITIONS AND PROVISIONS CONTAINED ON THIS FORM AND/OR ON ANY ACCEPTED REGULAR OR ENGINEERED PLANS.

1. Property owners are responsible for determining and marking all property line locations and related easements.
2. It is the Permitee responsibility to secure the necessary rights to access and grade on private property.
3. Permitee shall ensure that all underground utilities have been identified prior to starting work by contacting the Utilities Underground Location Center by calling 1-800-424-5555 -or- 811 or going online at www.callbeforeyoudig.org.
4. All embankment material shall be select native material or imported select material. All embankment material shall be placed and compacted to 95% of the maximum density per WSDOT/APWA Standards 2-03.3(14)C. All embankments for roadways, buildings, etc. shall be placed per Method C. All other embankments shall be placed per Method A. The areas to be filled shall be cleared and grubbed prior to placing any fill material
5. On-site erosion control measures shall be the responsibility of the Contractor and shall be in place prior to beginning work and remain in place until work is completed.
6. Thurston County has the right to suspend work between October 1 and April 30 on projects where erosion and sediment are not being properly controlled (Drainage Manual – Volume I – Section 2.4.3).
7. All disturbed soils shall be seeded/mulched or otherwise stabilized before final approval.
8. **Contact both Development Review at (360) 867-2051 and the Stormwater Utility at (360) 867-2099, to schedule a pre-construction meeting with the project's inspectors. Allow at least 3 business days advance notice. Please note that this pre-construction meeting must be held <u>prior</u> to beginning <u>any</u> construction or land disturbing activity.**
9. **A FINAL INSPECTION IS REQUIRED. THIS INSPECTION SHALL BE SCHEDULED IMMEDIATELY UPON COMPLETION OF WORK.***

BY ACCEPTING THIS PERMIT AND PERFORMING THE WORK, THE PERMITTEE HEREBY STATES THAT THEY HAVE READ THE PROVISIONS APPLICABLE TO CONSTRUCTION PERMITS AS DESCRIBED ABOVE AND INCLUDED IN THE THURSTON COUNTY ROAD STANDARDS, DRAINAGE DESIGN & EROSION CONTROL MANUAL, IBC, APPENDIX J OF THE IBC AND THURSTON COUNTY CODE.

THURSTON COUNTY PUBLIC WORKS

PERMISSION PROVIDED BY: Arthur Saint, PE DATE: Wednesday May 31, 2023



Signature

Please see reverse side for the general provisions applicable to all permits.

GENERAL PROVISIONS APPLICABLE TO ALL PERMITS

In accepting this permit the permittee, his successors and assigns, agree to protect Thurston County and save it harmless from all claims, actions, or damages of every kind and description which may be suffered by any person or persons, corporation or property by reason of the performance of any such work, character of materials used or manner of installation, maintenance and operation or by improper occupancy of Right-of-Ways or public places or public structures, and in case any suit or action is brought against Thurston County for damages arising out of or by reason of any of the above causes, the petitioner, his successors and assigns will, upon notice to him or them or commencement of such action, defend the same at his or their own sole cost and expense and will satisfy any judgment after the said suit or action shall have finally been determined if adverse to Thurston County.

All the provisions, conditions, regulations and requirements shall be binding upon the successors and assigns of the permittee.

This approval does not relieve the Permitee from compliance with all other local, state and/or federal approvals, permits, and/or laws necessary to conduct the development activity for which this permit is issued. Any additional permits and/or approvals shall be the responsibility of the Permitee.

In issuing this permit, Thurston County makes no representations as to the Traffic Safety of the access location.

EXCEPT AS HEREIN AUTHORIZED, NO EXCAVATION SHALL BE MADE OR OBSTACLE PLACED WITHIN THE LIMITS OF A COUNTY ROAD IN SUCH A MANNER AS TO INTERFERE WITH THE TRAVEL OVER SAID ROAD.

Except as herein authorized, no excavation shall be made or obstacle placed within four (4.0) feet of the edge of the pavement.

All materials and workmanship shall be in accordance with the requirements of the most current edition of the State of Washington, Department of Transportation Standard Specifications for Road and Bridge Construction, IBC and Thurston County Road Standards.

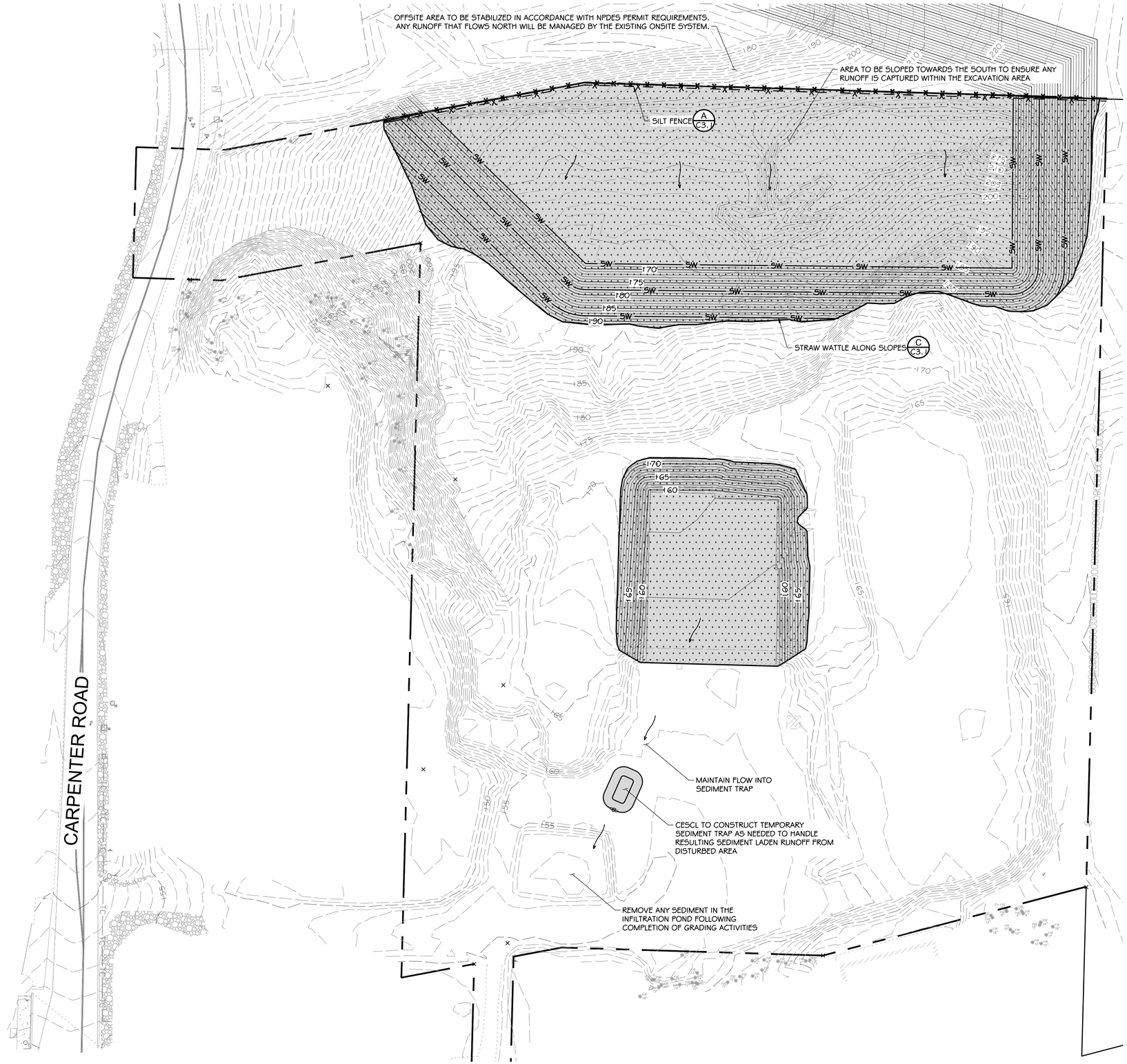
No fill shall be placed during periods of unfavorable weather or while the fill is frozen or thawing. When work is stopped by rain, placement of fill shall not resume until the geothechical firm determines that the moisture content is suitable for the required compactive effort. The contractor shall be responsible for removal and reworking any fill that has softened or has less than the required compaction. All disturbed soils shall be seeded, mulched or otherwise protected from sheet washing as soon as possible.

If work done under this permit interferes in any way with the drainage of the County roads, the grantee shall wholly and at his own expense make such provisions as the Public Works Director or his authorized representative may direct to take care of said drainage.

All road surfaces, slopes, ditches, pipes, etc., disturbed and/or damaged by the operation shall be restored to their original condition and cross-section.

The County Commissioners may revoke, annul, change, amend, amplify, or terminate this permit or any of the conditions herein enumerated if the grantee fails to comply with any or all of its provisions, requirements, or regulations, as herein set forth or through willful or unreasonable neglect, fails to heed or comply with notices given or if the utility herein granted is not installed or operated and maintained in conformity herewith or at all or from any cause or reason whatsoever.

PLOTTED: May 22, 2023 - 15:58:55 PLOTTED BY: jessicam
FILE: I:\2021\1018210110 - City of Olympia WWF SUP (see 1018190090 to store docs)\CADD\DWG\GRADING PLAN SET\C5.0 - ITERIM SITE STABILITY PLAN.dwg



LEGEND

- PROPERTY LINE
- C C3.1 STRAW WATTLE (SW)
- A C3.1 SILT FENCE
- HYDROSEED
- FLOW ARROW

STABILITY NOTES:

1. STRAW WATTLES SHALL BE PLACED ON SLOPES IN NORTHERN GRADING AREA TO STABILIZE SLOPES AND REDUCE VELOCITY OF RUNOFF DOWN THE SLOPE.
2. SEEDING AND MULCHING SHALL BE UTILIZED TO STABILIZE SOILS AND PROTECT SLOPES.
3. ALL GRADED AREAS WITH SLOPES STEEPER THAN 3H:1V SHALL BE ROUGHENED TO A DEPTH OF 2"-4" PRIOR TO SEEDING. THIS CAN BE ACCOMPLISHED IN A VARIETY OF WAYS, INCLUDING "TRACK WALKING", OR DRIVING A CRAWLER TRACTOR UP AND DOWN THE SLOPE, LEAVING A CLEAT OF IMPRINTS PARALLEL TO SLOPE CONTOURS.
4. HYDROSEED APPLICATIONS IN ACCORDANCE WITH BMP C120 SHALL INCLUDE A MINIMUM OF 1,500 POUNDS PER ACRE OF MULCH WITH 3% TACKIFIER. DIVIDE THE HYDROMULCH OPERATION INTO TWO PHASES:
   - PHASE 1: INSTALL ALL SEED AND FERTILIZER WITH 25-30 PERCENT MULCH AND TACKIFIER ONTO SOIL IN THE FIRST LIFT.
   - PHASE 2: INSTALL THE REST OF THE MULCH AND TACKIFIER OVER THE FIRST LIFT.

PERMANENT SEED MIX				
COMMON NAME	LATIN NAME	% WEIGHT	% PURITY	% GERMINATION
CHEWINGS OR ANNUAL BLUE GRASS	FESTUCA RUBRA VAR. COMMUNTATA OR POA ANNA	40	98	90
PERENNIAL RYE	LOLIUM PERENNE	50	98	90
REDTOP OR COLONIAL BENTGRASS	AGRISTIS ALBA OR AGROSTIS TENUIS	5	92	85
WHITE DUTCH CLOVER	TRIFOLIUM REPENS	5	98	90

ABBREVIATED DRAINAGE PLAN
ACCEPTED AS NOTED
THURSTON COUNTY
DEVELOPMENT REVIEW SECTION
BY: _____
DO NOT PURGE FROM FILE

N

0 40 80
SCALE

VERTICAL DATUM
NGVD 29

NO	DATE	BY	CHD	APPR	REVISION

STEVEN DENNIS SCHMITZ — 48258 — REGISTERED PROFESSIONAL ENGINEER — STATE OF WASHINGTON — 5-22-2023

kpff
612 Woodland Square Loop, Suite 200
Lacey, WA 98503
360.292.7230
www.kpff.com

CALL UNDERGROUND LOCATE TWO (2) WORKING DAYS BEFORE YOU DIG 811

DESIGNED BY	APPROVED BY
JM	SDS
DRAWN BY	DATE
JM	5-22-2023
CHECKED BY	JOB NO: 0182100110
SDS	

CARPENTER ROAD WASTE RESOURCE FACILITY
LACEY, WA

INTERIM SITE STABILITY PLAN

DRAWING
C5.0
SHEET 8 OF 7

DATE: April 20, 2022

TO: Frank Winslow, Department of Ecology, Toxics Cleanup Program

FROM: Josh Morman, Department of Ecology, Toxics Cleanup Program

SUBJECT: Washington State Governor's Executive Order 21-02
Carpenter Road, Olympia
Department of Archaeology and Historic Preservation State Archaeologist Project 2022-03-01576
Final Determination of Low Cultural Resource Impact

Area of Potential Impact and Project Activities
The Washington State Department of Ecology proposes to fund the following VCP project to conduct cleanup actions at 6530 Martin Way East, Olympia, in Thurston County.

The purpose of this project is to demolish a building and excavate contaminated soil near the building. The contaminated soil will be moved to an offsite location for disposal and the area will be re-graded as needed. Ecology has completed the Ecology Form 05-05/106, describing the area of potential impact and ground disturbing activities.

The area of potential impact is approximately 18,250 square feet of area located on a former indoor gun range. The project activities include removal of lead contaminated soil both inside and outside the footprint of the existing structure and removal of the structure. The excavation will be up to 18in below ground surface and remove up to 500 cubic yards of soil.

Final Determination
Ecology made a Preliminary Determination of Low Risk of Cultural Resource Impact and provided an opportunity for comments. The preliminary determination and request for consultation was sent via email to the following parties on March 21, 2022:

- Rob Whitlam, Department of Archaeology and Historic Preservation
- Shaun Dinubilo, Squaxin Island Tribe
- Brad Beach and Annette Bullchild, Nisqually Tribe
- Brandon Reynon and Jennifer Keating, Puyallup Tribe
- Jackie Ferry, Samish Tribe
- William Thoms, Confederated Tribes of the Chehalis Reservation
- Seth Russell, Cowlitz Tribe

We received comments from Rob Whitlam on March 21, 2022 that concurred with the determination of low risk of cultural resource impacts, with the stipulation that an IDP must be given to all site workers. Additionally the Squaxin and Nisqually tribes offered comments concurring with Ecology.

Based on our review and comments received, Ecology is retaining the earlier determination of ***Low Risk of Cultural Resources Impact***.

To avoid cultural resources impacts Ecology is requiring an Inadvertent Discovery Plan (IDP) will be issued to everyone performing cleanup work for the proposed project. In the event that archaeological deposits are inadvertently discovered during construction, ground-disturbing activities should be halted immediately in an area large enough to maintain integrity of the deposits. The DAHP, affected tribes, and Ecology must be notified. Appropriate treatment of the archaeological resources and/or human remains would be determined among these parties.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

June 28, 2023

Jim Rioux
City of Olympia Public Works
PO Box 1967
Olympia, WA 98507

RE: Coverage under the Construction Stormwater General Permit

Permit number:	**WAR312374**
Site Name:	**Waste Resources Operations Facility**
Location:	**6530 Martin Way E**
	Olympia, WA County: Thurston
Disturbed Acres:	**8.45**

Dear Jim Rioux:

The Washington State Department of Ecology (Ecology) received your Notice of Intent for coverage under Ecology's Construction Stormwater General Permit (CSWGP). This is your permit coverage letter. Your permit coverage is effective June 28, 2023.

Retain this letter as an official record of permit coverage for your site. You may keep your records in electronic format if you can easily access them from your construction site. You can get the CSWGP, permit forms, and other information at Ecology's CSWGP eCoverage Packet webpage[1]. Contact your Permit Administrator, listed below, if you want a copy of the CSWGP mailed to you. Please read the permit and contact Ecology if you have any questions.

Electronic Discharge Monitoring Reports (WQWebDMR)
This permit requires you to submit monthly discharge monitoring reports (DMRs) for the full duration of permit coverage (from the first full month of coverage to termination). Your first sampling and reporting period will be for the month of **July 2023** and your first DMR must be submitted by **August 15, 2023**.

You must submit your DMRs electronically using Ecology's secure online system, WQWebDMR. To sign up for WQWebDMR go to Ecology's WQWebPortal guidance webpage[2]. If you have

[1] http://www.ecology.wa.gov/eCoverage-packet
[2] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance

questions, contact the portal staff at (360) 407-7097 (Olympia area), or (800) 633-6193/Option 3, or email WQWebPortal@ecy.wa.gov.

Appeal Process
You have a right to appeal coverage under the general permit to the Pollution Control Hearing Board (PCHB). Appeals must be filed within 30 days of the date of receipt of this letter. Any appeal is limited to the general permit's applicability or non-applicability to a specific discharger. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2). For more information regarding your right to appeal, please reference Ecology's Focus Sheet: *Appeal of General Permit Coverage*[3].

Annual Permit Fees
RCW 90.48.465 requires Ecology to recover the costs of managing the permit program. Permit fees are invoiced annually until the permit is terminated. Termination conditions are described in the permit. For permit fee related questions, please contact the Water Quality Fee Unit at wqfeeunit@ecy.wa.gov or (800) 633-6193/Option 2. You can also visit Water Quality Permit Fees Webpage[4] for more information.

Ecology Field Inspector Assistance
If you have questions regarding stormwater management at your construction site, please contact your Regional Inspector, Evan Wood of Ecology's Southwest Regional Office in Lacey at evan.wood@ecy.wa.gov, or (360) 706-4599.

Questions or Additional Information
Ecology is here to help. Please review our Construction Stormwater General Permit webpage[5] for more information. If you have questions about the Construction Stormwater General Permit, please contact your Permit Administrator, Josh Klimek at josh.klimek@ecy.wa.gov, or (360) 407-7451.

Sincerely,

Jeff Killelea, Manager
Program Development Services Section
Water Quality Program

[3] https://apps.ecology.wa.gov/publications/summarypages/1710007.html
[4] https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-quality-permits/Fees
[5] www.ecology.wa.gov/constructionstormwaterpermit

Appendix B

Laboratory Reports for Verification Soil Samples

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 3, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-021

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 2, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 3, 2024
Samples Submitted: October 2, 2024
Laboratory Reference: 2410-021
Project: 0415-068-11

Case Narrative

Samples were collected on October 1, 2024 and received by the laboratory on October 2, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 3, 2024
Samples Submitted: October 2, 2024
Laboratory Reference: 2410-021
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B001	10-021-01	Soil	10-1-24	10-2-24	
B002	10-021-02	Soil	10-1-24	10-2-24	
B003	10-021-03	Soil	10-1-24	10-2-24	
B004	10-021-04	Soil	10-1-24	10-2-24	
S001	10-021-05	Soil	10-1-24	10-2-24	
S002	10-021-06	Soil	10-1-24	10-2-24	
S003	10-021-07	Soil	10-1-24	10-2-24	
S004	10-021-08	Soil	10-1-24	10-2-24	
S005	10-021-09	Soil	10-1-24	10-2-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 3, 2024
Samples Submitted: October 2, 2024
Laboratory Reference: 2410-021
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B001**					
Laboratory ID:	10-021-01					
Lead	**ND**	5.3	EPA 6010D	10-2-24	10-2-24	
Client ID:	**B002**					
Laboratory ID:	10-021-02					
Lead	**ND**	5.3	EPA 6010D	10-2-24	10-2-24	
Client ID:	**B003**					
Laboratory ID:	10-021-03					
Lead	**57**	5.3	EPA 6010D	10-2-24	10-2-24	
Client ID:	**B004**					
Laboratory ID:	10-021-04					
Lead	**ND**	5.2	EPA 6010D	10-2-24	10-2-24	
Client ID:	**S001**					
Laboratory ID:	10-021-05					
Lead	**13**	5.4	EPA 6010D	10-2-24	10-2-24	
Client ID:	**S002**					
Laboratory ID:	10-021-06					
Lead	**ND**	5.4	EPA 6010D	10-2-24	10-2-24	
Client ID:	**S003**					
Laboratory ID:	10-021-07					
Lead	**11**	5.3	EPA 6010D	10-2-24	10-2-24	
Client ID:	**S004**					
Laboratory ID:	10-021-08					
Lead	**24**	5.2	EPA 6010D	10-2-24	10-2-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 3, 2024
Samples Submitted: October 2, 2024
Laboratory Reference: 2410-021
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S005**					
Laboratory ID:	10-021-09					
Lead	**20**	5.3	EPA 6010D	10-2-24	10-2-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 3, 2024
Samples Submitted: October 2, 2024
Laboratory Reference: 2410-021
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1002SM1					
Lead	**ND**	5.0	EPA 6010D	10-2-24	10-2-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	09-311-03										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	09-311-03										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**256**	**254**	250	250	ND	**103**	**102**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 3, 2024
Samples Submitted: October 2, 2024
Laboratory Reference: 2410-021
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B001	10-021-01	**5**	10-2-24
B002	10-021-02	**6**	10-2-24
B003	10-021-03	**5**	10-2-24
B004	10-021-04	**3**	10-2-24
S001	10-021-05	**7**	10-2-24
S002	10-021-06	**7**	10-2-24
S003	10-021-07	**6**	10-2-24
S004	10-021-08	**4**	10-2-24
S005	10-021-09	**5**	10-2-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GED ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD.
Project Manager: Abhijit Joshi
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-021

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1	B001	10/1/24	1030	S	1															X							X
2	B002		1350	S	1															X							
3	B003		1345	S	1															X							
4	B004		1340	S	1															X							
5	S001		1035	S	1															X							
6	S002		1040	S	1															X							
7	S003		1315	S	1															X							
8	S004		1320	S	1															X							
9	S005	↓	1325	S	1															X							↓

	Signature	Company	Date	Time
Relinquished	[signature]	GED	10/2/24	915
Received	Van	Spdy	10/2/24	0915
Relinquished	Van	Spdy	10/2/24	1200
Received	[signature]	OTE	10/2/24	1200
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 4, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-052

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 3, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 4, 2024
Samples Submitted: October 3, 2024
Laboratory Reference: 2410-052
Project: 0415-068-11

Case Narrative

Samples were collected on October 2 and 3, 2024 and received by the laboratory on October 3, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 4, 2024
Samples Submitted: October 3, 2024
Laboratory Reference: 2410-052
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B005	10-052-01	Soil	10-2-24	10-3-24	
B006	10-052-02	Soil	10-2-24	10-3-24	
B007	10-052-03	Soil	10-2-24	10-3-24	
B008	10-052-04	Soil	10-2-24	10-3-24	
S006	10-052-05	Soil	10-2-24	10-3-24	
S007	10-052-06	Soil	10-2-24	10-3-24	
S008	10-052-07	Soil	10-2-24	10-3-24	
S009	10-052-08	Soil	10-2-24	10-3-24	
S010	10-052-09	Soil	10-2-24	10-3-24	
S011	10-052-10	Soil	10-2-24	10-3-24	
DUP001	10-052-11	Soil	10-2-24	10-3-24	
S012	10-052-12	Soil	10-3-24	10-3-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 4, 2024
Samples Submitted: October 3, 2024
Laboratory Reference: 2410-052
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B005**					
Laboratory ID:	10-052-01					
Lead	**200**	5.3	EPA 6010D	10-4-24	10-4-24	
Client ID:	**B006**					
Laboratory ID:	10-052-02					
Lead	**14**	5.2	EPA 6010D	10-4-24	10-4-24	
Client ID:	**B007**					
Laboratory ID:	10-052-03					
Lead	**ND**	5.3	EPA 6010D	10-4-24	10-4-24	
Client ID:	**B008**					
Laboratory ID:	10-052-04					
Lead	**9.2**	5.4	EPA 6010D	10-4-24	10-4-24	
Client ID:	**S006**					
Laboratory ID:	10-052-05					
Lead	**130**	5.3	EPA 6010D	10-4-24	10-4-24	
Client ID:	**S007**					
Laboratory ID:	10-052-06					
Lead	**ND**	5.2	EPA 6010D	10-4-24	10-4-24	
Client ID:	**S008**					
Laboratory ID:	10-052-07					
Lead	**ND**	5.4	EPA 6010D	10-4-24	10-4-24	
Client ID:	**S009**					
Laboratory ID:	10-052-08					
Lead	**300**	5.3	EPA 6010D	10-4-24	10-4-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 4, 2024
Samples Submitted: October 3, 2024
Laboratory Reference: 2410-052
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S010**					
Laboratory ID:	10-052-09					
Lead	**ND**	5.2	EPA 6010D	10-4-24	10-4-24	
Client ID:	**S011**					
Laboratory ID:	10-052-10					
Lead	**1300**	5.3	EPA 6010D	10-4-24	10-4-24	
Client ID:	**DUP001**					
Laboratory ID:	10-052-11					
Lead	**ND**	5.2	EPA 6010D	10-4-24	10-4-24	
Client ID:	**S012**					
Laboratory ID:	10-052-12					
Lead	**6.2**	5.1	EPA 6010D	10-4-24	10-4-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 4, 2024
Samples Submitted: October 3, 2024
Laboratory Reference: 2410-052
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1004SM1					
Lead	**ND**	5.0	EPA 6010D	10-4-24	10-4-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-035-01										
	ORIG	DUP									
Lead	**14.4**	**14.4**	NA	NA		NA		NA	0	20	
MATRIX SPIKES											
Laboratory ID:	10-035-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**257**	**259**	250	250	14.4	**97**	**98**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 4, 2024
Samples Submitted: October 3, 2024
Laboratory Reference: 2410-052
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B005	10-052-01	**5**	10-3-24
B006	10-052-02	**4**	10-3-24
B007	10-052-03	**6**	10-3-24
B008	10-052-04	**7**	10-3-24
S006	10-052-05	**5**	10-3-24
S007	10-052-06	**4**	10-3-24
S008	10-052-07	**7**	10-3-24
S009	10-052-08	**6**	10-3-24
S010	10-052-09	**3**	10-3-24
S011	10-052-10	**6**	10-3-24
DUP001	10-052-11	**4**	10-3-24
S012	10-052-12	**3**	10-3-24

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 10-052

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals*	TCLP Metals #	HEM (oil and grease) 1664				% Moisture
1	B005	10/2/24	1010	S	1															X	X					X
2	B006		1015	S	1															X						X
3	B007		1020	S	1															X						X
4	B008		1025	S	1															X						X
5	S006		1045	S	1															X						X
6	S007		1050	S	1															X						X
7	S008		1030	S	1															X						X
8	S009		1035	S	1															X						X
9	S010		1005	S	1															X						X
10	S011		1000	S	1															X						X

	Signature	Company	Date	Time
Relinquished	Paul Robinette	GEI	10/3/24	830
Received	Van	Spdy	10/3/24	0830
Relinquished	Van	Spdy	10/3/24	1125
Received	Kristen Prell	OSE	10/3/24	1125
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robideste

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-052

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
11	DUP001	10/2/24	0600	S	1															X							X
12	SO12	10/3/24	0700	S	1															X							X

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	10/3/24	1530
Received	Van	Spdy	10/3/24	0830
Relinquished	Van	Spdy	10/3/24	1125
Received	Aidan Prell	OSE	10/3/24	1125
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 8, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-103

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 7, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

Case Narrative

Samples were collected on October 3, 2024 and received by the laboratory on October 7, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B009	10-103-01	Soil	10-3-24	10-7-24	
B010	10-103-02	Soil	10-3-24	10-7-24	
B011	10-103-03	Soil	10-3-24	10-7-24	
B012	10-103-04	Soil	10-3-24	10-7-24	
B013	10-103-05	Soil	10-3-24	10-7-24	
B014	10-103-06	Soil	10-3-24	10-7-24	
S013	10-103-07	Soil	10-3-24	10-7-24	
S014	10-103-08	Soil	10-3-24	10-7-24	
S015	10-103-09	Soil	10-3-24	10-7-24	
S016	10-103-10	Soil	10-3-24	10-7-24	
S017	10-103-11	Soil	10-3-24	10-7-24	
S018	10-103-12	Soil	10-3-24	10-7-24	
S019	10-103-13	Soil	10-3-24	10-7-24	
S020	10-103-14	Soil	10-3-24	10-7-24	
S021	10-103-15	Soil	10-3-24	10-7-24	
S022	10-103-16	Soil	10-3-24	10-7-24	
S023	10-103-17	Soil	10-3-24	10-7-24	
S024	10-103-18	Soil	10-3-24	10-7-24	
S025	10-103-19	Soil	10-3-24	10-7-24	
S026	10-103-20	Soil	10-3-24	10-7-24	
S027	10-103-21	Soil	10-3-24	10-7-24	
S028	10-103-22	Soil	10-3-24	10-7-24	
S029	10-103-23	Soil	10-3-24	10-7-24	
DUP002	10-103-24	Soil	10-3-24	10-7-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B009**					
Laboratory ID:	10-103-01					
Lead	**7.9**	5.4	EPA 6010D	10-7-24	10-8-24	
Client ID:	**B010**					
Laboratory ID:	10-103-02					
Lead	**13**	5.5	EPA 6010D	10-7-24	10-8-24	
Client ID:	**B011**					
Laboratory ID:	10-103-03					
Lead	**7.5**	5.4	EPA 6010D	10-7-24	10-8-24	
Client ID:	**B012**					
Laboratory ID:	10-103-04					
Lead	**ND**	5.5	EPA 6010D	10-7-24	10-8-24	
Client ID:	**B013**					
Laboratory ID:	10-103-05					
Lead	**ND**	5.4	EPA 6010D	10-7-24	10-8-24	
Client ID:	**B014**					
Laboratory ID:	10-103-06					
Lead	**77**	5.4	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S013**					
Laboratory ID:	10-103-07					
Lead	**ND**	5.6	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S014**					
Laboratory ID:	10-103-08					
Lead	**61**	5.3	EPA 6010D	10-7-24	10-8-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S015**					
Laboratory ID:	10-103-09					
Lead	**210**	5.5	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S016**					
Laboratory ID:	10-103-10					
Lead	**ND**	5.2	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S017**					
Laboratory ID:	10-103-11					
Lead	**14**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S018**					
Laboratory ID:	10-103-12					
Lead	**ND**	5.5	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S019**					
Laboratory ID:	10-103-13					
Lead	**160**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S020**					
Laboratory ID:	10-103-14					
Lead	**61**	5.2	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S021**					
Laboratory ID:	10-103-15					
Lead	**43**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S022**					
Laboratory ID:	10-103-16					
Lead	**ND**	5.3	EPA 6010D	10-7-24	10-8-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S023**					
Laboratory ID:	10-103-17					
Lead	**ND**	5.6	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S024**					
Laboratory ID:	10-103-18					
Lead	**ND**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S025**					
Laboratory ID:	10-103-19					
Lead	**ND**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S026**					
Laboratory ID:	10-103-20					
Lead	**ND**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S027**					
Laboratory ID:	10-103-21					
Lead	**7.2**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S028**					
Laboratory ID:	10-103-22					
Lead	**6.1**	5.4	EPA 6010D	10-7-24	10-8-24	
Client ID:	**S029**					
Laboratory ID:	10-103-23					
Lead	**ND**	5.3	EPA 6010D	10-7-24	10-8-24	
Client ID:	**DUP002**					
Laboratory ID:	10-103-24					
Lead	**ND**	5.2	EPA 6010D	10-7-24	10-8-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1007SM3					
Lead	**ND**	5.0	EPA 6010D	10-7-24	10-8-24	
Laboratory ID:	MB1007SM4					
Lead	**ND**	5.0	EPA 6010D	10-7-24	10-8-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-103-04										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	10-103-23										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-103-04										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**236**	**238**	250	250	ND	**95**	**95**	75-125	1	20	
Laboratory ID:	10-103-23										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**231**	**228**	250	250	ND	**92**	**91**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 8, 2024
Samples Submitted: October 7, 2024
Laboratory Reference: 2410-103
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B009	10-103-01	**8**	10-7-24
B010	10-103-02	**9**	10-7-24
B011	10-103-03	**8**	10-7-24
B012	10-103-04	**9**	10-7-24
B013	10-103-05	**7**	10-7-24
B014	10-103-06	**7**	10-7-24
S013	10-103-07	**10**	10-7-24
S014	10-103-08	**5**	10-7-24
S015	10-103-09	**9**	10-7-24
S016	10-103-10	**4**	10-7-24
S017	10-103-11	**5**	10-7-24
S018	10-103-12	**8**	10-7-24
S019	10-103-13	**6**	10-7-24
S020	10-103-14	**4**	10-7-24
S021	10-103-15	**5**	10-7-24
S022	10-103-16	**5**	10-7-24
S023	10-103-17	**10**	10-7-24
S024	10-103-18	**6**	10-7-24
S025	10-103-19	**5**	10-7-24
S026	10-103-20	**5**	10-7-24
S027	10-103-21	**6**	10-7-24
S028	10-103-22	**7**	10-7-24
S029	10-103-23	**5**	10-7-24
DUP002	10-103-24	**5**	10-7-24

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 10-103

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~HTCA~~ Metals	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
1	B009	10/03/24	900	S	1															x							10
2	B010	10/03/24	905	S	1															x							
3	B011	10/03/24	1145	S	1															x							
4	B012	10/03/24	1150	S	1															x							
5	B013	10/03/24	1200	S	1															x							
6	B014	10/03/24	1205	S	1															x							
7	S013	10/03/24	910	S	1															x							
8	S014	10/03/24	915	S	1															x							
9	S015	10/03/24	920	S	1															x							
10	S016	10/03/24	925	S	1															x							

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished	[signature]	GEI	10/7/24	0900	*Lead Only
Received	Van	Spdy	10/7/24	0900	
Relinquished	Van	Spdy	10/7/24	1053	
Received	[signature]	GEI	10/7/24	1053	
Relinquished					
Received					Data Package: Standard ☐ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-103

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~HTCA~~ Metals *	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
11	S017	10/03/24	930	S	1															X							10
12	S018	10/03/24	950	S	1															X							
13	S019	10/03/24	935	S	1															X							
14	S020	10/03/24	940	S	1															X							
15	S021	10/03/24	945	S	1															X							
16	S022	10/03/24	1120	S	1															X							
17	S023	10/03/24	1125	S	1															X							
18	S024	10/03/24	1130	S	1															X							
19	S025	10/03/24	1135	S	1															X							
20	S026	10/03/24	1140	S	1															X							

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	10/7/24	0900
Received	Van	Stdy	10/7/24	0900
Relinquished	Van	Stdy	10/7/24	1053
Received	[signature]	OTE	10/7/24	1053
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 10-103

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~HTCA~~ Metals	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
21	S027	10/03/24	1210	S	1															X							8
22	S028	10/03/24	1225	S	1															X							
23	S029	10/03/24	1230	S	1															X							
24	DUP002	10/03/24	0600	S	1															X							

	Signature	Company	Date	Time
Relinquished		GEI	10/7/24	0900
Received	Van	SPLV	10/7/24	0900
Relinquished	Van	SPLV	10/7/24	1053
Received			10/7/24	1053
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 17, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-217

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 16, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

Case Narrative

Samples were collected on October 15, 2024 and received by the laboratory on October 16, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S030	10-217-01	Soil	10-15-24	10-16-24	
S031	10-217-02	Soil	10-15-24	10-16-24	
S032	10-217-03	Soil	10-15-24	10-16-24	
S009-1	10-217-04	Soil	10-15-24	10-16-24	
SP-WT-1	10-217-05	Soil	10-15-24	10-16-24	
SP-WT-2	10-217-06	Soil	10-15-24	10-16-24	
SP-WT-3	10-217-07	Soil	10-15-24	10-16-24	
SP-WT-4	10-217-08	Soil	10-15-24	10-16-24	
SP-WT-5	10-217-09	Soil	10-15-24	10-16-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S030**					
Laboratory ID:	10-217-01					
Lead	**7.8**	5.3	EPA 6010D	10-16-24	10-16-24	
Client ID:	**S031**					
Laboratory ID:	10-217-02					
Lead	**37**	5.3	EPA 6010D	10-16-24	10-16-24	
Client ID:	**S032**					
Laboratory ID:	10-217-03					
Lead	**13**	5.2	EPA 6010D	10-16-24	10-16-24	
Client ID:	**S009-1**					
Laboratory ID:	10-217-04					
Lead	**190**	5.2	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-1**					
Laboratory ID:	10-217-05					
Lead	**4700**	53	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-2**					
Laboratory ID:	10-217-06					
Lead	**15000**	54	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-3**					
Laboratory ID:	10-217-07					
Lead	**13000**	53	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-4**					
Laboratory ID:	10-217-08					
Lead	**4500**	53	EPA 6010D	10-16-24	10-16-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-WT-5**					
Laboratory ID:	10-217-09					
Lead	**12000**	53	EPA 6010D	10-16-24	10-16-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-WT-1**					
Laboratory ID:	10-217-05					
Lead	**ND**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-2**					
Laboratory ID:	10-217-06					
Lead	**0.27**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-3**					
Laboratory ID:	10-217-07					
Lead	**0.99**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-4**					
Laboratory ID:	10-217-08					
Lead	**ND**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-5**					
Laboratory ID:	10-217-09					
Lead	**1.2**	0.20	EPA 6010D	10-17-24	10-17-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1016SM1					
Lead	**ND**	5.0	EPA 6010D	10-16-24	10-16-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-209-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-209-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**242**	**242**	250	250	ND	**97**	**97**	75-125	0	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1017TM1					
Lead	**ND**	0.20	EPA 6010D	10-17-24	10-17-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-160-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-160-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**8.77**	**8.48**	10.0	10.0	ND	**88**	**85**	75-125	3	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S030	10-217-01	**6**	10-16-24
S031	10-217-02	**6**	10-16-24
S032	10-217-03	**5**	10-16-24
S009-1	10-217-04	**4**	10-16-24
SP-WT-1	10-217-05	**6**	10-16-24
SP-WT-2	10-217-06	**7**	10-16-24
SP-WT-3	10-217-07	**5**	10-16-24
SP-WT-4	10-217-08	**6**	10-16-24
SP-WT-5	10-217-09	**5**	10-16-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 10-217

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total ~~MTCA~~ Metals * LEAD	TCLP Metals * LEAD	HEM (oil and grease) 1664					% Moisture
1	S030	10/15/24	1040	S	1															X							
2	S031		1005	S	1															X							
3	S032		1010	S	1															X							
4	~~B009-1~~ S009-1		950	S	1															X							
5	SP-INT-1		1315	S	1															X	X						
6	SP-INT-2		1320	S	1															X	X						
7	SP-INT-3		1325	S	1															X	X						
8	SP-INT-4		1330	S	1															X	X						
9	SP-INT-5	↓	1335	S	1															X	X						

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		GE	10.16.24	0910	* LEAD ONLY
Received	Vani	Spdy	10/16/24	0910	
Relinquished	Vani	Spdy	10/16/24	1150	
Received		GE	10/16/24	1150	
Relinquished					
Received					Data Package: Standard ☐ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 31, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-391

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 30, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

Case Narrative

Samples were collected on October 30, 2024 and received by the laboratory on October 30, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B015	10-391-01	Soil	10-24-24	10-30-24	
B016	10-391-02	Soil	10-24-24	10-30-24	
B017	10-391-03	Soil	10-24-24	10-30-24	
B018	10-391-04	Soil	10-24-24	10-30-24	
B019	10-391-05	Soil	10-24-24	10-30-24	
B020	10-391-06	Soil	10-24-24	10-30-24	
B021	10-391-07	Soil	10-24-24	10-30-24	
S033	10-391-08	Soil	10-24-24	10-30-24	
S034	10-391-09	Soil	10-24-24	10-30-24	
S035	10-391-10	Soil	10-24-24	10-30-24	
S036	10-391-11	Soil	10-24-24	10-30-24	
S037	10-391-12	Soil	10-24-24	10-30-24	
S038	10-391-13	Soil	10-24-24	10-30-24	
S039	10-391-14	Soil	10-24-24	10-30-24	
S040	10-391-15	Soil	10-24-24	10-30-24	
S041	10-391-16	Soil	10-24-24	10-30-24	
S042	10-391-17	Soil	10-24-24	10-30-24	
S043	10-391-18	Soil	10-24-24	10-30-24	
S044	10-391-19	Soil	10-24-24	10-30-24	
S045	10-391-20	Soil	10-24-24	10-30-24	
DUP003	10-391-21	Soil	10-24-24	10-30-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B015**					
Laboratory ID:	10-391-01					
Lead	**ND**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**B016**					
Laboratory ID:	10-391-02					
Lead	**85**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**B017**					
Laboratory ID:	10-391-03					
Lead	**9.9**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**B018**					
Laboratory ID:	10-391-04					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**B019**					
Laboratory ID:	10-391-05					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**B020**					
Laboratory ID:	10-391-06					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**B021**					
Laboratory ID:	10-391-07					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S033**					
Laboratory ID:	10-391-08					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S034**					
Laboratory ID:	10-391-09					
Lead	**ND**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S035**					
Laboratory ID:	10-391-10					
Lead	**30**	5.6	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S036**					
Laboratory ID:	10-391-11					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S037**					
Laboratory ID:	10-391-12					
Lead	**11**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S038**					
Laboratory ID:	10-391-13					
Lead	**11**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S039**					
Laboratory ID:	10-391-14					
Lead	**22**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S040**					
Laboratory ID:	10-391-15					
Lead	**9.8**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S041**					
Laboratory ID:	10-391-16					
Lead	**ND**	5.4	EPA 6010D	10-31-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S042**					
Laboratory ID:	10-391-17					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S043**					
Laboratory ID:	10-391-18					
Lead	**8.4**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S044**					
Laboratory ID:	10-391-19					
Lead	**7.4**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S045**					
Laboratory ID:	10-391-20					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**DUP003**					
Laboratory ID:	10-391-21					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1031SM2					
Lead	**ND**	5.0	EPA 6010D	10-31-24	10-31-24	

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1031SM3					
Lead	**ND**	5.0	EPA 6010D	10-31-24	10-31-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-404-02										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
Laboratory ID:	10-391-02										
	ORIG	DUP									
Lead	**78.6**	**76.8**	NA	NA		NA		NA	2	20	
MATRIX SPIKES											
Laboratory ID:	10-404-02										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**259**	**257**	250	250	ND	**103**	**103**	75-125	1	20	
Laboratory ID:	10-391-02										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**308**	**329**	250	250	78.6	**92**	**100**	75-125	6	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 31, 2024
Samples Submitted: October 30, 2024
Laboratory Reference: 2410-391
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B015	10-391-01	**8**	10-30-24
B016	10-391-02	**8**	10-30-24
B017	10-391-03	**7**	10-30-24
B018	10-391-04	**6**	10-30-24
B019	10-391-05	**6**	10-30-24
B020	10-391-06	**6**	10-30-24
B021	10-391-07	**6**	10-30-24
S033	10-391-08	**5**	10-30-24
S034	10-391-09	**7**	10-30-24
S035	10-391-10	**11**	10-30-24
S036	10-391-11	**6**	10-30-24
S037	10-391-12	**7**	10-30-24
S038	10-391-13	**6**	10-30-24
S039	10-391-14	**8**	10-30-24
S040	10-391-15	**7**	10-30-24
S041	10-391-16	**7**	10-30-24
S042	10-391-17	**6**	10-30-24
S043	10-391-18	**6**	10-30-24
S044	10-391-19	**6**	10-30-24
S045	10-391-20	**6**	10-30-24
DUP003	10-391-21	**5**	10-30-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEO ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☑ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 10-391

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals #	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1	B015	10/24/24	1140	S	1															X							10
2	B016		1015		1															X							
3	B017		1030		1															X							
4	B018		1340		1															X							
5	B019		1325		1															X							
6	B020		1400		1															X							
7	B021		1405		1															X							
8	5033		1050		1															X							
9	5034		1020		1															X							
10	5035	↓	1010	↓	1															X							↓

	Signature	Company	Date	Time
Relinquished		GES	10-30-24	0850
Received	Van	Spdy	10/30/24	0850
Relinquished	Van	Spdy	10/30/24	1120
Received			10/30/24	1120
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEDEN ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-391

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals *	TCLP Metals **	HEM (oil and grease) 1664 **					% Moisture
11	5036	10/24/24	1045	S	1															X							10
12	5037		1005		1															X							
13	5038		1035		1															X							
14	5039		1000		1															X							
15	5040		1025		1															X							
16	5041		1335		1															X							
17	5042		1325		1															X							
18	5043		1330		1															X							
19	5044		1350		1															X							
20	5045	↓	1410	↓	1															X							

	Signature	Company	Date	Time
Relinquished		GE	10.25.24	0850
Received	Van		10/30/24	0850
Relinquished	Van		10/30/24	1120
Received		GE	10/30/24	1120
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEO ENGINEERS
Project Number: 0415.068.11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-391

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
21	DUP003	10/25/24	0600	S	1															X							X

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		GEI	10.30.24	0850	* LEAD ONLY
Received	Van	Spdy	10/30/24	0850	
Relinquished	Van	Spdy	10/30/24	1120	
Received		OSE	10/30/24	1120	
Relinquished					
Received					Data Package: Standard ☐ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 1, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-424

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 31, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-424
Project: 0415-068-11

Case Narrative

Samples were collected on October 30, 2024 and received by the laboratory on October 31, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-424
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
B022	10-424-01	Soil	10-30-24	10-31-24	
S046	10-424-02	Soil	10-30-24	10-31-24	
S047	10-424-03	Soil	10-30-24	10-31-24	
S048	10-424-04	Soil	10-30-24	10-31-24	
S049	10-424-05	Soil	10-30-24	10-31-24	
S050	10-424-06	Soil	10-30-24	10-31-24	
S051	10-424-07	Soil	10-30-24	10-31-24	
S052	10-424-08	Soil	10-30-24	10-31-24	
S053	10-424-09	Soil	10-30-24	10-31-24	
S054	10-424-10	Soil	10-30-24	10-31-24	
S055	10-424-11	Soil	10-30-24	10-31-24	
S056	10-424-12	Soil	10-30-24	10-31-24	
S057	10-424-13	Soil	10-30-24	10-31-24	
S058	10-424-14	Soil	10-30-24	10-31-24	
S059	10-424-15	Soil	10-30-24	10-31-24	
DUP004	10-424-16	Soil	10-30-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-424
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**B022**					
Laboratory ID:	10-424-01					
Lead	**ND**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S046**					
Laboratory ID:	10-424-02					
Lead	**22**	5.1	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S047**					
Laboratory ID:	10-424-03					
Lead	**7.8**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S048**					
Laboratory ID:	10-424-04					
Lead	**ND**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S049**					
Laboratory ID:	10-424-05					
Lead	**27**	5.2	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S050**					
Laboratory ID:	10-424-06					
Lead	**ND**	5.2	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S051**					
Laboratory ID:	10-424-07					
Lead	**ND**	5.2	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S052**					
Laboratory ID:	10-424-08					
Lead	**40**	5.5	EPA 6010D	10-31-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-424
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S053**					
Laboratory ID:	10-424-09					
Lead	**18**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S054**					
Laboratory ID:	10-424-10					
Lead	**11**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S055**					
Laboratory ID:	10-424-11					
Lead	**17**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S056**					
Laboratory ID:	10-424-12					
Lead	**5.6**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S057**					
Laboratory ID:	10-424-13					
Lead	**ND**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S058**					
Laboratory ID:	10-424-14					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**S059**					
Laboratory ID:	10-424-15					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**DUP004**					
Laboratory ID:	10-424-16					
Lead	**ND**	5.3	EPA 6010D	10-31-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-424
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1031SM4					
Lead	**ND**	5.0	EPA 6010D	10-31-24	10-31-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-424-05										
	ORIG	DUP									
Lead	**26.2**	**26.4**	NA	NA		NA		NA	1	20	
MATRIX SPIKES											
Laboratory ID:	10-424-05										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**268**	**256**	250	250	26.2	**97**	**92**	75-125	5	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-424
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
B022	10-424-01	**7**	10-31-24
S046	10-424-02	**3**	10-31-24
S047	10-424-03	**6**	10-31-24
S048	10-424-04	**7**	10-31-24
S049	10-424-05	**4**	10-31-24
S050	10-424-06	**4**	10-31-24
S051	10-424-07	**5**	10-31-24
S052	10-424-08	**9**	10-31-24
S053	10-424-09	**6**	10-31-24
S054	10-424-10	**6**	10-31-24
S055	10-424-11	**5**	10-31-24
S056	10-424-12	**7**	10-31-24
S057	10-424-13	**7**	10-31-24
S058	10-424-14	**6**	10-31-24
S059	10-424-15	**5**	10-31-24
DUP004	10-424-16	**5**	10-31-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEO ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 10-424

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total ~~MTCA~~ Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1	B022	10/30/24	935	S	1															X							X
2	S046		945		1															X							X
3	S047		815		1															X							X
4	S048		930		1															X							X
5	S049		940		1															X							X
6	S050		1010		1															X							X
7	S051		1015		1															X							X
8	S052		1020		1															X							X
9	S053		1025		1															X							X
10	S054	↓	1030	↓	1															X							X

	Signature	Company	Date	Time
Relinquished	Paul Robinette	GE	10/31/24	0980
Received	Van	Spdy	10/31/24	0900
Relinquished	Van	Spdy	10/31/24	1210
Received	Nicholle Bilhi	OE	10/31/24	1210
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEOENGINEERS
Project Number: 0415-028-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 10-424

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total ~~HTCA~~ Metals #	TCLP Metals	HEM (oil and grease) 1664					% Moisture
11	SO55	10/30/24	1035	S	1															X							X
12	SO56		1040		1															X							X
13	SO57		1045		1															X							X
14	SO58		1050		1															X							X
15	SO59		1055		1															X							X
16	DUP004	↓	0000	↓	1															X							X

	Signature	Company	Date	Time
Relinquished	[signature]	GEL	10-31-24	0900
Received	[signature]	SPL	10/31/24	0900
Relinquished	[signature]	SPL	10/31/24	1210
Received	[signature]	OSE	10/31/24	1210
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 11, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2411-111

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on November 8, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

Case Narrative

Samples were collected on November 7, 2024 and received by the laboratory on November 8, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S060	11-111-01	Soil	11-7-24	11-8-24	
S061	11-111-02	Soil	11-7-24	11-8-24	
S062	11-111-03	Soil	11-7-24	11-8-24	
W01	11-111-04	Wipe	11-7-24	11-8-24	
W02	11-111-05	Wipe	11-7-24	11-8-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S060**					
Laboratory ID:	11-111-01					
Lead	**6.7**	5.4	EPA 6010D	11-11-24	11-11-24	
Client ID:	**S061**					
Laboratory ID:	11-111-02					
Lead	**ND**	5.4	EPA 6010D	11-11-24	11-11-24	
Client ID:	**S062**					
Laboratory ID:	11-111-03					
Lead	**ND**	5.3	EPA 6010D	11-11-24	11-11-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1111SM3					
Lead	**ND**	5.0	EPA 6010D	11-11-24	11-11-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	11-114-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	11-114-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**255**	**255**	250	250	ND	**102**	**102**	75-125	0	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W01**					
Laboratory ID:	11-111-04					
Lead	**270**	10	EPA 6010D	11-11-24	11-11-24	
Client ID:	**W02**					
Laboratory ID:	11-111-05					
Lead	**520**	10	EPA 6010D	11-11-24	11-11-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1111WPH1					
Lead	**ND**	10	EPA 6010D	11-11-24	11-11-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	SB1111WPH1										
	SB	SBD	SB	SBD		SB	SBD				
Lead	**500**	**508**	500	500	ND	**100**	**102**	80-120	2	20	
SPIKE BLANK											
Laboratory ID:	SB1111WPH1										
Lead	**500**		500		N/A	**100**		80-120			

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S060	11-111-01	**8**	11-8-24
S061	11-111-02	**7**	11-8-24
S062	11-111-03	**5**	11-8-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-111

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	SD6D	10/31/24	750	S	1
2	SD61		755	S	1
3	SD6Z		800	S	1
4	WD1	11/1/24	1100	GW	1
5	WD2	11/1/24	1110	GW	1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1															X							X
2															X							
3															X							
4															X							
5															X							

	Signature	Company	Date	Time
Relinquished		GEI	11/8/24	0925
Received	Van	Spdy	11/8/24	0925
Relinquished	Van	Spdy	11/8/24	1235
Received		OSE	11/8/24	1235
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 4, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2412-017

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on December 3, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 4, 2024
Samples Submitted: December 3, 2024
Laboratory Reference: 2412-017
Project: 0415-068-11

Case Narrative

Samples were collected on December 2, 2024 and received by the laboratory on December 3, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 4, 2024
Samples Submitted: December 3, 2024
Laboratory Reference: 2412-017
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S011-1	12-017-01	Soil	12-2-24	12-3-24	
S063	12-017-02	Soil	12-2-24	12-3-24	
S064	12-017-03	Soil	12-2-24	12-3-24	
S065	12-017-04	Soil	12-2-24	12-3-24	
S066	12-017-05	Soil	12-2-24	12-3-24	
S067	12-017-06	Soil	12-2-24	12-3-24	
S068	12-017-07	Soil	12-2-24	12-3-24	
B023	12-017-08	Soil	12-2-24	12-3-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 4, 2024
Samples Submitted: December 3, 2024
Laboratory Reference: 2412-017
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S011-1**					
Laboratory ID:	12-017-01					
Lead	**440**	5.4	EPA 6010D	12-3-24	12-3-24	
Client ID:	**S063**					
Laboratory ID:	12-017-02					
Lead	**780**	5.4	EPA 6010D	12-3-24	12-3-24	
Client ID:	**S064**					
Laboratory ID:	12-017-03					
Lead	**760**	5.4	EPA 6010D	12-3-24	12-3-24	
Client ID:	**S065**					
Laboratory ID:	12-017-04					
Lead	**1300**	5.4	EPA 6010D	12-3-24	12-3-24	
Client ID:	**S066**					
Laboratory ID:	12-017-05					
Lead	**8.4**	5.9	EPA 6010D	12-3-24	12-3-24	
Client ID:	**S067**					
Laboratory ID:	12-017-06					
Lead	**17**	5.5	EPA 6010D	12-3-24	12-3-24	
Client ID:	**S068**					
Laboratory ID:	12-017-07					
Lead	**26**	5.4	EPA 6010D	12-3-24	12-3-24	
Client ID:	**B023**					
Laboratory ID:	12-017-08					
Lead	**ND**	5.5	EPA 6010D	12-3-24	12-3-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 4, 2024
Samples Submitted: December 3, 2024
Laboratory Reference: 2412-017
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1203SM1					
Lead	**ND**	5.0	EPA 6010D	12-3-24	12-3-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-015-01										
	ORIG	DUP									
Lead	**8.42**	**8.16**	NA	NA		NA		NA	3	20	
MATRIX SPIKES											
Laboratory ID:	12-015-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**247**	**252**	250	250	8.42	**95**	**97**	75-125	2	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 4, 2024
Samples Submitted: December 3, 2024
Laboratory Reference: 2412-017
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S011-1	12-017-01	**7**	12-3-24
S063	12-017-02	**7**	12-3-24
S064	12-017-03	**8**	12-3-24
S065	12-017-04	**7**	12-3-24
S066	12-017-05	**15**	12-3-24
S067	12-017-06	**9**	12-3-24
S068	12-017-07	**8**	12-3-24
B023	12-017-08	**9**	12-3-24

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 12-017

Company:	GeoEngineers
Project Number:	0415-068-11
Project Name:	Carpenter Rd
Project Manager:	Abhijit Joshi
Sampled by:	Paul Robinette

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☑ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
1	SO11-1	12/2/24	846	S	1															X							
2	SO63		848		1															X							
3	SO64		850		1															X							
4	SO65		852		1															X							
5	SO66		854		1															X							
6	SO67		856		1															X							
7	SO68		858		1															X							
8	BO23	↓	915	↓	1															X							

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	12/3/24	0905
Received	Van	SPL	12/3/24	0905
Relinquished	Van	SPL	12/3/24	1310
Received	[signature]	GEI	12/3/24	1310
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 10, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2412-092

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on December 9, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

Case Narrative

Samples were collected on December 9, 2024 and received by the laboratory on December 9, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S011-2	12-092-01	Solid	12-9-24	12-9-24	
S063-1	12-092-02	Solid	12-9-24	12-9-24	
S064-1	12-092-03	Solid	12-9-24	12-9-24	
S065-1	12-092-04	Solid	12-9-24	12-9-24	
SP-A-1	12-092-05	Solid	12-9-24	12-9-24	
SP-A-2	12-092-06	Solid	12-9-24	12-9-24	
SP-A-3	12-092-07	Solid	12-9-24	12-9-24	
SP-C-1	12-092-08	Solid	12-9-24	12-9-24	
SP-C-2	12-092-09	Solid	12-9-24	12-9-24	
SP-C-3	12-092-10	Solid	12-9-24	12-9-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-A-1**					
Laboratory ID:	12-092-05					
Lead	**7.3**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-A-2**					
Laboratory ID:	12-092-06					
Lead	**12**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-A-3**					
Laboratory ID:	12-092-07					
Lead	**6.0**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-C-1**					
Laboratory ID:	12-092-08					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-C-2**					
Laboratory ID:	12-092-09					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-C-3**					
Laboratory ID:	12-092-10					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S011-2**					
Laboratory ID:	12-092-01					
Lead	**33**	6.8	EPA 6010D	12-9-24	12-9-24	
Client ID:	**S063-1**					
Laboratory ID:	12-092-02					
Lead	**56**	5.6	EPA 6010D	12-9-24	12-9-24	
Client ID:	**S064-1**					
Laboratory ID:	12-092-03					
Lead	**17**	6.0	EPA 6010D	12-9-24	12-9-24	
Client ID:	**S065-1**					
Laboratory ID:	12-092-04					
Lead	**150**	6.2	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-A-1**					
Laboratory ID:	12-092-05					
Lead	**400**	5.3	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-A-2**					
Laboratory ID:	12-092-06					
Lead	**510**	5.3	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-A-3**					
Laboratory ID:	12-092-07					
Lead	**220**	5.3	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-C-1**					
Laboratory ID:	12-092-08					
Lead	**8.3**	5.5	EPA 6010D	12-9-24	12-9-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-C-2**					
Laboratory ID:	12-092-09					
Lead	**23**	5.6	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-C-3**					
Laboratory ID:	12-092-10					
Lead	**12**	5.7	EPA 6010D	12-9-24	12-9-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1210TM1					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-092-05										
	ORIG	DUP									
Lead	**7.32**	**7.10**	NA	NA		NA		NA	3	20	
MATRIX SPIKES											
Laboratory ID:	12-092-05										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**16.5**	**16.8**	10.0	10.0	7.32	**92**	**95**	75-125	2	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1209SM3					
Lead	**ND**	5.0	EPA 6010D	12-9-24	12-9-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-083-01										
	ORIG	DUP									
Lead	**12.4**	**15.1**	NA	NA		NA		NA	20	20	
MATRIX SPIKES											
Laboratory ID:	12-083-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**243**	**242**	250	250	12.4	**92**	**92**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S011-2	12-092-01	**26**	12-9-24
S063-1	12-092-02	**10**	12-9-24
S064-1	12-092-03	**16**	12-9-24
S065-1	12-092-04	**19**	12-9-24
SP-A-1	12-092-05	**5**	12-9-24
SP-A-2	12-092-06	**7**	12-9-24
SP-A-3	12-092-07	**6**	12-9-24
SP-C-1	12-092-08	**9**	12-9-24
SP-C-2	12-092-09	**11**	12-9-24
SP-C-3	12-092-10	**12**	12-9-24

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 12-092

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP ~~Metals~~ Lead	HEM (oil and grease) 1664A	HOLD	TOTAL METALS PB*			% Moisture
1	SOIL-2	12/4/24	630	S	1																			X			X
2	SO63-1		635	S	1																			X			X
3	SO64-1		640	S	1																			X			X
4	SO65-1		645	S	1																			X			X
5	SP-A-1		650	A	1																X			X			X
6	SP-A-2		652	A	1																X			X			X
7	SP-A-3		654	A	1																X			X			X
8	SP-C-1		656	C	1																X			X			X
9	SP-C-2		658	C	1																X			X			X
10	SP-C-3		700	C	1																X			X			X

	Signature	Company	Date	Time
Relinquished		ESI	12/9/24	945
Received	Jordan Peell	OSE	12/9/24	0943
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Appendix C
Data Validation Report

Data Validation Report

2101 4th Avenue, Suite 950, Seattle, Washington 98121, Telephone: 206.728.2674 www.geoengineers.com

Project:	Carpenter Road Site Cleanup Action, City of Olympia
File No.:	00415-068-11
Subject:	Data Validation Report for Excavation Verification Soil Sample Data
Date:	March 28, 2025

This report documents the results of data validation (USEPA Document 540-R-08-005; USEPA 2009) of the chemical analytical data for soil excavation verification samples collected as part of the cleanup action construction activities completed in 2024/2025 at the Carpenter Road Site (Site), and the associated laboratory and field quality control (QC) samples. The Site is located at 6530 Martin Way East in Lacey, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA 2020) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below the applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Laboratory/Field Duplicates

Validated Sample Delivery Groups

This data validation included review of the sample delivery groups (SDGs) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
2410-021	B001, B002, B003, B004, S001, S002, S003, S004, S005
2410-052	B005, B006, B007, DUP001, B008, S006, S007, S008, S009, S010, S011, S012
2410-103	B009, B010, B011, B012, B013, B014, S013, S014, S015, S016, S017, S018, S019, S020, S021, S022, S023, S024, S025, DUP002, S026, S027, S028, S029
2410-217	S030, S031, S032, S009-1
2410-391	B015, B016, B017, B018, B019, B020, B021, S033, DUP003, S034, S035, S036, S037, S038, S039, S040, S041, S042, S043, S044, S045
2410-424	B022, S046, S047, S048, S049, S050, S051, S052, S053, S054, S055, S056, S057, S058, DUP004, S059
2411-111	S060, S061, S062
2412-017	B023, S011-1, S063, S064, S065, S066, S067, S068
2412-092	S011-2, S063-1, S064-1, S065-1

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using the following method:

- Total Metals by Method EPA6010D

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

OnSite provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis. The sample coolers arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

METHOD BLANKS

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY DUPLICATES

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for soil samples is 35 percent.

SDG 2410-052: One field duplicate sample pair, B007 and DUP001, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

SDG 2410-103: One field duplicate sample pair, S025 and DUP002, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

SDG 2410-391: One field duplicate sample pair, S033 and DUP003, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

SDG 2410-424: One field duplicate sample pair, S058 and DUP004, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the LCS/LCSD and MS/MSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and laboratory/field duplicate RPD values.

No analytical results were qualified. The data are acceptable for the intended use.

References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-542-R-20-006. November 2020.

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

GeoEngineers

Data Validation Report

2101 4th Avenue, Suite 950, Seattle, Washington 98121, Telephone: 206.728.2674 www.geoengineers.com

Project:	Carpenter Road Site Cleanup Action, City of Olympia
File No.:	00415-068-11
Subject:	Data Validation Report for Post-Cleanup Ecology Block Wipe Sample Data
Date:	March 28, 2025

This report documents the results of data validation (USEPA Document 540-R-08-005; USEPA 2009) for the chemical analytical data of wipe samples collected as part of the cleanup action construction activities completed in 2024/2025 at the Carpenter Road Site (Site), and the associated laboratory and field quality control (QC) samples. The Site is located at 6530 Martin Way East in Lacey, Washington.

Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA 2020) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below the applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times and Sample Preservation
- Method Blanks
- Matrix Spikes/Matrix Spike Duplicates
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Field Duplicates

Validated Sample Delivery Groups

This data validation included review of the sample delivery groups (SDGs) listed below in Table 1.

TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS

LABORATORY SDG	SAMPLES VALIDATED
2411-111	W01, W02

2411-168	W03, W04, W05, W06, W07, W08, W09, DUP005, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19, W20, W21, W22, W23, W24
2411-190	W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36, W37, W38, W39, W40, W41, DUP006, W42, W43, W44
2411-333	W35-1

Chemical Analysis Performed

OnSite Environmental, Inc. (OnSite), located in Redmond, Washington, performed laboratory analyses on the samples using the following method:

- Total Metals by Method EPA6010D

Data Validation Summary

The results for each of the QC elements are summarized below.

DATA PACKAGE COMPLETENESS

OnSite provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

HOLDING TIMES AND SAMPLE PRESERVATION

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis. The sample coolers arrived at the laboratory within the appropriate temperatures of between two and six degrees Celsius.

METHOD BLANKS

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Since the actual analyte concentration in an environmental sample is not known, the accuracy of a particular analysis is usually inferred by performing a matrix spike (MS) analysis on one sample from the associated batch, known as the parent sample. One aliquot of the sample is analyzed in the normal manner and then a second aliquot of the sample is spiked with a known amount of analyte concentration and analyzed. From these analyses, a percent recovery is calculated. Matrix spike duplicate (MSD) analyses are generally performed for organic analyses as a precision check and analyzed in the same sequence as a matrix spike. Using the result values from the MS and MSD, the relative percent difference (RPD) is calculated. The percent recovery control limits for MS and MSD analyses are specified in the laboratory documents, as are the RPD control limits for MS/MSD sample sets.

One MS/MSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS/LCSD analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery and RPD values were within the proper control limits.

FIELD DUPLICATES

In order to assess precision, field duplicate samples were collected and analyzed along with the reviewed sample batches. The duplicate samples were analyzed for the same parameters as the associated parent samples. Precision is determined by calculating the RPD between each pair of samples. If one or more of the sample analytes has a concentration less than five times the reporting limit for that sample, then the absolute difference is used instead of the RPD. The RPD control limit for wipe samples is 35 percent.

SDG 2411-168: One field duplicate sample pair, W09 and DUP005, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

SDG 2411-190: One field duplicate sample pair, W41 and DUP006, was submitted with this SDG. The precision criteria for the target analytes were met for this sample pair.

Overall Assessment

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the LCS/LCSD and MS/MSD percent recovery values. Precision was acceptable, as demonstrated by the LCS/LCSD, MS/MSD, and field duplicate RPD values.

No analytical results were qualified. The data are acceptable for the intended use.

References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA-542-R-20-006. November 2020.

Disclaimer: Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Appendix D

Disposal Weight Tickets for Segregated Soil and Bullets (Hazardous Waste)

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 113325

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	12/27/2024	Vehicle#	95 Volume
Payment Type	Credit Account	Container	
CWM Load#	512327	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616075FLE		
Destination		Grid	
PO	2442		
Profile	OR362079 (STAB03: SOIL & BULLETS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	12/27/2024 12:50:42	MANUAL WT	pslider1		Gross	69841 lb*
Out	12/27/2024 12:50:42		pslider1		Tare	1 lb*
			* Manual Weight		Net	69840 lb
					Tons	34.92

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Stab-Tons-RCR	100	34.92	Tons				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	TRANS PER TON-TRAN	100	34.92	Tons				WA-LACEY
4	LINER EA-LINER PER	100	2.00	Each				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 113326

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	12/27/2024	Vehicle#	R95 Volume
Payment Type	Credit Account	Container	
CWM Load#	512355	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018283993FLE		
Destination		Grid	
PO	2442		
Profile	OR362079 (STAB03: SOIL & BULLETS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	25461 lb*
In	12/27/2024 12:53:11	MANUAL WT	pslider1		Tare	1 lb*
Out	12/27/2024 12:53:11		pslider1		Net	25460 lb
			* Manual Weight		Tons	12.73

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Stab-Tons-RCR	100	12.73	Tons				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	TRANS PER TON-TRAN	100	12.73	Tons				WA-LACEY
4	LINER EA-LINER PER	100	2.00	Each				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

Appendix E

EnviroBlend CS Safety Data Sheet (SDS) and Treatability Study Report

EnviroBlend®
Metal Waste Treatment by Premier Magnesia, LLC

ENVIROBLEND® CS

EnviroBlend CS is a coarser size of magnesium oxides. It is typically used for remediation/stabilization of heavy metal contaminated waste. EnviroBlend CS has a high buffering capability for pH neutralization.

Typical Properties

pH	10-11
Specific Gravity	70-80 lbs per cu.ft.
Appearance	Light grey to tan powder
Sizing, wt%	
+12M	0.0
+20M	13
+40M	16
+70M	16
+100M	9
-100M	46

Domestic Shipping Information

DOT Proper Shipping Name	Not Regulated
DOT Hazard Class	Not Regulated
DOT ID Number	Not Regulated

Shipment Options DOT Approved Tank Cars or Trucks

MAS: 10-26-10

EnviroBlend is a registered trademark of Premier Magnesia, LLC

Premier Magnesia, LLC, 300 Barr Harbor Drive, Suite 250
West Conshohocken, PA 19428
Tel: 610-828-6929
http://www.premiermagnesia.com

EnviroBlend Metal Waste Treatment by Premier Magnesia, LLC

SAFETY DATA SHEET

Issue Date 02-Dec-2014 **Revision Date** 01-12-2022 **Version** 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name ENVIROBLEND® CS

Other means of identification

Product Code ENVIROBLEND® CS

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use A specialty blend of magnesium oxide, magnesium hydroxide used for heavy metals remediation.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Premier Magnesia, LLC, 75 Giles Place, Waynesville, NC 28786

Emergency telephone number

Company Phone Number 828-452-4784

24 Hour Emergency Phone Number Chemtrec 1-800-424-9300

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

Product dust is classified as a "nuisance particulate, not otherwise regulated" as specified by ACGHI and OSHA. The excessive, long-term inhalation of mineral dusts may contribute to the development of industrial bronchitis, reduced breathing capacity, and may lead to the increased susceptibility to lung disease. Contact with water may cause product to swell, generate some heat and burst its container. Low toxicity.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Fine powder to fine granular **Physical state** Solid **Odor** Odorless

Causes mild irritation to the eyes
Low toxicity by skin contact.
Chronic overexposure by inhalation of airborne particulate may irritate upper respiratory system as well as the throat.
Ingestion is an unlikely route of exposure. If ingested in large amounts it may cause irritation, nausea, vomiting, diarrhea, abdominal pain, black stool, pink urine, coma and possibly death.

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Magnesium Oxide	1309-48-4	70	
Magnesium Hydroxide	1309-42-8	30	

4. FIRST AID MEASURES

First aid measures

Eye contact Rinse thoroughly with plenty of water, also under the eyelids.

Skin Contact Wash with soap and water. Low toxicity by skin contact.

Inhalation Move victim to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Ingestion Ingestion is an unlikely route of exposure. If ingested in sufficient quantity and victim is conscious, give 1-2 glasses of water or milk. Never give anything by mouth to an unconscious person. Leave decision to induce vomiting to qualified medical personnel, since particles may be aspirated into the lungs. Seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Water reacts with magnesium oxide producing magnesium hydroxide and heat. Do not allow water to get inside containers: reaction with water will cause product to swell, generate heat, and burst its container. If contact is unavoidable, use sufficient water to safely absorb the heat that may be generated.

Specific hazards arising from the chemical
No information available.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Carefully clean up and place material into a suitable container, being careful to avoid creating excessive dust. If conditions warrant, clean up personnel should wear approved respiratory protection, gloves and goggles to prevent irritation from contact and/or inhalation.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Avoid generation of dust. Do not allow water to get inside containers; reaction with water will cause product to swell, generate heat and burst its container. Exposed, unprotected magnesium oxide will absorb moisture and carbon dioxide from the air.

Incompatible materials Magnesium Oxide component is soluble in aqueous acids generating heat and steam; violent reaction or ignition with interhalogens (e.g., bromine pentifluoride; chlorine trifluoride). Incandescent reaction with phosphorus pentachloride.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Magnesium Oxide 1309-48-4	TWA: 10 mg/m³ inhalable fraction	TWA: 15 mg/m³ fume, total particulate (vacated) TWA: 10 mg/m³ fume and total particulate	IDLH: 750 mg/m³ fume

NIOSH IDLH Provide workers with NIOSH approved respirators in accordance with requirements of 29 CFR 1910. 134 for level of exposure incurred.

Appropriate engineering controls

Engineering Controls Provide sufficient ventilation, in both volume and air flow patterns to control mist/dust concentrations below allowable exposure limits. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. The use of eye protection is recommended.

Skin and body protection The use of eye protection, gloves and long sleeve clothing is recommended.

Respiratory protection Provide workers with NIOSH approved respirators in accordance with requirements of 29 CFR 1910. 134 for level of exposure incurred.

General Hygiene Considerations Wash hands thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid		
Appearance	Fine powder to fine granular	**Odor**	Odorless
Color	Brownish	**Odor threshold**	No information available

Property	**Values**	**Remarks • Method**
pH	10-11	
Melting point/freezing point	Melting pt >2100 °C Melting pt >3800 °F	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	Not Applicable	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	3.56 g/cc	
Water solubility	Slight <1%	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	70-80lb/ft3

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
Magnesium Oxide component is soluble in aqueous acids generating heat and steam; violent reaction or ignition with interhalogens (e.g., bromine pentifluoride; chlorine trifluoride). Incandescent reaction with phosphorus pentachloride.

Hazardous Decomposition Products
Heat and steam.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information Magnesium Oxide # 1309-48-4 Magnesium Hydroxide #1309-42-8 Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation Inhalation of fume (not MgO dust particulate) produced upon decomposition of magnesium compounds can produce a febrile reaction and leukocytosis in humans.

Eye contact Irritating to eyes.

Skin Contact Low toxicity by skin contact.

Ingestion Ingestion is an unlikely route of exposure. If ingested in large amounts it may cause irritation, nausea, vomiting, diarrhea, abdominal pain, black stool, pink urine, coma and possibly death.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Magnesium Hydroxide 1309-42-8	= 8500 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 100% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available on any adverse effects of this material on the environment

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes This product does not exhibit any characteristics of a hazardous waste. The product is suitable for landfill disposal. Follow all applicable federal, state and local regulations for safe disposal.

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

DOT Not regulated Not regulated by DOT as a hazardous material. No hazard class, label or placard required, no UN or NA number assigned.

15. REGULATORY INFORMATION

International Inventories

TSCA Complies

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Magnesium Oxide	X	X	X	X	X	X	X	X
Magnesium Hydroxide	X	X	X	X	X	X	X	X

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
This product does not contain any substances reportable under Sections 302, 304 or 313. Sections 311 and 312 do apply. (Routine Reporting and Chemical Inventories)

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain chemicals known to the State of California to cause cancer, birthdefects or other reproductive toxins.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Magnesium Oxide 1309-48-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

NFPA	**Health hazards** 1	**Flammability** 0	**Instability** 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** 0	**Flammability** 0	**Physical hazards** 0	**Personal protection** X

Issue Date 02-Dec-2014
Revision Date 01-12-2022
Revision Note
No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

Specification Section 02 61 13.05-1.03.B; C; & D
"Management of Contaminated Soils – Soil Treatment Plan (B), Firm Name (C), & Report (D)"

Attn: Abhijit Joshi **September 9, 2024**
Project: Carpenter Road Cleanup
Re: Soil Treatment Plan via EnviroBlend CS (magnesium oxides)

Soil Treatment Plan – 02 61 13.05-1.03B:

1. Means & Methods: After completing precursor events, particularly TESC BMP's and the Bullet Fragment Recovery outlined in Submittal TE-016, TITANs will treat screened-soils on the existing slab-on-grade. TITAN will dose EnviroBlend (delivered to site in Supersacks) targeting 3% application by weight via both machine and hand-applied distribution. An excavator will bucket-blend the soils and EnviroBlend together.
2. Manufacturer, Product Data, & MSDS: Premier Magnesia, "EnviroBlend" submittal, MSDS (all attached) – Website: **https://enviroblend.com**
3. Previous Project Examples: Attached
4. Dosage Rate: 3%
5. Mixing Method: Bucket-blending using hydraulic machinery (excavator/loader/bobcat)
6. pH Mitigation: Product pH is 10-11 and is NOT Regulated for shipment. Provides a buffered pH that will not enter the hazardous waste pH range even when grossly overdosed. Primary hazard associated with the raw product is *"nuisance particulate, not otherwise regulated"* so it is generally safe to handle, however it must be kept dry to avoid exothermic swelling and bursting its container. It does not present an acute toxicity hazard based on known or supplied information nor is it a hazardous waste.
7. Eliminate Cross-Contamination: Treated soils will be stockpiled within the building's roofline and exported ASAP once confirmation analytical is received and there is enough tonnage on the ground to justify the truck dispatch. If stockpile capacity underneath the roofline becomes an issue then TITAN will mobilize roll-off bins.

Firm Performing Treatability Study – 02 61 13.05-1.03C:

1. Ursus Remediation Testing & Technologies: Note, this firm is EnviroBlend's 3rd Party Lab, and the website is easiest to navigate for additional information: **https://www.ursusremediationtesting.com**

Treatability Study Report – 02 61 13.05-1.03D:

1. Procedures: Mark Clawson provided access to the building on August 12th where Nick Seeley and Bill Gill shoveled the densest upper few inches of bullet-fragments and soil into 5-EA 5-gallon Home Depot buckets. The objective was to capture the 'hottest' soils with the highest concentration of lead to essentially be a 'stress test' to ensure our chosen treatment compound successfully treated the hottest possible soils we could find. The five buckets were then combined to mimic TITAN's bullet-screening process, with the

resulting soil-blend yield registering at 610 mg/L, or 122 times the 5.0 mg/L treatment objective. Soils were then FedEx'd directly to Ursus in Wisconsin, where TCLP metal testing was performed using screening methodologies using the same guidelines as prescribed by EPA Method SW-846 1311, except the amount of sample is scaled down to one-tenth (10%) the prescribed sample weight and extraction solution volume. CA WET tests were performed at a 2%, 3%, and 4% dosing.

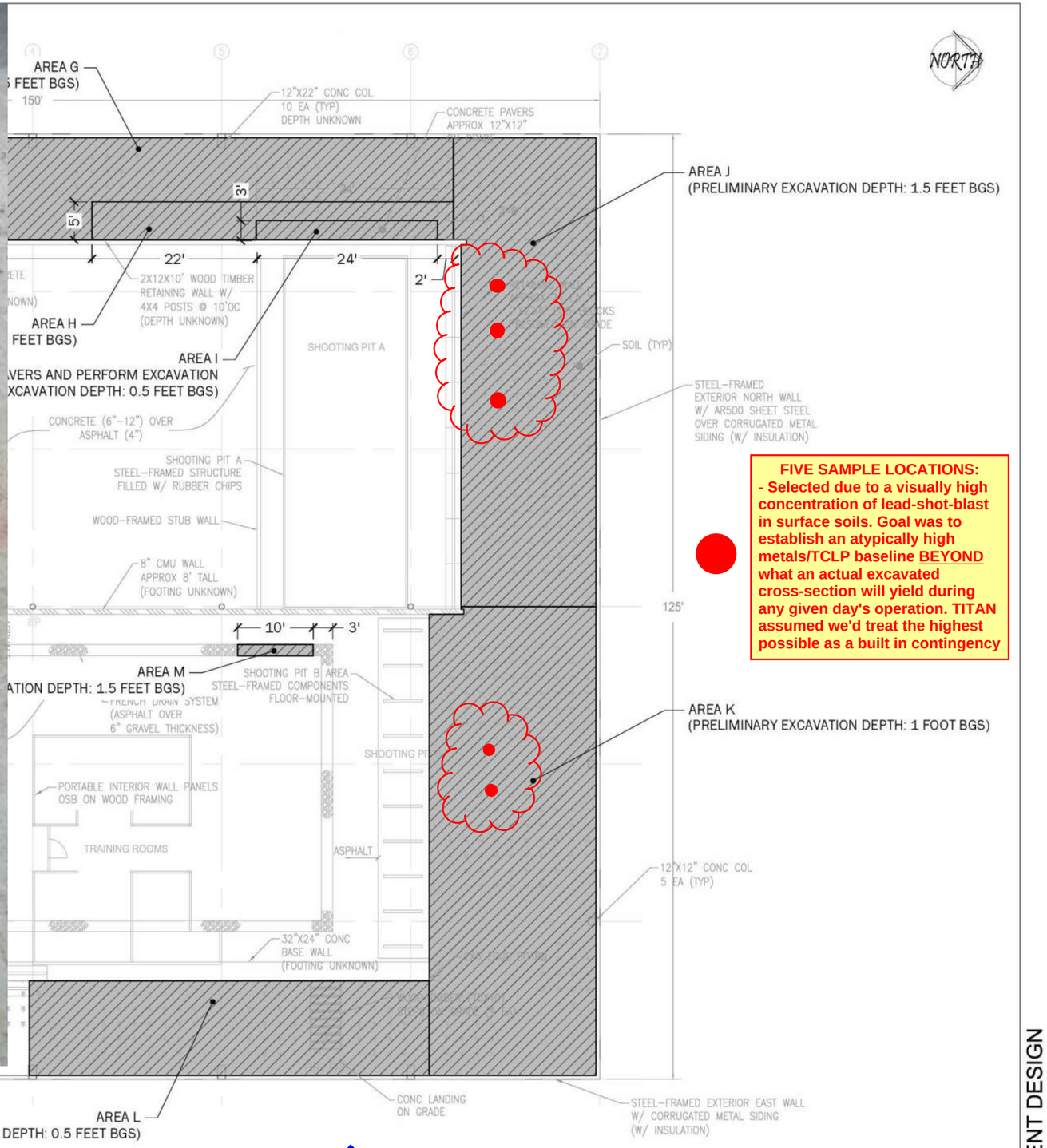
2. Locations: See attachment of Site Plan. Based on visual observation, at five locations Nick and Bill scraped the upper several inches aiming to capture the highest density bullet-fragment soils. Each bucket yielded a very high amount of lead bullet fragments and the *combined sample analyzed by Ursus – at 610 mg/L – appears to have achieved our goal of ensuring our chosen treatment solution is viable.*
3. Manufacturer, Product Data, & MSDS: Premier Magnesia, "EnviroBlend" submittal, MSDS (all attached) – Website: **https://enviroblend.com**
4. Summary Treatment Table: Ursus "Treatability Study Results" [August 28th 2024]
5. Laboratory data reports & data quality review: Initial results included herein are from EnviroBlend's 3rd Party Treatment Testing lab, Ursus (info above.) Because TITAN just learned Ursus was *not a Washington State/DOE accredited lab*, Ursus blended three additional samples at 2%, 3%, and 4% (via FedEx) for Seattle's Friedman Bruya (D.O.E. Accredited Lab) to perform TCLP in the coming week. Results are expected the week of September 16th (results will be forwarded.) **https://friedmanandbruya.com**

[END SUBMITTAL]



URSUS LAB:
SIEVED SOILS
(APPX. 2-GALLONS TOTAL)
PRELIMINARY ANALYTICAL:
TOTAL LEAD = 12,400 mg/kg
BASELINE TCLP = 610 mg/L

RESULTING YIELD OF BULLET FRAGMENTS. THERE ARE FEW ROCKS OR COPPER JACKETS IN THIS IMAGE - THE VAST MAJORITY IS LEAD



FIVE SAMPLE LOCATIONS:
- Selected due to a visually high concentration of lead-shot-blast in surface soils. Goal was to establish an atypically high metals/TCLP baseline BEYOND what an actual excavated cross-section will yield during any given day's operation. TITAN assumed we'd treat the highest possible as a built in contingency

0 8' 16'
SCALE: 1/16" = 1'-0"

TITAN DOCUMENT FOR TREATMENT PLAN SUBMITTAL 02 61 13.05-1.03D(2) LOCATIONS

NO	REVISION	DATE	APPD

FINAL CONSTRUCTION CHECKED
BY
DATE
FIELD BOOKS: Field Books
DATE: 01/03/2024
SCALE: AS SHOWN
DESIGNED: SS
CHECKED: AJ, IW
DRAWN: HM
PROJECT NAME: CARPENTER ROAD SITE
DRAWING NAME: 04150804_Sht 17_X3 [Remedial Ex Plan - Inside]

CITY OF OLYMPIA

CARPENTER ROAD SITE CLEANUP ACTION

OLYMPIA, WASHINGTON
REMEDIAL EXCAVATION PLAN - INSIDE THE BUILDING

SPEC NO:
WBS NO:
SHEET NO:
SHEET 17 OF 19

100 PERCENT DESIGN

DATE: 5/9/2024 12:02 PM PATH: P:\0041506\CAD\04\CARPENTER ROAD SITE CLEANUP ACTION DESIGN\V04_R03 - 100 PERCENT STAMP FILE: 04150804_Sht 17_X3 [REMEDIAL EX PLAN - INSIDE]_LAYOUT: REMEDIAL EXCAVATION PLAN - INSIDE THE BUILDING

Provided to Builders Exchange of WA, Inc. For usage Conditions Agreement see www.bxwa.com - Always Verify Scal

02 61 13.05-1.03D(4) SUMMARY TREATMENT TABLE

TREATABILITY STUDY RESULTS

Premier: TITAN Earthwork - Police Gun Range

August 28, 2024

Compositional Results (mg/kg)		
Sample Name	**Ursus Lab ID**	**Lead**
Soil	24-08020	12,400

Leaching Results							
Sample Name		**EnviroBlend® Dosage**		**Screening Leaching Test Results**			
	Ursus Lab ID	**Chemical**	**Percentage**	**Pretest pH**	**Solution**	**Final pH**	**Lead mg/L**
TCLP Limit	-	-	-	-	-	-	*5*
Soil	24-08020	Untreated	-	1.68	TCLP 1	5.02	610
		EnviroBlend® CS	2%	-	TCLP 1	7.04	12.4
			3%	-	TCLP 1	10.61	0.075
			4%	-	TCLP 1	10.80	<0.067

3% TREATMENT IS OPTIMAL
TARGET TO < 5.0 mg/L

NOTES:

1. The screening CA WET test is a modified, scaled-down CA-WET leaching test that gives results that are similar to those of a standard CA-WET test on the waste material. The screening test is not suitable for regulatory submittals.

2. Premier Chemicals product EnviroBlend® in the ground form was used in the treatability study. Other products and particle sizes should be tested to ensure that they provide comparable results prior to using the other products.

3. The treatability results demonstrate the effect of the treatment on the samples tested. Extrapolation of the results to waste streams or contaminated sites depends on the representativeness of the samples collected.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Ave South
Seattle, WA 98108-2419
(206) 285-8282
office@friedmanandbruya.com
www.friedmanandbruya.com

September 19, 2024

Andy Wenzel, Project Manager
Ursus Remediation Testing & Tech
1204 Springdale St
Mount Horeb, WI 53572

Dear Mr Wenzel:

Included are the results from the testing of material submitted on September 13, 2024 from the TITAN Earth Works-Gun Range, F&BI 409175 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: steve.greiling@titanearth.com
NAA0919R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on September 13, 2024 by Friedman & Bruya, Inc. from the Ursus Remediation Testing & Tech TITAN Earth Works-Gun Range, F&BI 409175 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Ursus Remediation Testing & Techj
409175 -01	Soil - 2% EB CS
409175 -02	Soil - 3% EB CS
409175 -03	Soil - 4% EB CS

All quality control requirements were acceptable.

Analysis for TCLP Metals By EPA Method 6020B and 1311

Client ID:	Soil - 2% EB CS	Client:	Ursus Remediation Testing & Tech
Date Received:	09/13/24	Project:	TITAN Earth Works-Gun Range
Date Extracted:	09/16/24	Lab ID:	409175-01
Date Analyzed:	09/17/24	Data File:	409175-01.078
Matrix:	Soil/Solid	Instrument:	ICPMS3
Units:	mg/L (ppm)	Operator:	SP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Lead	0.76	5.0

Analysis for TCLP Metals By EPA Method 6020B and 1311

Client ID:	Soil - 3% EB CS	Client:	Ursus Remediation Testing & Tech
Date Received:	09/13/24	Project:	TITAN Earth Works-Gun Range
Date Extracted:	09/16/24	Lab ID:	409175-02
Date Analyzed:	09/17/24	Data File:	409175-02.087
Matrix:	Soil/Solid	Instrument:	ICPMS3
Units:	mg/L (ppm)	Operator:	SP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Lead	0.41	5.0

Analysis for TCLP Metals By EPA Method 6020B and 1311

Client ID:	Soil - 4% EB CS	Client:	Ursus Remediation Testing & Tech
Date Received:	09/13/24	Project:	TITAN Earth Works-Gun Range
Date Extracted:	09/16/24	Lab ID:	409175-03
Date Analyzed:	09/17/24	Data File:	409175-03.098
Matrix:	Soil/Solid	Instrument:	ICPMS3
Units:	mg/L (ppm)	Operator:	SP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Lead	0.45	5.0

Analysis for TCLP Metals By EPA Method 6020B and 1311

Client ID:	Method Blank	Client:	Ursus Remediation Testing & Tech
Date Received:	Not Applicable	Project:	TITAN Earth Works-Gun Range
Date Extracted:	09/16/24	Lab ID:	I4-760 mb
Date Analyzed:	09/17/24	Data File:	I4-760 mb.076
Matrix:	Soil/Solid	Instrument:	ICPMS3
Units:	mg/L (ppm)	Operator:	SP

Analyte:	Concentration mg/L (ppm)	TCLP Limit
Lead	<0.1	5.0

Date of Report: 09/19/24
Date Received: 09/13/24
Project: TITAN Earth Works-Gun Range, F&BI 409175
Date Extracted: 09/13/24
Date Analyzed: 09/13/24

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR pH USING EPA METHOD 9045D

Sample ID Laboratory ID	pH
Soil - 4% EB CS 409175-03	10.9 ve

Date of Report: 09/19/24
Date Received: 09/13/24
Project: TITAN Earth Works-Gun Range, F&BI 409175

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TCLP METALS USING EPA METHODS 6020B AND 1311

Laboratory Code: 409175-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Lead	mg/L (ppm)	1.0	<1	91	96	75-125	5

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Lead	mg/L (ppm)	1.0	92	80-120

Date of Report: 09/19/24
Date Received: 09/13/24
Project: TITAN Earth Works-Gun Range, F&BI 409175

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR pH BY METHOD 9045D

Laboratory Code: 409175-03

Analyte	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
pH	10.9	10.9	0	0-20

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht – The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k – The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Ursus Remediation Testing & Technologies LLC 409175

Chain of Custody 09/13/24 MI Page_____ of _____

Company Name:	Ursus Remediation
Project Contact:	Andy
Address:	-
City/State/Zip	-
Telephone:	-
Project Name:	TITAN Earth Works - Gun Range
Project Number:	-
Project Location:	-
Sampled By:	

Send results to:
Ursus Remediation Testing & Tech
1204 Springdale Street
Mount Horeb, WI 53572
PH 608-437-7413
ATTN: Andy Wenzel

Laboratory Use Only
Ice Present Yes No
Sample Conditions
by WED
09/18 ef

Preservation*

Client Sample Collection Method Comments:

Lab ID	Collection Date	Collection Time	Grab/ Comp	Sample ID Description	Filt'd Y/N	**Matrix:	TCLP Lead	pH	Total No of Containers	Lab ID #
						Fill in Spaces with Bottles per Test				
01	9/12/2024	12:00 AM	G	Soil - 2% EB CS	N	S	x			
02	9/12/2024	12:00 AM	G	Soil - 3% EB CS	N	S	x			
03	9/12/2024	12:00 AM	G	Soil - 4% EB CS	N	S	x	✓		ef 09/13

Samples received at 20 °C

*Preservation
A=None
B=HCL
C=H2SO4
D=HNO3
E=NaOH
F=Methanol
O=Other

**Matrix
S-Soil
Slg-Sludge
I-Indst Waste
GW-Groundwater
SW-Surface Water
WW-Wastewater

Relinquished By: Andrew Wenzel	Date/Time 9/12/24 1000	Relinquished By: ef	Date/Time 9/13/24 1000
Received by:	Date/Time	Received by:	Date/Time

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 409175 CLIENT Ursus INITIALS/ DATE: AP 09/13/24

If custody seals are present on cooler, are they intact? ☑ NA ☐ YES ☐ NO

Cooler/Sample temperature 20 °C
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs? ☐ YES ☑ NO

How did samples arrive?
☑ Over the Counter ☐ Picked up by F&BI ☐ FedEx/UPS/GSO

Is there a Chain-of-Custody* (COC)? ☑ YES ☐ NO Initials/ Date: AP 09/13/24
*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 days

Are the samples clearly identified? (explain "no" answer below) ☐ YES ☑ NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below) ☑ YES ☐ NO

Were appropriate sample containers used? ☑ YES ☐ NO ☐ Unknown

If custody seals are present on samples, are they intact? ☑ NA ☐ YES ☐ NO

Are samples requiring no headspace, headspace free? ☑ NA ☐ YES ☐ NO

Is the following information provided on the COC, and does it match the sample label?
(explain "no" answer below)

Sample ID's	☑ Yes ☐ No	☐ Not on COC/label
Date Sampled	☐ Yes ☑ No	☑ Not on COC/label
Time Sampled	☐ Yes ☑ No	☑ Not on COC/label
# of Containers	☐ Yes ☑ No Not on COC.	
Relinquished	☑ Yes ☐ No	
Requested analysis	☑ Yes ☐ On Hold	

Other comments (use a separate page if needed)

Air Samples: Were any additional canisters/tubes received? ☑ NA ☐ YES ☐ NO

Number of unused TO15 canisters _____ **Number of unused TO17 tubes** _____

Appendix F

Laboratory Reports for Waste Disposal Characterization Samples

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

October 17, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-217

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 16, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

Case Narrative

Samples were collected on October 15, 2024 and received by the laboratory on October 16, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S030	10-217-01	Soil	10-15-24	10-16-24	
S031	10-217-02	Soil	10-15-24	10-16-24	
S032	10-217-03	Soil	10-15-24	10-16-24	
S009-1	10-217-04	Soil	10-15-24	10-16-24	
SP-WT-1	10-217-05	Soil	10-15-24	10-16-24	
SP-WT-2	10-217-06	Soil	10-15-24	10-16-24	
SP-WT-3	10-217-07	Soil	10-15-24	10-16-24	
SP-WT-4	10-217-08	Soil	10-15-24	10-16-24	
SP-WT-5	10-217-09	Soil	10-15-24	10-16-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S030**					
Laboratory ID:	10-217-01					
Lead	**7.8**	5.3	EPA 6010D	10-16-24	10-16-24	
Client ID:	**S031**					
Laboratory ID:	10-217-02					
Lead	**37**	5.3	EPA 6010D	10-16-24	10-16-24	
Client ID:	**S032**					
Laboratory ID:	10-217-03					
Lead	**13**	5.2	EPA 6010D	10-16-24	10-16-24	
Client ID:	**S009-1**					
Laboratory ID:	10-217-04					
Lead	**190**	5.2	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-1**					
Laboratory ID:	10-217-05					
Lead	**4700**	53	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-2**					
Laboratory ID:	10-217-06					
Lead	**15000**	54	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-3**					
Laboratory ID:	10-217-07					
Lead	**13000**	53	EPA 6010D	10-16-24	10-16-24	
Client ID:	**SP-WT-4**					
Laboratory ID:	10-217-08					
Lead	**4500**	53	EPA 6010D	10-16-24	10-16-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-WT-5**					
Laboratory ID:	10-217-09					
Lead	**12000**	53	EPA 6010D	10-16-24	10-16-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-WT-1**					
Laboratory ID:	10-217-05					
Lead	**ND**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-2**					
Laboratory ID:	10-217-06					
Lead	**0.27**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-3**					
Laboratory ID:	10-217-07					
Lead	**0.99**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-4**					
Laboratory ID:	10-217-08					
Lead	**ND**	0.20	EPA 6010D	10-17-24	10-17-24	
Client ID:	**SP-WT-5**					
Laboratory ID:	10-217-09					
Lead	**1.2**	0.20	EPA 6010D	10-17-24	10-17-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1016SM1					
Lead	**ND**	5.0	EPA 6010D	10-16-24	10-16-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-209-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-209-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**242**	**242**	250	250	ND	**97**	**97**	75-125	0	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1017TM1					
Lead	**ND**	0.20	EPA 6010D	10-17-24	10-17-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-160-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-160-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**8.77**	**8.48**	10.0	10.0	ND	**88**	**85**	75-125	3	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: October 17, 2024
Samples Submitted: October 16, 2024
Laboratory Reference: 2410-217
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S030	10-217-01	**6**	10-16-24
S031	10-217-02	**6**	10-16-24
S032	10-217-03	**5**	10-16-24
S009-1	10-217-04	**4**	10-16-24
SP-WT-1	10-217-05	**6**	10-16-24
SP-WT-2	10-217-06	**7**	10-16-24
SP-WT-3	10-217-07	**5**	10-16-24
SP-WT-4	10-217-08	**6**	10-16-24
SP-WT-5	10-217-09	**5**	10-16-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 10-217

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total ~~MTCA~~ Metals * LEAD	TCLP Metals * LEAD	HEM (oil and grease) 1664					% Moisture
1	S030	10/15/24	1040	S	1															X							
2	S031		1005	S	1															X							
3	S032		1010	S	1															X							
4	~~B009-1~~ S009-1		950	S	1															X							
5	SP-INT-1		1315	S	1															X	X						
6	SP-INT-2		1320	S	1															X	X						
7	SP-INT-3		1325	S	1															X	X						
8	SP-INT-4		1330	S	1															X	X						
9	SP-INT-5	↓	1335	S	1															X	X						

	Signature	Company	Date	Time	Comments/Special Instructions
Relinquished		GE	10.16.24	0910	* LEAD ONLY
Received	Vani	Spdy	10/16/24	0910	
Relinquished	Vani	Spdy	10/16/24	1150	
Received		GE	10/16/24	1150	
Relinquished					
Received					Data Package: Standard ☐ Level III ☐ Level IV ☐
Reviewed/Date		Reviewed/Date			Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 1, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2410-425

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on October 31, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

Case Narrative

Samples were collected on October 30, 2024 and received by the laboratory on October 31, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SP-EXT-1	10-425-01	Soil	10-30-24	10-31-24	
SP-EXT-2	10-425-02	Soil	10-30-24	10-31-24	
SP-EXT-3	10-425-03	Soil	10-30-24	10-31-24	
SP-EXT-4	10-425-04	Soil	10-30-24	10-31-24	
SP-EXT-5	10-425-05	Soil	10-30-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-EXT-1**					
Laboratory ID:	10-425-01					
Lead	**5700**	53	EPA 6010D	10-31-24	11-1-24	
Client ID:	**SP-EXT-2**					
Laboratory ID:	10-425-02					
Lead	**820**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**SP-EXT-3**					
Laboratory ID:	10-425-03					
Lead	**190**	5.3	EPA 6010D	10-31-24	10-31-24	
Client ID:	**SP-EXT-4**					
Laboratory ID:	10-425-04					
Lead	**100**	5.4	EPA 6010D	10-31-24	10-31-24	
Client ID:	**SP-EXT-5**					
Laboratory ID:	10-425-05					
Lead	**200**	5.4	EPA 6010D	10-31-24	10-31-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-EXT-1**					
Laboratory ID:	10-425-01					
Lead	**ND**	1.0	EPA 6010D	11-1-24	11-1-24	
Client ID:	**SP-EXT-2**					
Laboratory ID:	10-425-02					
Lead	**ND**	1.0	EPA 6010D	11-1-24	11-1-24	
Client ID:	**SP-EXT-3**					
Laboratory ID:	10-425-03					
Lead	**ND**	1.0	EPA 6010D	11-1-24	11-1-24	
Client ID:	**SP-EXT-4**					
Laboratory ID:	10-425-04					
Lead	**ND**	1.0	EPA 6010D	11-1-24	11-1-24	
Client ID:	**SP-EXT-5**					
Laboratory ID:	10-425-05					
Lead	**ND**	1.0	EPA 6010D	11-1-24	11-1-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1031SM2					
Lead	**ND**	5.0	EPA 6010D	10-31-24	10-31-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-404-02										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-404-02										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**259**	**257**	250	250	ND	**103**	**103**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1101TM1					
Lead	**ND**	1.0	EPA 6010D	11-1-24	11-1-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-425-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	10-425-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**9.48**	**9.42**	10.0	10.0	ND	**95**	**94**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 1, 2024
Samples Submitted: October 31, 2024
Laboratory Reference: 2410-425
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
SP-EXT-1	10-425-01	**6**	10-31-24
SP-EXT-2	10-425-02	**8**	10-31-24
SP-EXT-3	10-425-03	**6**	10-31-24
SP-EXT-4	10-425-04	**8**	10-31-24
SP-EXT-5	10-425-05	**8**	10-31-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 10-425

Company:	GEO ENGINEERS
Project Number:	0415-068-11
Project Name:	CARPENTER RD
Project Manager:	ABHIJIT JOSHI
Sampled by:	PAUL ROBINETTE

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☒ Project Priority (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	SP-EXT-1	10/30/24	1400	S	1
2	SP-EXT-2		1405		1
3	SP-EXT-3		1410		1
4	SP-EXT-4		1415		1
5	SP-EXT-5		1420		1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1														X LEAD ONLY		X LEAD ONLY						X
2														X		X						X
3														X		X						X
4														X		X						X
5														X		X						X

	Signature	Company	Date	Time
Relinquished		GEO	10-31-24	0980
Received	Van	Spdy	10/31/24	0900
Relinquished	Van	Spdy	10/31/24	1210
Received		OSE	10/31/24	1210
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

X LEAD ONLY

PROJECT PRIORITY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 5, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2412-038

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on December 4, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

Case Narrative

Samples were collected on December 2 and 3, 2024 and received by the laboratory on December 4, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
DUP007	12-038-01	Soil	12-2-24	12-4-24	
SP-FRD-1	12-038-02	Soil	12-3-24	12-4-24	
SP-FRD-2	12-038-03	Soil	12-3-24	12-4-24	
SP-FRD-3	12-038-04	Soil	12-3-24	12-4-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**DUP007**					
Laboratory ID:	12-038-01					
Lead	**ND**	5.5	EPA 6010D	12-4-24	12-4-24	
Client ID:	**SP-FRD-1**					
Laboratory ID:	12-038-02					
Lead	**550**	5.5	EPA 6010D	12-4-24	12-4-24	
Client ID:	**SP-FRD-2**					
Laboratory ID:	12-038-03					
Lead	**210**	5.4	EPA 6010D	12-4-24	12-4-24	
Client ID:	**SP-FRD-3**					
Laboratory ID:	12-038-04					
Lead	**460**	5.4	EPA 6010D	12-4-24	12-4-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-FRD-1**					
Laboratory ID:	12-038-02					
Lead	**ND**	0.20	EPA 6010D	12-5-24	12-5-24	
Client ID:	**SP-FRD-2**					
Laboratory ID:	12-038-03					
Lead	**ND**	0.20	EPA 6010D	12-5-24	12-5-24	
Client ID:	**SP-FRD-3**					
Laboratory ID:	12-038-04					
Lead	**ND**	0.20	EPA 6010D	12-5-24	12-5-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1204SM2					
Lead	**ND**	5.0	EPA 6010D	12-4-24	12-4-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-035-01										
	ORIG	DUP									
Lead	**6.13**	**6.62**	NA	NA		NA		NA	8	20	
MATRIX SPIKES											
Laboratory ID:	12-035-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**243**	**254**	250	250	6.13	**95**	**99**	75-125	4	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1205TM1					
Lead	**ND**	0.20	EPA 6010D	12-5-24	12-5-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	10-326-18										
	ORIG	DUP									
Lead	**0.795**	**0.802**	NA	NA		NA		NA	1	20	
MATRIX SPIKES											
Laboratory ID:	10-326-18										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**9.88**	**9.91**	10.0	10.0	0.795	**91**	**91**	75-125	0	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 5, 2024
Samples Submitted: December 4, 2024
Laboratory Reference: 2412-038
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
DUP007	12-038-01	**9**	12-4-24
SP-FRD-1	12-038-02	**10**	12-4-24
SP-FRD-2	12-038-03	**7**	12-4-24
SP-FRD-3	12-038-04	**7**	12-4-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 12-038

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	DUPOD7	12/2/24	0600	S	1
2	SP-FRD-1	12/3/24	1400		1
3	SP-FRD-2		1405		1
4	SP-FRD-3		1410		1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total Metals	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
1														X	X							X
2														X		X						
3														X		X						
4														X		X						

	Signature	Company	Date	Time
Relinquished		GEI	12/4/24	0935
Received	Van	Spdy	12/4/24	0935
Relinquished	Van	Spdy	12/4/24	1245
Received		OSE	12/4/24	1245
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 10, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2412-092

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on December 9, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

Case Narrative

Samples were collected on December 9, 2024 and received by the laboratory on December 9, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S011-2	12-092-01	Solid	12-9-24	12-9-24	
S063-1	12-092-02	Solid	12-9-24	12-9-24	
S064-1	12-092-03	Solid	12-9-24	12-9-24	
S065-1	12-092-04	Solid	12-9-24	12-9-24	
SP-A-1	12-092-05	Solid	12-9-24	12-9-24	
SP-A-2	12-092-06	Solid	12-9-24	12-9-24	
SP-A-3	12-092-07	Solid	12-9-24	12-9-24	
SP-C-1	12-092-08	Solid	12-9-24	12-9-24	
SP-C-2	12-092-09	Solid	12-9-24	12-9-24	
SP-C-3	12-092-10	Solid	12-9-24	12-9-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-A-1**					
Laboratory ID:	12-092-05					
Lead	**7.3**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-A-2**					
Laboratory ID:	12-092-06					
Lead	**12**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-A-3**					
Laboratory ID:	12-092-07					
Lead	**6.0**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-C-1**					
Laboratory ID:	12-092-08					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-C-2**					
Laboratory ID:	12-092-09					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	
Client ID:	**SP-C-3**					
Laboratory ID:	12-092-10					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S011-2**					
Laboratory ID:	12-092-01					
Lead	**33**	6.8	EPA 6010D	12-9-24	12-9-24	
Client ID:	**S063-1**					
Laboratory ID:	12-092-02					
Lead	**56**	5.6	EPA 6010D	12-9-24	12-9-24	
Client ID:	**S064-1**					
Laboratory ID:	12-092-03					
Lead	**17**	6.0	EPA 6010D	12-9-24	12-9-24	
Client ID:	**S065-1**					
Laboratory ID:	12-092-04					
Lead	**150**	6.2	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-A-1**					
Laboratory ID:	12-092-05					
Lead	**400**	5.3	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-A-2**					
Laboratory ID:	12-092-06					
Lead	**510**	5.3	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-A-3**					
Laboratory ID:	12-092-07					
Lead	**220**	5.3	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-C-1**					
Laboratory ID:	12-092-08					
Lead	**8.3**	5.5	EPA 6010D	12-9-24	12-9-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-C-2**					
Laboratory ID:	12-092-09					
Lead	**23**	5.6	EPA 6010D	12-9-24	12-9-24	
Client ID:	**SP-C-3**					
Laboratory ID:	12-092-10					
Lead	**12**	5.7	EPA 6010D	12-9-24	12-9-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1210TM1					
Lead	**ND**	0.20	EPA 6010D	12-10-24	12-10-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-092-05										
	ORIG	DUP									
Lead	**7.32**	**7.10**	NA	NA		NA		NA	3	20	
MATRIX SPIKES											
Laboratory ID:	12-092-05										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**16.5**	**16.8**	10.0	10.0	7.32	**92**	**95**	75-125	2	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1209SM3					
Lead	**ND**	5.0	EPA 6010D	12-9-24	12-9-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-083-01										
	ORIG	DUP									
Lead	**12.4**	**15.1**	NA	NA		NA		NA	20	20	
MATRIX SPIKES											
Laboratory ID:	12-083-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**243**	**242**	250	250	12.4	**92**	**92**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 10, 2024
Samples Submitted: December 9, 2024
Laboratory Reference: 2412-092
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S011-2	12-092-01	**26**	12-9-24
S063-1	12-092-02	**10**	12-9-24
S064-1	12-092-03	**16**	12-9-24
S065-1	12-092-04	**19**	12-9-24
SP-A-1	12-092-05	**5**	12-9-24
SP-A-2	12-092-06	**7**	12-9-24
SP-A-3	12-092-07	**6**	12-9-24
SP-C-1	12-092-08	**9**	12-9-24
SP-C-2	12-092-09	**11**	12-9-24
SP-C-3	12-092-10	**12**	12-9-24

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 12-092

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP ~~Metals~~ Lead	HEM (oil and grease) 1664A	HOLD	TOTAL METALS PB*			% Moisture
1	SOIL-2	12/4/24	630	S	1																			X			X
2	SO63-1		635	S	1																			X			X
3	SO64-1		640	S	1																			X			X
4	SO65-1		645	S	1																			X			X
5	SP-A-1		650	A	1																X			X			X
6	SP-A-2		652	A	1																X			X			X
7	SP-A-3		654	A	1																X			X			X
8	SP-C-1		656	C	1																X			X			X
9	SP-C-2		658	C	1																X			X			X
10	SP-C-3		700	C	1																X			X			X

	Signature	Company	Date	Time
Relinquished		ESI	12/9/24	945
Received	Jordan Peell	OSE	12/9/24	0943
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 18, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2412-259

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on December 17, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 18, 2024
Samples Submitted: December 17, 2024
Laboratory Reference: 2412-259
Project: 0415-068-11

Case Narrative

Samples were collected on December 16, 2024 and received by the laboratory on December 17, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Total Lead EPA 6010D Analysis

The sample result is reported on a wet weight basis.

The duplicate RPD for Lead is outside control limits due to sample inhomogeneity.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 18, 2024
Samples Submitted: December 17, 2024
Laboratory Reference: 2412-259
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SP-CMU-1	12-259-01	Concrete	12-16-24	12-17-24	
SP-CMU-2	12-259-02	Concrete	12-16-24	12-17-24	
SP-CMU-3	12-259-03	Concrete	12-16-24	12-17-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 18, 2024
Samples Submitted: December 17, 2024
Laboratory Reference: 2412-259
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-CMU-1**					
Laboratory ID:	12-259-01					
Lead	**ND**	0.20	EPA 6010D	12-18-24	12-18-24	
Client ID:	**SP-CMU-2**					
Laboratory ID:	12-259-02					
Lead	**ND**	0.20	EPA 6010D	12-18-24	12-18-24	
Client ID:	**SP-CMU-3**					
Laboratory ID:	12-259-03					
Lead	**ND**	0.20	EPA 6010D	12-18-24	12-18-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 18, 2024
Samples Submitted: December 17, 2024
Laboratory Reference: 2412-259
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-CMU-1**					
Laboratory ID:	12-259-01					
Lead	**35**	5.0	EPA 6010D	12-18-24	12-18-24	
Client ID:	**SP-CMU-2**					
Laboratory ID:	12-259-02					
Lead	**59**	5.0	EPA 6010D	12-18-24	12-18-24	
Client ID:	**SP-CMU-3**					
Laboratory ID:	12-259-03					
Lead	**19**	5.0	EPA 6010D	12-18-24	12-18-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 18, 2024
Samples Submitted: December 17, 2024
Laboratory Reference: 2412-259
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1218TM1					
Lead	**ND**	0.20	EPA 6010D	12-18-24	12-18-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-259-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	12-259-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**8.98**	**8.87**	10.0	10.0	ND	**90**	**89**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 18, 2024
Samples Submitted: December 17, 2024
Laboratory Reference: 2412-259
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1218SM1					
Lead	**ND**	5.0	EPA 6010D	12-18-24	12-18-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-259-01										
	ORIG	DUP									
Lead	**35.3**	**25.5**	NA	NA		NA		NA	32	20	L
MATRIX SPIKES											
Laboratory ID:	12-259-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**231**	**239**	250	250	35.3	**78**	**82**	75-125	3	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 12-259

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals * Lead	HEM (oil and grease) 1664A	HOLD	To be analyzed if Lead			% Moisture
1	SP-CMU-1	12/16/24	1100	C	1																X			X			
2	SP-CMU-2	↓	1105	C	1																X			X			
3	SP-CMU-3	↓	1110	C	1																X			X			

	Signature	Company	Date	Time
Relinquished		GEI	12/17/24	805
Received	Nichelle Bigelow	OSE	12/17/24	0805
Relinquished				
Received				
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

December 20, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2412-315

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on December 19, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

Case Narrative

Samples were collected on December 19, 2024 and received by the laboratory on December 19, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

Total Lead EPA 6010D Analysis

The Matrix Spike/Matrix Spike Duplicate recoveries for Lead are outside control limits due to matrix inhomogeneity. The Spike Blank recovery was 102%.

Any other QA/QC issues associated with this extraction and analysis will be indicated with a footnote reference and discussed in detail on the Data Qualifier page.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SP-AC-1	12-315-01	Concrete	12-19-24	12-19-24	
SP-AC-2	12-315-02	Concrete	12-19-24	12-19-24	
SP-AC-3	12-315-03	Concrete	12-19-24	12-19-24	
SP-AC-4	12-315-04	Concrete	12-19-24	12-19-24	
SP-AC-5	12-315-05	Concrete	12-19-24	12-19-24	
DUP-008	12-315-06	Concrete	12-19-24	12-19-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-AC-1**					
Laboratory ID:	12-315-01					
Lead	**5.5**	0.20	EPA 6010D	12-20-24	12-20-24	
Client ID:	**SP-AC-2**					
Laboratory ID:	12-315-02					
Lead	**ND**	0.20	EPA 6010D	12-20-24	12-20-24	
Client ID:	**SP-AC-3**					
Laboratory ID:	12-315-03					
Lead	**ND**	0.20	EPA 6010D	12-20-24	12-20-24	
Client ID:	**SP-AC-4**					
Laboratory ID:	12-315-04					
Lead	**ND**	0.20	EPA 6010D	12-20-24	12-20-24	
Client ID:	**SP-AC-5**					
Laboratory ID:	12-315-05					
Lead	**9.9**	0.20	EPA 6010D	12-20-24	12-20-24	
Client ID:	**DUP-008**					
Laboratory ID:	12-315-06					
Lead	**4.8**	0.20	EPA 6010D	12-20-24	12-20-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-AC-1**					
Laboratory ID:	12-315-01					
Lead	**290**	5.4	EPA 6010D	12-19-24	12-19-24	
Client ID:	**SP-AC-2**					
Laboratory ID:	12-315-02					
Lead	**240**	5.7	EPA 6010D	12-19-24	12-19-24	
Client ID:	**SP-AC-3**					
Laboratory ID:	12-315-03					
Lead	**280**	5.3	EPA 6010D	12-19-24	12-19-24	
Client ID:	**SP-AC-4**					
Laboratory ID:	12-315-04					
Lead	**280**	5.4	EPA 6010D	12-19-24	12-19-24	
Client ID:	**SP-AC-5**					
Laboratory ID:	12-315-05					
Lead	**350**	5.4	EPA 6010D	12-19-24	12-19-24	
Client ID:	**DUP-008**					
Laboratory ID:	12-315-06					
Lead	**380**	5.7	EPA 6010D	12-19-24	12-19-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1220TM1					
Lead	**ND**	0.20	EPA 6010D	12-20-24	12-20-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-315-01										
	ORIG	DUP									
Lead	**5.47**	**5.77**	NA	NA		NA		NA	5	20	
MATRIX SPIKES											
Laboratory ID:	12-315-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**15.7**	**15.5**	10.0	10.0	5.47	**102**	**100**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Solid
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1219SM1					
Lead	**ND**	5.0	EPA 6010D	12-19-24	12-19-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-315-01										
	ORIG	DUP									
Lead	**268**	**318**	NA	NA		NA		NA	17	20	
MATRIX SPIKES											
Laboratory ID:	12-315-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**610**	**595**	250	250	268	**136**	**131**	75-125	2	20	V

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: December 20, 2024
Samples Submitted: December 19, 2024
Laboratory Reference: 2412-315
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
SP-AC-1	12-315-01	**8**	12-19-24
SP-AC-2	12-315-02	**13**	12-19-24
SP-AC-3	12-315-03	**5**	12-19-24
SP-AC-4	12-315-04	**7**	12-19-24
SP-AC-5	12-315-05	**8**	12-19-24
DUP-008	12-315-06	**12**	12-19-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

Page 1 of 1

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 12-315

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	SP-AC-1	12/19/24	900	C	1
2	SP-AC-2		905	C	1
3	SP-AC-3		910	C	1
4	SP-AC-4		915	C	1
5	SP-AC-5		920	C	1
6	DUP-20B		600	C	1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals LEAD	HEM (oil and grease) 1664A	HOLD	TOTAL LEAD			% Moisture
1																X			X			X
2																X			X			X
3																X			X			X
4																X			X			X
5																X			X			X
6																X			X			X

	Signature	Company	Date	Time
Relinquished		GEI	12/19/24	11:05
Received	J. Isaacson	ALPHA	12/19/24	11:05
Relinquished	J. Isaacson	ALPHA	12/19/24	12:15
Received	Nichelle Bain	OSE	12/19/24	1215
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

January 3, 2025

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2501-002

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on January 2, 2025.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

Case Narrative

Samples were collected on December 31, 2024 and received by the laboratory on January 2, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
SP-C-4	01-002-01	Concrete	12-31-24	1-2-24	
SP-C-5	01-002-02	Concrete	12-31-24	1-2-24	
SP-C-6	01-002-03	Concrete	12-31-24	1-2-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-C-4**					
Laboratory ID:	01-002-01					
Lead	**ND**	0.20	EPA 6010D	1-3-25	1-3-25	
Client ID:	**SP-C-5**					
Laboratory ID:	01-002-02					
Lead	**ND**	0.20	EPA 6010D	1-3-25	1-3-25	
Client ID:	**SP-C-6**					
Laboratory ID:	01-002-03					
Lead	**ND**	0.20	EPA 6010D	1-3-25	1-3-25	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**SP-C-4**					
Laboratory ID:	01-002-01					
Lead	**28**	5.5	EPA 6010D	1-2-25	1-2-25	
Client ID:	**SP-C-5**					
Laboratory ID:	01-002-02					
Lead	**18**	5.3	EPA 6010D	1-2-25	1-2-25	
Client ID:	**SP-C-6**					
Laboratory ID:	01-002-03					
Lead	**17**	5.5	EPA 6010D	1-2-25	1-2-25	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

TCLP LEAD
EPA 1311/6010D
QUALITY CONTROL

Matrix: TCLP Extract
Units: mg/L (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0103TM1					
Lead	**ND**	0.20	EPA 6010D	1-3-25	1-3-25	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	01-002-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	01-002-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**10.0**	**10.3**	10.0	10.0	ND	**100**	**103**	75-125	3	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB0102SM1					
Lead	**ND**	5.0	EPA 6010D	1-2-25	1-2-25	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	12-404-08										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	12-404-08										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**258**	**255**	250	250	ND	**103**	**102**	75-125	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: January 3, 2025
Samples Submitted: January 2, 2025
Laboratory Reference: 2501-002
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
SP-C-4	01-002-01	**9**	1-2-25
SP-C-5	01-002-02	**6**	1-2-25
SP-C-6	01-002-03	**10**	1-2-25

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street · Redmond, WA 98052
Phone: (425) 883-3881 · www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 01-002

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals	TCLP Metals – Lead	HEM (oil and grease) 1664A	HOLD	TOTAL LEAD		% Moisture
1	SP-C-4	12/31/24	1145	C	1																X			X		X
2	SP-C-5	"	1150	"	1																X			X		X
3	SP-C-6	"	1155	"	1																X			X		X

	Signature	Company	Date	Time
Relinquished	[signature]	GE	1/2/25	0933
Received	[signature]	SPL	1/2/25	0933
Relinquished	[signature]	SPL	1/2/25	1115
Received	[signature]	OSE	1/2/25	1115
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Appendix G

Disposal Weight Tickets for Treated Excavated Materials (Non-Hazardous Waste)

CHANGE:

CHECK :

Centralia, WA -- 11 **3325580**

CENTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

10/26/24 10:12 am 10/26/24 10:44 am

7749 RBSU200138

Contract:TB-15779

DTTX27019

Scale In	GROSS WEIGHT	106,580	NET TONS	29.26	INBOUND
Scale Out	TARE WEIGHT	48,060	NET WEIGHT	58,520	INVOICE

28.00	YD	Tracking QTY	
29.26	tn	Cont Soil	Origin:Lacey 100%

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by chapter 15.80 RCW administered by the Washington State Department of Agriculture.
INBOUND - SCALE INDICATOR B337755370 E-seal #2002
OUTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

Centralia, WA -- 11 **3325627**
CENTRALIA ROOSEVELT ROOSEVELT, WA

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

10/29/24 7:25 am 10/29/24 7:53 am
0329 RBSU200275

Contract:TB-15779

DTTX450006

Scale In	GROSS WEIGHT	105,060	NET TONS	28.99		INBOUND
Scale Out	TARE WEIGHT	47,080	NET WEIGHT	57,980		INVOICE

28.00	YD	Tracking QTY	
28.99	tn	Cont Soil	Origin:Lacey 100%

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by chapter 15.80 RCW administered by the Washington State Department of Agriculture.
INBOUND - SCALE INDICATOR B337755370 E-seal #2002
OUTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

Centralia, WA -- 11 **3325668**

CENTRALIA ROOSEVELT ROOSEVELT, WA

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

10/29/24 8:37 am 10/29/24 9:07 am

0331 RBSU200391

Contract:TB-15779

DTTX427790

Scale In	GROSS WEIGHT	106,160	NET TONS	29.48		INBOUND
Scale Out	TARE WEIGHT	47,200	NET WEIGHT	58,960		INVOICE

28.00	YD	Tracking QTY	
29.48	tn	Cont Soil	Origin:Lacey 100%

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by chapter 15.80 RCW administered by the Washington State Department of Agriculture.
INBOUND - SCALE INDICATOR B337755370 E-seal #2002
OUTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

Centralia, WA -- 11 **3325685**

CENTRALIA ROOSEVELT ROOSEVELT, WA

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

10/29/24 9:32 am 10/29/24 9:59 am

0329 RBSU200376

Contract:TB-15779

BNSF231129

Scale In	GROSS WEIGHT	107,680	NET TONS	29.59		INBOUND
Scale Out	TARE WEIGHT	48,500	NET WEIGHT	59,180		INVOICE

28.00	YD	Tracking QTY	
29.59	tn	Cont Soil	Origin:Lacey 100%

Centralia, WA --
CENTRALIA ROOSEVELT ROOSEVELT, WA

11 **3325712**

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

10/30/24 10:00 am 10/30/24 10:22 am

3516 RBSU200380

Contract:TB-15779

BNSF231166

Scale In	GROSS WEIGHT	98,140	NET TONS	25.15		INBOUND
Scale Out	TARE WEIGHT	47,840	NET WEIGHT	50,300		INVOICE

28.00	YD	Tracking QTY	
25.15	tn	Cont Soil	Origin:Lacey 100%

CHANGE:

CHECK :

Centralia, WA -- 11 **3325713**

CENTRALIA ROOSEVELT ROOSEVELT, WA

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

10/30/24 9:47 am 10/30/24 10:24 am

5227 RBSU200242

Contract:TB-15779

BNSF231166

Scale In	GROSS WEIGHT	110,580	NET TONS	29.96		INBOUND
Scale Out	TARE WEIGHT	50,660	NET WEIGHT	59,920		INVOICE

28.00	YD	Tracking QTY	
29.96	tn	Cont Soil	Origin:Lacey 100%

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by chapter 15.80 RCW administered by the Washington State Department of Agriculture.
INBOUND - SCALE INDICATOR B337755370 E-seal #2002
OUTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

11/7/24 3:26 pm 11/7/24 3:55 pm

5227 RBSU200146

:ontract:TB-15779

BNSF231005

Scale In	GROSS WEIGHT	109,880	NET TONS	30.92	INBOUND
Scale Out	TARE WEIGHT	48,040	NET WEIGHT	61,840	INVOICE

8.00	YD	Tracking QTY	
0.92	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

ntralia, WA --
NTRALIA ROOSEVELT ROOSEVELT, WA

11 **3326240**

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

11/13/24 1:14 pm 11/13/24 1:45 pr

5226 RBSU200115

Contract:TB-15779

BNSF230057

Scale In	GROSS WEIGHT	108,700	NET TONS	29.82
Scale Out	TARE WEIGHT	49,060	NET WEIGHT	59,640

INBOUND
INVOICE

8.00	YD	Tracking QTY	
9.82	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed r chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

11/14/24 6:09 am 11/14/24 6:35 ar

5226 RBSU200150

:ontract:TB-15779

BNSF231167

Scale In	GROSS WEIGHT	110,760	NET TONS	30.91	INBOUND
Scale Out	TARE WEIGHT	48,940	NET WEIGHT	61,820	INVOICE

8.00	YD	Tracking QTY	
0.91	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

entralia, WA --
:NTRALIA ROOSEVELT ROOSEVELT, WA

11 **3326274**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

11/14/24 6:23 am 11/14/24 6:48 ar

5227 RBSU200435

Contract:TB-15779

BNSF230057

Scale In	GROSS WEIGHT	102,920	NET TONS	27.56	INBOUND
Scale Out	TARE WEIGHT	47,800	NET WEIGHT	55,120	INVOICE

8.00	YD	Tracking QTY	
7.56	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

11/14/24 6:25 am 11/14/24 6:50 ar

2235 RBSU200420

:ontract:TB-15779

BNSF231167

Scale In	GROSS WEIGHT	111,740	NET TONS	31.54	INBOUND
Scale Out	TARE WEIGHT	48,660	NET WEIGHT	63,080	INVOICE

8.00	YD	Tracking QTY	
1.54	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 1:27 pm 12/19/24 1:54 pr

5227 RBSU200399

Contract:TB-15779

BNSF231166

Scale In	GROSS WEIGHT	88,580	NET TONS	18.68	INBOUND
Scale Out	TARE WEIGHT	51,220	NET WEIGHT	37,360	INVOICE

8.00	YD	Tracking QTY	
8.68	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

entralia, WA --
ENTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327351**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 2:00 pm 12/19/24 2:41 pr

2234 RBSU200380

Contract:TB-15779

BNSF231166

Scale In GROSS WEIGHT 107,620 NET TONS 29.16 INBOUND
Scale Out TARE WEIGHT 49,300 NET WEIGHT 58,320 INVOICE

8.00 YD Tracking QTY
9.16 tn Cont Soil Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 2:05 pm 12/19/24 2:43 pr

3517 RBSU200337

Contract:TB-15779

BNSF231166

Scale In	GROSS WEIGHT	100,620	NET TONS	30.72	INBOUND
Scale Out	TARE WEIGHT	39,180	NET WEIGHT	61,440	INVOICE

8.00	YD	Tracking QTY	
0.72	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

ntralia, WA --
NTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327358**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 2:06 pm 12/19/24 2:51 pr

5226 RBSU200150

ontract:TB-15779

BNSF231166

Scale In	GROSS WEIGHT	98,140	NET TONS	24.16	INBOUND
Scale Out	TARE WEIGHT	49,820	NET WEIGHT	48,320	INVOICE

8.00	YD	Tracking QTY	
4.16	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 2:30 pm 12/19/24 2:53 pr

5227 RBSU200269

Contract:TB-15779

BNSF231166

Scale In	GROSS WEIGHT	111,480	NET TONS	31.03	INBOUND
Scale Out	TARE WEIGHT	49,420	NET WEIGHT	62,060	INVOICE

8.00	YD	Tracking QTY	
1.03	tn	Cont Soil	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

CHECK :

Appendix H
Laboratory Reports for Wipe Samples

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 11, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2411-111

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on November 8, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

Case Narrative

Samples were collected on November 7, 2024 and received by the laboratory on November 8, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
S060	11-111-01	Soil	11-7-24	11-8-24	
S061	11-111-02	Soil	11-7-24	11-8-24	
S062	11-111-03	Soil	11-7-24	11-8-24	
W01	11-111-04	Wipe	11-7-24	11-8-24	
W02	11-111-05	Wipe	11-7-24	11-8-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**S060**					
Laboratory ID:	11-111-01					
Lead	**6.7**	5.4	EPA 6010D	11-11-24	11-11-24	
Client ID:	**S061**					
Laboratory ID:	11-111-02					
Lead	**ND**	5.4	EPA 6010D	11-11-24	11-11-24	
Client ID:	**S062**					
Laboratory ID:	11-111-03					
Lead	**ND**	5.3	EPA 6010D	11-11-24	11-11-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Soil
Units: mg/Kg (ppm)

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1111SM3					
Lead	**ND**	5.0	EPA 6010D	11-11-24	11-11-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
DUPLICATE											
Laboratory ID:	11-114-01										
	ORIG	DUP									
Lead	**ND**	**ND**	NA	NA		NA		NA	NA	20	
MATRIX SPIKES											
Laboratory ID:	11-114-01										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**255**	**255**	250	250	ND	**102**	**102**	75-125	0	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W01**					
Laboratory ID:	11-111-04					
Lead	**270**	10	EPA 6010D	11-11-24	11-11-24	
Client ID:	**W02**					
Laboratory ID:	11-111-05					
Lead	**520**	10	EPA 6010D	11-11-24	11-11-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1111WPH1					
Lead	**ND**	10	EPA 6010D	11-11-24	11-11-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	SB1111WPH1										
	SB	SBD	SB	SBD		SB	SBD				
Lead	**500**	**508**	500	500	ND	**100**	**102**	80-120	2	20	
SPIKE BLANK											
Laboratory ID:	SB1111WPH1										
Lead	**500**		500		N/A	**100**		80-120			

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 11, 2024
Samples Submitted: November 8, 2024
Laboratory Reference: 2411-111
Project: 0415-068-11

% MOISTURE

Client ID	Lab ID	% Moisture	Date Analyzed
S060	11-111-01	**8**	11-8-24
S061	11-111-02	**7**	11-8-24
S062	11-111-03	**5**	11-8-24

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-111

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers
1	SD6D	10/31/24	750	S	1
2	SD61		755	S	1
3	SD6Z		800	S	1
4	WD1	11/1/24	1100	GW	1
5	WD2	11/1/24	1110	GW	1

Lab ID	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1															X							X
2															X							
3															X							
4															X							
5															X							

	Signature	Company	Date	Time
Relinquished		GEI	11/8/24	0925
Received	Van	Spdy	11/8/24	0925
Relinquished	Van	Spdy	11/8/24	1235
Received		OSE	11/8/24	1235
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 14, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2411-168

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on November 13, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 14, 2024
Samples Submitted: November 13, 2024
Laboratory Reference: 2411-168
Project: 0415-068-11

Case Narrative

Samples were collected on November 12, 2024 and received by the laboratory on November 13, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 14, 2024
Samples Submitted: November 13, 2024
Laboratory Reference: 2411-168
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
W03	11-168-01	Wipe	11-12-24	11-13-24	
W04	11-168-02	Wipe	11-12-24	11-13-24	
W05	11-168-03	Wipe	11-12-24	11-13-24	
W06	11-168-04	Wipe	11-12-24	11-13-24	
W07	11-168-05	Wipe	11-12-24	11-13-24	
W08	11-168-06	Wipe	11-12-24	11-13-24	
W09	11-168-07	Wipe	11-12-24	11-13-24	
W10	11-168-08	Wipe	11-12-24	11-13-24	
W11	11-168-09	Wipe	11-12-24	11-13-24	
W12	11-168-10	Wipe	11-12-24	11-13-24	
W13	11-168-11	Wipe	11-12-24	11-13-24	
W14	11-168-12	Wipe	11-12-24	11-13-24	
W15	11-168-13	Wipe	11-12-24	11-13-24	
W16	11-168-14	Wipe	11-12-24	11-13-24	
W17	11-168-15	Wipe	11-12-24	11-13-24	
W18	11-168-16	Wipe	11-12-24	11-13-24	
W19	11-168-17	Wipe	11-12-24	11-13-24	
W20	11-168-18	Wipe	11-12-24	11-13-24	
W21	11-168-19	Wipe	11-12-24	11-13-24	
W22	11-168-20	Wipe	11-12-24	11-13-24	
W23	11-168-21	Wipe	11-12-24	11-13-24	
W24	11-168-22	Wipe	11-12-24	11-13-24	
DUP005	11-168-23	Wipe	11-12-24	11-13-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 14, 2024
Samples Submitted: November 13, 2024
Laboratory Reference: 2411-168
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W03**					
Laboratory ID:	11-168-01					
Lead	**23**	10	EPA 6010D	11-13-24	11-13-24	
Client ID:	**W04**					
Laboratory ID:	11-168-02					
Lead	**130**	10	EPA 6010D	11-13-24	11-13-24	
Client ID:	**W05**					
Laboratory ID:	11-168-03					
Lead	**14**	10	EPA 6010D	11-13-24	11-13-24	
Client ID:	**W06**					
Laboratory ID:	11-168-04					
Lead	**110**	10	EPA 6010D	11-13-24	11-13-24	
Client ID:	**W07**					
Laboratory ID:	11-168-05					
Lead	**20**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W08**					
Laboratory ID:	11-168-06					
Lead	**12**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W09**					
Laboratory ID:	11-168-07					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W10**					
Laboratory ID:	11-168-08					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 14, 2024
Samples Submitted: November 13, 2024
Laboratory Reference: 2411-168
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W11**					
Laboratory ID:	11-168-09					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W12**					
Laboratory ID:	11-168-10					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W13**					
Laboratory ID:	11-168-11					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W14**					
Laboratory ID:	11-168-12					
Lead	**64**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W15**					
Laboratory ID:	11-168-13					
Lead	**29**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W16**					
Laboratory ID:	11-168-14					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W17**					
Laboratory ID:	11-168-15					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W18**					
Laboratory ID:	11-168-16					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 14, 2024
Samples Submitted: November 13, 2024
Laboratory Reference: 2411-168
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W19**					
Laboratory ID:	11-168-17					
Lead	**80**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W20**					
Laboratory ID:	11-168-18					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W21**					
Laboratory ID:	11-168-19					
Lead	**17**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W22**					
Laboratory ID:	11-168-20					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W23**					
Laboratory ID:	11-168-21					
Lead	**220**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W24**					
Laboratory ID:	11-168-22					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**DUP005**					
Laboratory ID:	11-168-23					
Lead	**15**	10	EPA 6010D	11-14-24	11-14-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 14, 2024
Samples Submitted: November 13, 2024
Laboratory Reference: 2411-168
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1113WPH1					
Lead	**ND**	10	EPA 6010D	11-13-24	11-13-24	
Laboratory ID:	MB1114WPH1					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	SB1113WPH1										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**528**	**520**	500	500	ND	**106**	**104**	80-120	2	20	
Laboratory ID:	SB1114WPH1										
	MS	MSD	MS	MSD		MS	MSD				
Lead	**518**	**522**	500	500	ND	**104**	**104**	80-120	1	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEO ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-168

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
1	W03	11-12-24	804	WIPE	1															X							
2	W04		806		1															X							
X3	W05		808		1															X							
4	W06		810		1															X							
5	W07		812		1															X							
6	W08		814		1															X							
7	W09		816		1															X							
8	W10		818		1															X							
9	W11		820		1															X							
10	W12	↓	822	↓	1															X							

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	11-14-24	0910
Received	Van	Spdy	11/13/24	0910
Relinquished	Van	Spdy	11/13/24	1215
Received	[signature]	GE	11/13/24	1215
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEO ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)
(Check One)
☐ Same Day ☒ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-168

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
11	W13	11/12/24	824	WATER	1															X							
12	W14		826		1															X							
13	W15		828		1															X							
14	W16		830		1															X							
15	W17		832		1															X							
16	W18		834		1															X							
17	W19		836		1															X							
18	W20		838		1															X							
19	W21		840		1															X							
20	W22		842		1															X							

	Signature	Company	Date	Time
Relinquished		GEI	11/13/24	0910
Received	Van		11/13/24	0910
Relinquished	Van		11/13/24	1215
Received		OSE	11/13/24	1215
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐
Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GEO ENGINEERS
Project Number: 0415-068-11
Project Name: CARPENTER RD
Project Manager: ABHIJIT JOSHI
Sampled by: PAUL ROBINETTE

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☒ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 11-168

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX (8021☐ 8260☐)	NWTPH-Gx	NWTPH-Dx (SG Clean-up ☐)	Volatiles 8260	Halogenated Volatiles 8260	EDB EPA 8011 (Waters Only)	Semivolatiles 8270/SIM (with low-level PAHs)	PAHs 8270/SIM (low-level)	PCBs 8082	Organochlorine Pesticides 8081	Organophosphorus Pesticides 8270/SIM	Chlorinated Acid Herbicides 8151	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664					% Moisture
21	W23	11-12-24	0814	WATER	1															X							
22	W24	11-12-24	0846	WATER	1															X							
23	DUP005	11-12-24	0000	WATER	1															X							

	Signature	Company	Date	Time
Relinquished		GEO	11/13/24	0910
Received	Vam	Spdy	11/13/24	0910
Relinquished	Vam	Spdy	11/13/24	1215
Received		GEO	11/13/24	1215
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

* LEAD ONLY

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 15, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2411-190

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on November 14, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 15, 2024
Samples Submitted: November 14, 2024
Laboratory Reference: 2411-190
Project: 0415-068-11

Case Narrative

Samples were collected on November 12, 2024 and received by the laboratory on November 14, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 15, 2024
Samples Submitted: November 14, 2024
Laboratory Reference: 2411-190
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
W35	11-190-01	Wipe	11-12-24	11-14-24	
W36	11-190-02	Wipe	11-12-24	11-14-24	
W37	11-190-03	Wipe	11-12-24	11-14-24	
W38	11-190-04	Wipe	11-12-24	11-14-24	
W39	11-190-05	Wipe	11-12-24	11-14-24	
W40	11-190-06	Wipe	11-12-24	11-14-24	
W41	11-190-07	Wipe	11-12-24	11-14-24	
W42	11-190-08	Wipe	11-12-24	11-14-24	
W43	11-190-09	Wipe	11-12-24	11-14-24	
W44	11-190-10	Wipe	11-12-24	11-14-24	
W25	11-190-11	Wipe	11-12-24	11-14-24	
W26	11-190-12	Wipe	11-12-24	11-14-24	
W27	11-190-13	Wipe	11-12-24	11-14-24	
W28	11-190-14	Wipe	11-12-24	11-14-24	
W29	11-190-15	Wipe	11-12-24	11-14-24	
W30	11-190-16	Wipe	11-12-24	11-14-24	
W31	11-190-17	Wipe	11-12-24	11-14-24	
W32	11-190-18	Wipe	11-12-24	11-14-24	
W33	11-190-19	Wipe	11-12-24	11-14-24	
W34	11-190-20	Wipe	11-12-24	11-14-24	
DUP006	11-190-21	Wipe	11-12-24	11-14-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 15, 2024
Samples Submitted: November 14, 2024
Laboratory Reference: 2411-190
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W35**					
Laboratory ID:	11-190-01					
Lead	**1700**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W36**					
Laboratory ID:	11-190-02					
Lead	**140**	10	EPA 6010D	11-14-24	11-14-24	
Client ID:	**W37**					
Laboratory ID:	11-190-03					
Lead	**140**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W38**					
Laboratory ID:	11-190-04					
Lead	**59**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W39**					
Laboratory ID:	11-190-05					
Lead	**220**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W40**					
Laboratory ID:	11-190-06					
Lead	**150**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W41**					
Laboratory ID:	11-190-07					
Lead	**33**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W42**					
Laboratory ID:	11-190-08					
Lead	**180**	10	EPA 6010D	11-15-24	11-15-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 15, 2024
Samples Submitted: November 14, 2024
Laboratory Reference: 2411-190
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W43**					
Laboratory ID:	11-190-09					
Lead	**190**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W44**					
Laboratory ID:	11-190-10					
Lead	**110**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W25**					
Laboratory ID:	11-190-11					
Lead	**160**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W26**					
Laboratory ID:	11-190-12					
Lead	**53**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W27**					
Laboratory ID:	11-190-13					
Lead	**97**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W28**					
Laboratory ID:	11-190-14					
Lead	**250**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W29**					
Laboratory ID:	11-190-15					
Lead	**11**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W30**					
Laboratory ID:	11-190-16					
Lead	**110**	10	EPA 6010D	11-15-24	11-15-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 15, 2024
Samples Submitted: November 14, 2024
Laboratory Reference: 2411-190
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W31**					
Laboratory ID:	11-190-17					
Lead	**170**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W32**					
Laboratory ID:	11-190-18					
Lead	**120**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W33**					
Laboratory ID:	11-190-19					
Lead	**53**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**W34**					
Laboratory ID:	11-190-20					
Lead	**160**	10	EPA 6010D	11-15-24	11-15-24	
Client ID:	**DUP006**					
Laboratory ID:	11-190-21					
Lead	**28**	10	EPA 6010D	11-15-24	11-15-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 15, 2024
Samples Submitted: November 14, 2024
Laboratory Reference: 2411-190
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1114WPH2					
Lead	**ND**	10	EPA 6010D	11-14-24	11-14-24	
Laboratory ID:	MB1115WPH1					
Lead	**ND**	10	EPA 6010D	11-15-24	11-15-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	SB1114WPH2										
	SB	SBD	SB	SBD		SB	SBD				
Lead	**513**	**515**	500	500	ND	**103**	**103**	80-120	0	20	
Laboratory ID:	SB1115WPH1										
	SB	SBD	SB	SBD		SB	SBD				
Lead	**515**	**505**	500	500	ND	**103**	**101**	80-120	2	20	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☑ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 11-190

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~MTCA~~ Metals *	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
1	W35	11/12/24	1434	Wipe	1															X							
2	W36	11/12/24	1436	Wipe	1															X							
3	W37	11/12/24	1438	Wipe	1															X							
4	W38	11/12/24	1440	Wipe	1															X							
5	W39	11/12/24	1442	Wipe	1															X							
6	W40	11/12/24	1444	Wipe	1															X							
7	W41	11/12/24	1446	Wipe	1															X							
8	W42	11/12/24	1448	Wipe	1															X							
9	W43	11/12/24	1450	Wipe	1															X							
10	W44	11/12/24	1452	Wipe	1															X							

	Signature	Company	Date	Time
Relinquished	[signature]	GE	11/14/24	0810
Received	Van	Spdy	11/14/24	0810
Relinquished	Van	Spdy	11/14/24	1135
Received	Nichelle Bjelin	OSE	11/14/24	1135
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

Lead Only *

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

Page 2 of 3

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Laboratory Number: 11-190

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~HTCA~~ Metals *	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
11	W25	11/12/24	1410	Wipe	1															X							
12	W26	11/12/24	1412	Wipe	1															X							
13	W27	11/12/24	1414	Wipe	1															X							
14	W28	11/12/24	1416	Wipe	1															X							
15	W29	11/12/24	1418	Wipe	1															X							
16	W30	11/12/24	1424	Wipe	1															X							
17	W31	11/12/24	1426	Wipe	1															X							
18	W32	11/12/24	1428	Wipe	1															X							
19	W33	11/12/24	1430	Wipe	1															X							
20	W34	11/12/24	1432	Wipe	1															X							

	Signature	Company	Date	Time
Relinquished	[signature]	GEI	11/14/24	0810
Received	Van	Spdy	11/14/24	0810
Relinquished	Van	Spdy	11/14/24	1135
Received	Nichelle Bjorn	OSE	11/14/24	1135
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Lead Only *

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)
(Check One)
☐ Same Day ☑ 1 Day
☐ 2 Days ☐ 3 Days
☐ Standard (7 Days)
☐ _____ (other)

Laboratory Number: 11-190

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total ~~MTCA~~ Metals *	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
21	DUP006	11/12/24	0600	Wipe	1															X							

	Signature	Company	Date	Time
Relinquished		GE	11/13/24	0810
Received	Vann	Spdy	11/14/24	0810
Relinquished	Vann	Spdy	11/14/24	1135
Received	Nicholle Bafus	OSE	11/14/24	1135
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions
Lead Only *

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

OnSite Environmental Inc.
14648 NE 95th Street, Redmond, WA 98052 • (425) 883-3881

November 26, 2024

Abhijit Joshi
GeoEngineers, Inc.
2101 4th Avenue, Suite 950
Seattle, WA 98121

Re: Analytical Data for Project 0415-068-11
Laboratory Reference No. 2411-333

Dear Abhijit:

Enclosed are the analytical results and associated quality control data for samples submitted on November 25, 2024.

The standard policy of OnSite Environmental, Inc. is to store your samples for 30 days from the date of receipt. If you require longer storage, please contact the laboratory.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning the data, or need additional information, please feel free to call me.

Sincerely,

David Baumeister
Project Manager

Enclosures

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 26, 2024
Samples Submitted: November 25, 2024
Laboratory Reference: 2411-333
Project: 0415-068-11

Case Narrative

Samples were collected on November 21, 2024 and received by the laboratory on November 25, 2024. They were maintained at the laboratory at a temperature of 2°C to 6°C.

Please note that any and all soil sample results are reported on a dry-weight basis, unless otherwise noted below. However the soil results for the QA/QC samples are reported on a wet-weight basis.

General QA/QC issues associated with the analytical data enclosed in this laboratory report will be indicated with a reference to a comment or explanation on the Data Qualifier page. More complex and involved QA/QC issues will be discussed in detail below.

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 26, 2024
Samples Submitted: November 25, 2024
Laboratory Reference: 2411-333
Project: 0415-068-11

ANALYTICAL REPORT FOR SAMPLES

Client ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
W35-1	11-333-01	Wipe	11-21-24	11-25-24	

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 26, 2024
Samples Submitted: November 25, 2024
Laboratory Reference: 2411-333
Project: 0415-068-11

TOTAL LEAD
EPA 6010D

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
Client ID:	**W35-1**					
Laboratory ID:	11-333-01					
Lead	**ND**	10	EPA 6010D	11-26-24	11-26-24	

This report pertains to the samples analyzed in accordance with the chain of custody,
and is intended only for the use of the individual or company to whom it is addressed.

Date of Report: November 26, 2024
Samples Submitted: November 25, 2024
Laboratory Reference: 2411-333
Project: 0415-068-11

TOTAL LEAD
EPA 6010D
QUALITY CONTROL

Matrix: Wipe
Units: ug/Wipe

Analyte	Result	PQL	Method	Date Prepared	Date Analyzed	Flags
METHOD BLANK						
Laboratory ID:	MB1126WPH1					
Lead	**ND**	10	EPA 6010D	11-26-24	11-26-24	

Analyte	Result		Spike Level		Source Result	Percent Recovery		Recovery Limits	RPD	RPD Limit	Flags
MATRIX SPIKES											
Laboratory ID:	SB1126WPH1										
	SB	SBD	SB	SBD		SB	SBD				
Lead	**520**	**459**	500	500	ND	**104**	**92**	80-120	13	20	
SPIKE BLANK											
Laboratory ID:	SB1126WPH1										
Lead	**520**		500		N/A	**104**		80-120			

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

OnSite Environmental Inc.

Data Qualifiers and Abbreviations

A - Due to a high sample concentration, the amount spiked is insufficient for meaningful MS/MSD recovery data.

B - The analyte indicated was also found in the blank sample.

C - The duplicate RPD is outside control limits due to high result variability when analyte concentrations are within five times the quantitation limit.

E - The value reported exceeds the quantitation range and is an estimate.

F - Surrogate recovery data is not available due to the high concentration of coeluting target compounds.

H - The analyte indicated is a common laboratory solvent and may have been introduced during sample preparation, and be impacting the sample result.

I - Compound recovery is outside of the control limits.

J - The value reported was below the practical quantitation limit. The value is an estimate.

K - Sample duplicate RPD is outside control limits due to sample inhomogeneity. The sample was re-extracted and re-analyzed with similar results.

L - The RPD is outside of the control limits.

M - Hydrocarbons in the gasoline range are impacting the diesel range result.

M1 - Hydrocarbons in the gasoline range (toluene-naphthalene) are present in the sample.

N - Hydrocarbons in the lube oil range are impacting the diesel range result.

N1 - Hydrocarbons in diesel range are impacting lube oil range results.

O - Hydrocarbons indicative of heavier fuels are present in the sample and are impacting the gasoline result.

P - The RPD of the detected concentrations between the two columns is greater than 40.

Q - Surrogate recovery is outside of the control limits.

S - Surrogate recovery data is not available due to the necessary dilution of the sample.

T - The sample chromatogram is not similar to a typical _____.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U1 - The practical quantitation limit is elevated due to interferences present in the sample.

V - Matrix Spike/Matrix Spike Duplicate recoveries are outside control limits due to matrix effects.

W - Matrix Spike/Matrix Spike Duplicate RPD are outside control limits due to matrix effects.

X - Sample extract treated with a mercury cleanup procedure.

X1 - Sample extract treated with a sulfuric acid/silica gel cleanup procedure.

X2 - Sample extract treated with a silica gel cleanup procedure.

Y - The calibration verification for this analyte exceeded the 20% drift specified in methods 8260 & 8270, and therefore the reported result should be considered an estimate. The overall performance of the calibration verification standard met the acceptance criteria of the method.

Y1 - Negative effects of the matrix from this sample on the instrument caused values for this analyte in the bracketing continuing calibration verification standard (CCVs) to be outside of 20% acceptance criteria. Because of this, quantitation limits and sample concentrations should be considered estimates.

Z -

ND - Not Detected at PQL
PQL - Practical Quantitation Limit
RPD - Relative Percent Difference

This report pertains to the samples analyzed in accordance with the chain of custody, and is intended only for the use of the individual or company to whom it is addressed.

Chain of Custody

OnSite Environmental Inc.
Analytical Laboratory Testing Services
14648 NE 95th Street • Redmond, WA 98052
Phone: (425) 883-3881 • www.onsite-env.com

Company: GeoEngineers
Project Number: 0415-068-11
Project Name: Carpenter Rd
Project Manager: Abhijit Joshi
Sampled by: Paul Robinette

Turnaround Request (in working days)

(Check One)

- ☐ Same Day
- ☑ 1 Day
- ☐ 2 Days
- ☐ 3 Days
- ☐ Standard (7 Days)
- ☐ _____ (other)

Laboratory Number: 11-333

Lab ID	Sample Identification	Date Sampled	Time Sampled	Matrix	Number of Containers	NWTPH-HCID	NWTPH-Gx/BTEX	NWTPH-Gx	NWTPH-Dx (☐ Acid / SG Clean-up)	Volatiles 8260C	Halogenated Volatiles 8260C	EDB EPA 8011 (Waters Only)	Semivolatiles 8270D/SIM (with low-level PAHs)	PAHs 8270D/SIM (low-level)	PCBs 8082A	Organochlorine Pesticides 8081B	Organophosphorus Pesticides 8270D/SIM	Chlorinated Acid Herbicides 8151A	Total RCRA Metals	Total MTCA Metals *	TCLP Metals	HEM (oil and grease) 1664A	HOLD				% Moisture
1	W35-1	11/21/24	1000	Wipe	1															X							

	Signature	Company	Date	Time
Relinquished		GEI	11/25/24	1045
Received	Van	Spdy	11/25/24	1045
Relinquished	Van	Spdy	11/25/24	1255
Received		OSE	11/25/24	1255
Relinquished				
Received				
Reviewed/Date		Reviewed/Date		

Comments/Special Instructions

*Lead Only

Data Package: Standard ☐ Level III ☐ Level IV ☐

Chromatograms with final report ☐ Electronic Data Deliverables (EDDs) ☐

Appendix I

Disposal Weight Tickets for Demolition Debris (Hazardous Waste)



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 110686

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	11/14/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	511372	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018615630FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	17040 lb*
In	11/14/2024 12:44:06	MANUAL WT	pslider1		Tare	
Out	11/14/2024 12:44:06		pslider1		Net	17040 lb
			* Manual Weight		Tons	8.52

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 110687

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	11/14/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	511373	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018615626FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	17640 lb*
In	11/14/2024 12:49:56	MANUAL WT	pslider1		Tare	
Out	11/14/2024 12:49:56		pslider1		Net	17640 lb
			* Manual Weight		Tons	8.82

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 111228

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	11/20/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	511929	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018615627FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	22160 lb*
In	11/20/2024 14:05:01	MANUAL WT	pslider1		Tare	
Out	11/20/2024 14:05:01		pslider1		Net	22160 lb
			* Manual Weight		Tons	11.08

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112662

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512026	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616073FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	12/17/2024 14:35:24	MANUAL WT	pslider1		Gross	17940 lb*
Out	12/17/2024 14:35:24		pslider1		Tare	
			* Manual Weight		Net	17940 lb
					Tons	8.97

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112672

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512137	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616072FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	9840 lb*
In	12/17/2024 14:48:04	MANUAL WT	pslider1		Tare	
Out	12/17/2024 14:48:04		pslider1		Net	9840 lb
			* Manual Weight		Tons	4.92

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112676

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512139	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018615628FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	12/17/2024 14:51:54	MANUAL WT	pslider1		Gross	12840 lb*
Out	12/17/2024 14:51:54		pslider1		Tare	
			* Manual Weight		Net	12840 lb
					Tons	6.42

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112678

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512145	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616077FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	12/17/2024 14:56:32	MANUAL WT	pslider1		Gross	14720 lb*
Out	12/17/2024 14:56:32		pslider1		Tare	
			* Manual Weight		Net	14720 lb
					Tons	7.36

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112689

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512367	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616090FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	13080 lb*
In	12/17/2024 15:38:23	MANUAL WT	pslider1		Tare	
Out	12/17/2024 15:38:23		pslider1		Net	13080 lb
			* Manual Weight		Tons	6.54

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112690

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512368	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616089FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	13120 lb*
In	12/17/2024 15:41:27	MANUAL WT	pslider1		Tare	
Out	12/17/2024 15:41:27		pslider1		Net	13120 lb
			* Manual Weight		Tons	6.56

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112691

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512375	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616088FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	10420 lb*
In	12/17/2024 15:44:26	MANUAL WT	pslider1		Tare	
Out	12/17/2024 15:44:26		pslider1		Net	10420 lb
			* Manual Weight		Tons	5.21

Comments



Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 112692

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	12/17/2024	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512376	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616076FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound	Gross	6400 lb*
In	12/17/2024 15:47:40	MANUAL WT	pslider1		Tare	
Out	12/17/2024 15:47:40		pslider1		Net	6400 lb
			* Manual Weight		Tons	3.20

Comments

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114235

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	01/09/2025	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	512531	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018283992FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/09/2025 15:59:26	MANUAL WT	pslider1		Gross	7820 lb*
Out	01/09/2025 15:59:26		pslider1		Tare	
			* Manual Weight		Net	7820 lb
					Tons	3.91

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	35.00	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	1.00	Each				WA-LACEY
4	CONT PICKUP-CONTAI	100	1.00	Each				WA-LACEY
5	RAIL LOAD 20FT-RAI	100	1	Load				WA-LACEY
6	RENT DAILY-RENT PE	100	5.00	Each				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114522

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	01/13/2025	Vehicle#	RAL
Payment Type	Credit Account	Container	
CWM Load#	513238	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018283994FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

Volume

	Time	Scale	Operator	Inbound		
In	01/13/2025 16:17:00	MANUAL WT	pslider1		Gross	23940 lb*
Out	01/13/2025 16:17:00		pslider1		Tare	
			* Manual Weight		Net	23940 lb
					Tons	11.97

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	30.00	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	1.00	Each				WA-LACEY
4	CONT PICKUP-CONTAI	100	1.00	Each				WA-LACEY
5	RAIL LOAD 20FT-RAI	100	1	Load				WA-LACEY
6	RENT DAILY-RENT PE	100	28.00	Each				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114523

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	WATCO PALUOSE & COULEE CITY
Ticket Date	01/13/2025	Vehicle#	RAIL Volume
Payment Type	Credit Account	Container	
CWM Load#	513239	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	015743745FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/13/2025 16:20:53	MANUAL WT	pslider1		Gross	6440 lb*
Out	01/13/2025 16:20:53		pslider1		Tare	
			* Manual Weight		Net	6440 lb
					Tons	3.22

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	35.00	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	1.00	Each				WA-LACEY
4	CONT PICKUP-CONTAI	100	1.00	Each				WA-LACEY
5	RAIL LOAD 20FT-RAI	100	1	Load				WA-LACEY
6	RENT DAILY-RENT PE	100	20.00	Each				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

Appendix J

Disposal Weight Tickets for Concrete Debris (Non-Hazardous Waste)

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 11:58 am 12/19/24 12:35 pr

5223 RBSU200207

:ontract:TB-18471 PO:2442

BNSF231131

Scale In	GROSS WEIGHT	92,480	NET TONS	22.17
Scale Out	TARE WEIGHT	48,140	NET WEIGHT	44,340

INBOUND
INVOICE

8.00	YD	Tracking QTY	
2.17	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

ntralia, WA --
NTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327306**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 12:26 pm 12/19/24 12:56 pr

5227 RBSU200331

Contract:TB-18471 PO:2442

BNSF231131

Scale In	GROSS WEIGHT	90,660	NET TONS	20.70	
Scale Out	TARE WEIGHT	49,260	NET WEIGHT	41,400	INBOUND INVOICE

3.00	YD	Tracking QTY	
0.70	tn	Contaminated Debris	Origin:Lacey 100%

IS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a ighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
TBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 12:55 pm 12/19/24 1:25 pr

2234 RBSU200365

:ontract:TB-18471 PO:2442

BNSF231111

Scale In	GROSS WEIGHT	90,380	NET TONS	20.41
Scale Out	TARE WEIGHT	49,560	NET WEIGHT	40,820

INBOUND
INVOICE

8.00	YD	Tracking QTY	
0.41	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed / chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

ntralia, WA --
NTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327316**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 12:55 pm 12/19/24 1:25 pr

3517 RBSU200378

Contract:TB-18471 PO:2442

BNSF231131

Scale In	GROSS WEIGHT	88,380	NET TONS	20.11
Scale Out	TARE WEIGHT	48,160	NET WEIGHT	40,220

INBOUND
INVOICE

3.00	YD	Tracking QTY	
0.11	tn	Contaminated Debris	Origin:Lacey 100%

IS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a ighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
TBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 12:55 pm 12/19/24 1:26 pr

5226 RBSU200163

Contract:TB-18471 PO:2442

BNSF231131

Scale In	GROSS WEIGHT	95,220	NET TONS	22.50
Scale Out	TARE WEIGHT	50,220	NET WEIGHT	45,000

INBOUND
INVOICE

8.00	YD	Tracking QTY	
2.50	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

entralia, WA --
ENTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327325**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/19/24 1:11 pm 12/19/24 1:43 pr

5223 RBSU200162

Contract:TB-18471 PO:2442

BNSF231111

Scale In	GROSS WEIGHT	89,900	NET TONS	20.51
Scale Out	TARE WEIGHT	48,880	NET WEIGHT	41,020

INBOUND
INVOICE

3.00	YD	Tracking QTY	
0.51	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

NTRALIA ROOSEVELT ROOSEVELT, WA

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/24/24 9:42 am 12/24/24 10:18 ar

2234 RBSU200271

Contract:TB-18471 PO:2442

BNSF231047

Scale In	GROSS WEIGHT	88,160	NET TONS	19.35	
Scale Out	TARE WEIGHT	49,460	NET WEIGHT	38,700	

INBOUND
INVOICE

8.00	YD	Tracking QTY	
9.35	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed r chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

entralia, WA --
ENTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327511**

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/24/24 9:54 am 12/24/24 10:18 ar

2235 RBSU200237

Contract:TB-18471 PO:2442

BNSF231047

Scale In	GROSS WEIGHT	88,320	NET TONS	19.32	INBOUND
Scale Out	TARE WEIGHT	49,680	NET WEIGHT	38,640	INVOICE

3.00	YD	Tracking QTY	
9.32	tn	Contaminated Debris	Origin:Lacey 100%

IS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a
ighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed
chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
TBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

:NTRALIA ROOSEVELT ROOSEVELT, WA

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/30/24 10:19 am

2234

12/30/24 10:44 ar

RBSU200378

Contract:TB-18471 PO:2442

BNSF231167

Manual In	GROSS WEIGHT	84,360	NET TONS	17.43
Scale Out	TARE WEIGHT	49,500	NET WEIGHT	34,860

INBOUND
INVOICE

8.00	YD	Tracking QTY	
7.43	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed / chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

entralia, WA --
ENTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327591**

Danielle C.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

12/30/24 11:35 am 12/30/24 12:13 pr

1565 RBSU200117

Contract:TB-18471 PO:2442

BNSF231167

Scale In	GROSS WEIGHT	79,780	NET TONS	15.31	INBOUND
Scale Out	TARE WEIGHT	49,160	NET WEIGHT	30,620	INVOICE

3.00	YD	Tracking QTY	
5.31	tn	Contaminated Debris	Origin:Lacey 100%

IS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a ighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

1/11/25 8:42 am 1/11/25 9:20 am

5227 RBSU200337

:ontract:TB-18471 PO:2442

BNSF231009

Scale In	GROSS	WEIGHT	94,240	NET TONS	22.51
Scale Out	TARE	WEIGHT	49,220	NET WEIGHT	45,020

INBOUND
INVOICE

8.00	YD	Tracking QTY	
2.51	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed / chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

:NTRALIA ROOSEVELT ROOSEVELT, WA

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

1/11/25 9:16 am 1/11/25 9:43 am

8281 RBSU200419

:ontract:TB-18471 PO:2442

BNSF231009

Scale In	GROSS	WEIGHT	96,000	NET TONS	23.01
Scale Out	TARE	WEIGHT	49,980	NET WEIGHT	46,020

INBOUND
INVOICE

8.00	YD	Tracking QTY	
3.01	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed r chapter 15.80 RCW administered by the Washington State Department of Agriculture.
IBOUND - SCALE INDICATOR B337755370 E-seal #2002
UTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:
CHECK :

ıntralia, WA --
:NTRALIA ROOSEVELT ROOSEVELT, WA

CHECK :

11 **3327904**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

1/11/25 9:15 am 1/11/25 9:45 am

0331 RBSU200365

Contract:TB-18471 PO:2442

BNSF231009

Scale In	GROSS WEIGHT	90,900	NET TONS	20.57	INBOUND
Scale Out	TARE WEIGHT	49,760	NET WEIGHT	41,140	INVOICE

8.00	YD	Tracking QTY	
0.57	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a
eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed
chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
JTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

ıntralia, WA --
:NTRALIA ROOSEVELT ROOSEVELT, WA

11 **3327905**

Denise B.

015819 - Titan Earthwork LLC
1585 Valentine Ave. SE
Pacific, WA 98047

1/11/25 9:19 am 1/11/25 9:53 am

2235 RBSU200227

Contract:TB-18471 PO:2442

BNSF231009

Scale In	GROSS WEIGHT	98,780	NET TONS	23.75	INBOUND
Scale Out	TARE WEIGHT	51,280	NET WEIGHT	47,500	INVOICE

8.00	YD	Tracking QTY	
3.75	tn	Contaminated Debris	Origin:Lacey 100%

HIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a eighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed chapter 15.80 RCW administered by the Washington State Department of Agriculture.
BOUND - SCALE INDICATOR B337755370 E-seal #2002
JTBOUND - SCALE INDICATOR 56656605KM E-seal #2008

CHANGE:

Appendix K

Disposal Weight Tickets for Concrete and Asphalt Debris (Hazardous Waste)

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114537

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/14/2025	Vehicle#	R9 Volume
Payment Type	Credit Account	Container	
CWM Load#	513324	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	015743740FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/14/2025 08:24:56	MANUAL WT	pslider1		Gross	66861 lb*
Out	01/14/2025 08:24:56		pslider1		Tare	1 lb*
			* Manual Weight		Net	66860 lb
					Tons	33.43

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	2.00	Each				WA-LACEY
4	TRANS PER TON-TRAN	100	33.43	Tons				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114538

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/14/2025	Vehicle#	103 Volume
Payment Type	Credit Account	Container	
CWM Load#	513325	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	015743741FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/14/2025 08:31:17	MANUAL WT	pslider1		Gross	55501 lb*
Out	01/14/2025 08:31:17		pslider1		Tare	1 lb*
			* Manual Weight		Net	55500 lb
					Tons	27.75

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	2.00	Each				WA-LACEY
4	TRANS PER TON-TRAN	100	27.75	Tons				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114967

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/17/2025	Vehicle#	R9 Volume
Payment Type	Credit Account	Container	
CWM Load#	513548	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	015743743FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/17/2025 14:33:08	MANUAL WT	pslider1		Gross	60980 lb*
Out	01/17/2025 14:33:08		pslider1		Tare	1 lb*
			* Manual Weight		Net	60979 lb
					Tons	30.49

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	2.00	Each				WA-LACEY
4	TRANS PER TON-TRAN	100	30.49	Tons				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

WASTE MANAGEMENT

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 114968

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/17/2025	Vehicle#	95 Volume
Payment Type	Credit Account	Container	
CWM Load#	513552	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	015743742FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/17/2025 14:35:48	MANUAL WT	pslider1		Gross	65940 lb*
Out	01/17/2025 14:35:48		pslider1		Tare	1 lb*
			* Manual Weight		Net	65939 lb
					Tons	32.97

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				WA-LACEY
2	MFE-e-Manifest (La	100	1.00	Each				WA-LACEY
3	LINER EA-LINER PER	100	2.00	Each				WA-LACEY
4	TRANS PER TON-TRAN	100	32.97	Tons				WA-LACEY

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 115177

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/21/2025	Vehicle#	r9 Volume
Payment Type	Credit Account	Container	
CWM Load#	513579	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018283996FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/21/2025 13:01:15	MANUAL WT	pslider1		Gross	64500 lb*
Out	01/21/2025 13:01:15		pslider1		Tare	1 lb*
			* Manual Weight		Net	64499 lb
					Tons	32.25

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				
2	MFE-e-Manifest (La	100	1.00	Each				
3	LINER EA-LINER PER	100	2.00	Each				
4	TRANS PER TON-TRAN	100	32.25	Tons				

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 115242

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/21/2025	Vehicle#	95 Volume
Payment Type	Credit Account	Container	
CWM Load#	513582	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018283995FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/21/2025 16:11:53	MANUAL WT	pslider1		Gross	62581 lb*
Out	01/21/2025 16:11:53		pslider1		Tare	1 lb*
			* Manual Weight		Net	62580 lb
					Tons	31.29

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				
2	MFE-e-Manifest (La	100	1.00	Each				
3	LINER EA-LINER PER	100	2.00	Each				
4	TRANS PER TON-TRAN	100	31.29	Tons				

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 115251

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/21/2025	Vehicle#	95 Volume
Payment Type	Credit Account	Container	
CWM Load#	513643	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616081FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/21/2025 16:43:52	MANUAL WT	pslider1		Gross	59221 lb*
Out	01/21/2025 16:43:52		pslider1		Tare	1 lb*
			* Manual Weight		Net	59220 lb
					Tons	29.61

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				
2	MFE-e-Manifest (La	100	1.00	Each				
3	LINER EA-LINER PER	100	2.00	Each				
4	TRANS PER TON-TRAN	100	29.61	Tons				

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 115252

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/21/2025	Vehicle#	R9 Volume
Payment Type	Credit Account	Container	
CWM Load#	513646	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616082FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/21/2025 16:46:28	MANUAL WT	pslider1		Gross	63181 lb*
Out	01/21/2025 16:46:28		pslider1		Tare	1 lb*
			* Manual Weight		Net	63180 lb
					Tons	31.59

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				
2	MFE-e-Manifest (La	100	1.00	Each				
3	LINER EA-LINER PER	100	2.00	Each				
4	TRANS PER TON-TRAN	100	31.59	Tons				

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 115255

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	01/21/2025	Vehicle#	R95 Volume
Payment Type	Credit Account	Container	
CWM Load#	513720	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616083FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	01/21/2025 16:55:38	MANUAL WT	pslider1		Gross	66861 lb*
Out	01/21/2025 16:55:38		pslider1		Tare	1 lb*
			* Manual Weight		Net	66860 lb
					Tons	33.43

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				
2	MFE-e-Manifest (La	100	1.00	Each				
3	LINER EA-LINER PER	100	2.00	Each				
4	TRANS PER TON-TRAN	100	33.43	Tons				

Total Tax
Total Ticket

Driver`s Signature

Chemical Waste Management of the NorthWest
17629 Cedar Springs Lane
Arlington, OR, 97812
Ph: (541) 454-2643

Reprint
Ticket# 117546

Customer Name	TITAN EARTHWORK TITAN EARTHWO	Carrier	RTRANSPORT R Transport Inc
Ticket Date	02/18/2025	Vehicle#	R95 Volume
Payment Type	Credit Account	Container	
CWM Load#	513856	Driver	
Hauling Ticket#		Check#	
Route		Billing #	0001741
State Waste Code		Gen EPA ID	
Manifest	018616084FLE		
Destination		Grid	
PO	OR360841		
Profile	OR360841 (STAB07: CONSTRUCTION AND DEMOLITION DEBRIS)		
Generator	CITY OLYMPIA-6530 CITY OF OLYMPIA 6530 MARTIN WAY LACEY		

	Time	Scale	Operator	Inbound		
In	02/18/2025 13:04:06	MANUAL WT	pslider1		Gross	29181 lb*
Out	02/18/2025 13:04:06		pslider1		Tare	1 lb*
			* Manual Weight		Net	29180 lb
					Tons	14.59

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	RCRA Macr-Cubic Ya	100	28.50	Yards				
2	MFE-e-Manifest (La	100	1.00	Each				
3	LINER EA-LINER PER	100	2.00	Each				
4	TRANS PER TON-TRAN	100	14.59	Tons				

Total Tax
Total Ticket

Driver`s Signature

Appendix L

Laboratory Report for Wastewater Sample

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

January 13, 2025

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson

Project: Vanguard Laboratory (ENV)
Project Number: Titan Earthworks (V241226-2)
COC Number: A24L0513

Tori Johnson:

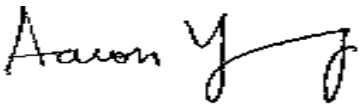
Enclosed please find the analytical data for your Vanguard Laboratory (ENV) project.

Your sample(s) were received on Tuesday, December 31, 2024 and properly maintained prior to the subsequent analysis. The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA, Standard Methods or the Army Corps of Engineers.

Following the analytical results you will find the Quality Control (QA/QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to contact me.
Sincerely,



ElementStationManager For Aaron Young
President
aarony@amtestlab.com

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Reported Samples

Lab ID	Sample	Matrix	Qualifiers	Date Sampled	Date Received
A24L0513-01	Grab	Water		12/26/2024	12/31/2024

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

AMTEST Identification Number: A24L0513-01
Client Identification: Grab
Sampling Date: 12/26/24 11:00

Metals by EPA 200 Series Methods

PARAMETER	RESULT	UNITS	Q	R.L.	METHOD	ANALYST	DATE
Total Mercury	ND	ug/L		0.100	EPA 245.1_3_1994	EZ	01/09/2025
Total Silver	ND	ug/L	U	0.200	EPA 200.8_5.4_1994	AE	01/08/2025
Total Arsenic	11.21	ug/L		0.100	EPA 200.8_5.4_1994	AE	01/08/2025
Total Barium	122.8	ug/L		0.300	EPA 200.8_5.4_1994	AE	01/08/2025
Total Cadmium	0.100	ug/L		0.100	EPA 200.8_5.4_1994	AE	01/08/2025
Total Chromium	ND	ug/L	U	0.500	EPA 200.8_5.4_1994	AE	01/08/2025
Dissolved Lead	723.5	ug/L		0.200	EPA 200.8_5.4_1994	AE	01/03/2025
Total Lead	863.0	ug/L		0.200	EPA 200.8_5.4_1994	AE	01/08/2025
Total Selenium	ND	ug/L	U	1.000	EPA 200.8_5.4_1994	AE	01/08/2025

SEMIVOLATILES BY GC/MS

PARAMETER	RESULT	UNITS	Q	R.L.	METHOD	ANALYST	DATE
1,2,4-Trichlorobenzene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
1,2-Dichlorobenzene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
1,2-Diphenylhydrazine	ND	ug/L	U	2.85	EPA 625.1	NN	01/10/2025
1,3-Dichlorobenzene	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
1,4-Dichlorobenzene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
2,4,5-Trichlorophenol	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
2,4,6-Trichlorophenol	ND	ug/L	U	6.65	EPA 625.1	NN	01/10/2025
2,4-Dichlorophenol	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
2,4-Dimethylphenol	ND	ug/L	U	6.18	EPA 625.1	NN	01/10/2025
2,4-Dinitrophenol	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
2,4-Dinitrotoluene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
2,6-Dinitrotoluene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
2-Chloronaphthalene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
2-Chlorophenol	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
2-Methylnaphthalene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
2-Methylphenol	ND	ug/L	U	9.51	EPA 625.1	NN	01/10/2025
2-Nitroaniline	ND	ug/L	U	2.85	EPA 625.1	NN	01/10/2025
2-Nitrophenol	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

AMTEST Identification Number: A24L0513-01
Client Identification: Grab
Sampling Date: 12/26/24 11:00

SEMIVOLATILES BY GC/MS (Continued)

PARAMETER	RESULT	UNITS	Q	R.L.	METHOD	ANALYST	DATE
3,3'-Dichlorobenzidine	ND	ug/L	U	9.51	EPA 625.1	NN	01/10/2025
3-Nitroaniline	ND	ug/L	U	7.60	EPA 625.1	NN	01/10/2025
4,6-Dinitro-2-methylphenol	ND	ug/L	U	6.65	EPA 625.1	NN	01/10/2025
4-Bromophenyl phenyl ether	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
4-Chloro-3-methylphenol	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
4-Chloroaniline	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
4-Chlorophenyl phenyl ether	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
4-Methylphenol	ND	ug/L	U	9.51	EPA 625.1	NN	01/10/2025
4-Nitroaniline	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
4-Nitrophenol	ND	ug/L	U	9.51	EPA 625.1	NN	01/10/2025
Acenaphthene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Acenaphthylene	ND	ug/L	U	2.85	EPA 625.1	NN	01/10/2025
Aniline	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Anthracene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Benzidine	ND	ug/L	U	2.85	EPA 625.1	NN	01/10/2025
Benzo(a)anthracene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Benzo(a)pyrene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Benzo(b)fluoranthene	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Benzo(g,h,i)perylene	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
Benzo(k)fluoranthene	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
Benzoic Acid	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
Benzyl alcohol	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Bis(2-chloroethoxy)methane	ND	ug/L	U	2.85	EPA 625.1	NN	01/10/2025
Bis(2-chloroethyl)ether	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Bis(2-Chloroisopropyl)ether	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Bis(2-ethylhexyl)phthalate	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Butyl benzyl phthalate	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Carbazole	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Chrysene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Dibenz(a,h)anthracene	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

AMTEST Identification Number: A24L0513-01
Client Identification: Grab
Sampling Date: 12/26/24 11:00

SEMIVOLATILES BY GC/MS (Continued)

PARAMETER	RESULT	UNITS	Q	R.L.	METHOD	ANALYST	DATE
Dibenzofuran	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Diethyl phthalate	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Dimethylphthalate	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Di-n-butyl phthalate	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Di-n-octyl phthalate	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Fluoranthene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Fluorene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Hexachlorobenzene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Hexachlorobutadiene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Hexachlorocyclopentadiene	ND	ug/L	U	2.85	EPA 625.1	NN	01/10/2025
Hexachloroethane	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
Indeno(1,2,3-cd)pyrene	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Isophorone	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Naphthalene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Nitrobenzene	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
N-Nitrosodimethylamine	ND	ug/L	U	3.33	EPA 625.1	NN	01/10/2025
N-Nitrosodi-n-propylamine	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
N-Nitrosodiphenylamine	ND	ug/L	U	5.70	EPA 625.1	NN	01/10/2025
Pentachlorophenol	ND	ug/L	U	3.80	EPA 625.1	NN	01/10/2025
Phenanthrene	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Phenol	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Pyrene	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Pyridine	ND	ug/L	U	4.75	EPA 625.1	NN	01/10/2025
Surrogate: 2,4,6-Tribromophenol	*138%*	*0-120%*				*NN*	*01/10/2025*
Surrogate: 2-Chlorophenol-D4	*109%*	*0-120%*				*NN*	*01/10/2025*
Surrogate: 2-Fluorobiphenyl	*123%*	*40-120%*				*NN*	*01/10/2025*
Surrogate: 2-Fluorophenol	*101%*	*0-120%*				*NN*	*01/10/2025*
Surrogate: Nitrobenzene-D5	*115%*	*40-120%*				*NN*	*01/10/2025*
Surrogate: Terphenyl-D14	*133%*	*40-120%*				*NN*	*01/10/2025*

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

AMTEST Identification Number: A24L0513-01
Client Identification: Grab
Sampling Date: 12/26/24 11:00

Conventional Chemistry Parameters by APHA/EPA Methods

PARAMETER	RESULT	UNITS	Q	R.L.	METHOD	ANALYST	DATE
pH	6.8	pH Units		0.1	SM 4500-H+B_2011	KH	01/02/2025
Total Solids	ND	mg/L	U	1.00	SM 2540B_2011	BV	01/10/2025

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control

Metals by EPA 200 Series Methods

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0013 - EPA 200.8 Filtered										
Blank (BCA0013-BLK1)					Prepared: 12/31/24 Analyzed: 01/03/25					
Lead	ND	U	0.200	ug/L						
LCS (BCA0013-BS1)					Prepared & Analyzed: 01/03/25					
Lead	5,044		0.200	ug/L	5,000		101%	90-110%		
Calibration Blank (BCA0013-CCB1)					Prepared & Analyzed: 01/03/25					
Lead	0.012			ug/L						
Calibration Blank (BCA0013-CCB2)					Prepared & Analyzed: 01/03/25					
Lead	0.009			ug/L						
Calibration Check (BCA0013-CCV1)					Prepared & Analyzed: 01/03/25					
Lead	24.00		0.200	ug/L	25.00		96%	85-115%		
Calibration Check (BCA0013-CCV2)					Prepared & Analyzed: 01/03/25					
Lead	24.39		0.200	ug/L	25.00		98%	85-115%		
Matrix Spike (BCA0013-MS1)		**Source: A24L0503-08**			Prepared: 12/31/24 Analyzed: 01/03/25					
Lead	101.9		0.200	ug/L	100.0	ND	102%	70-130%		
Matrix Spike (BCA0013-MS2)		**Source: A24L0513-01**			Prepared: 12/31/24 Analyzed: 01/03/25					
Lead	832.8		0.200	ug/L	100.0	723.5	109%	70-130%		
Matrix Spike Dup (BCA0013-MSD1)		**Source: A24L0503-08**			Prepared: 12/31/24 Analyzed: 01/03/25					
Lead	101.8		0.200	ug/L	100.0	ND	102%	70-130%	0.1	15
Matrix Spike Dup (BCA0013-MSD2)		**Source: A24L0513-01**			Prepared: 12/31/24 Analyzed: 01/03/25					
Lead	827.6		0.200	ug/L	100.0	723.5	104%	70-130%	0.6	15
Batch: BCA0038 - EPA 200.8 Digested										
Blank (BCA0038-BLK1)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	ND	U	0.100	ug/L						
Barium	ND	U	0.300	ug/L						
Cadmium	ND	U	0.100	ug/L						
Chromium	1.600		0.500	ug/L						

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
Blank (BCA0038-BLK1)					Prepared: 01/06/25 Analyzed: 01/08/25					
Lead	ND	U	0.200	ug/L						
Selenium	ND	U	1.000	ug/L						
Silver	ND	U	0.200	ug/L						
Blank (BCA0038-BLK2)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.138		0.100	ug/L						
Barium	0.402		0.300	ug/L						
Cadmium	ND	U	0.100	ug/L						
Chromium	0.937		0.500	ug/L						
Lead	ND	U	0.200	ug/L						
Selenium	ND	U	1.000	ug/L						
Silver	ND	U	0.200	ug/L						
Blank (BCA0038-BLK3)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.134		0.100	ug/L						
Barium	ND	U	0.300	ug/L						
Cadmium	ND	U	0.100	ug/L						
Chromium	ND	U	0.500	ug/L						
Lead	ND	U	0.200	ug/L						
Selenium	ND	U	1.000	ug/L						
Silver	ND	U	0.200	ug/L						
LCS (BCA0038-BS1)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	1,005		0.100	ug/L	1,000		100%	90-110%		
Barium	1,017		0.300	ug/L	1,000		102%	90-110%		
Cadmium	1,002		0.100	ug/L	1,000		100%	90-110%		
Chromium	994.2		0.500	ug/L	1,000		99%	90-110%		
Lead	943.3		0.200	ug/L	1,000		94%	90-110%		
Selenium	996.4		1.000	ug/L	1,000		100%	90-110%		
Silver	453.5		0.200	ug/L	500.0		91%	90-110%		
LCS (BCA0038-BS2)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	996.3		0.100	ug/L	1,000		100%	90-110%		
Barium	967.2		0.300	ug/L	1,000		97%	90-110%		
Cadmium	956.5		0.100	ug/L	1,000		96%	90-110%		
Chromium	967.7		0.500	ug/L	1,000		97%	90-110%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
LCS (BCA0038-BS2)					Prepared: 01/06/25 Analyzed: 01/08/25					
Lead	951.6		0.200	ug/L	1,000		95%	90-110%		
Selenium	937.8		1.000	ug/L	1,000		94%	90-110%		
Silver	498.7		0.200	ug/L	500.0		100%	90-110%		
LCS (BCA0038-BS3)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	1,009		0.100	ug/L	1,000		101%	90-110%		
Barium	997.7		0.300	ug/L	1,000		100%	90-110%		
Cadmium	992.3		0.100	ug/L	1,000		99%	90-110%		
Chromium	980.9		0.500	ug/L	1,000		98%	90-110%		
Lead	966.8		0.200	ug/L	1,000		97%	90-110%		
Selenium	1,005		1.000	ug/L	1,000		100%	90-110%		
Silver	514.5		0.200	ug/L	500.0		103%	90-110%		
Calibration Blank (BCA0038-CCB1)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.145			ug/L						
Barium	ND	U		ug/L						
Cadmium	ND	U		ug/L						
Chromium	0.008			ug/L						
Lead	ND	U		ug/L						
Selenium	0.121			ug/L						
Silver	ND	U		ug/L						
Calibration Blank (BCA0038-CCB2)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.124			ug/L						
Barium	ND	U		ug/L						
Cadmium	ND	U		ug/L						
Chromium	ND	U		ug/L						
Lead	ND	U		ug/L						
Selenium	0.254			ug/L						
Silver	ND	U		ug/L						
Calibration Blank (BCA0038-CCB3)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.001			ug/L						
Barium	ND	U		ug/L						
Cadmium	ND	U		ug/L						
Chromium	ND	U		ug/L						

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
Calibration Blank (BCA0038-CCB3)					Prepared: 01/06/25 Analyzed: 01/08/25					
Lead	0.064			ug/L						
Selenium	ND	U		ug/L						
Silver	ND	U		ug/L						
Calibration Blank (BCA0038-CCB4)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.060			ug/L						
Barium	ND	U		ug/L						
Cadmium	ND	U		ug/L						
Chromium	ND	U		ug/L						
Lead	ND	U		ug/L						
Selenium	0.127			ug/L						
Silver	ND	U		ug/L						
Calibration Blank (BCA0038-CCB5)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	0.042			ug/L						
Barium	ND	U		ug/L						
Cadmium	ND	U		ug/L						
Chromium	ND	U		ug/L						
Lead	ND	U		ug/L						
Selenium	0.314			ug/L						
Silver	ND	U		ug/L						
Calibration Check (BCA0038-CCV1)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	25.33		0.100	ug/L	25.00		101%	85-115%		
Barium	24.64		0.300	ug/L	25.00		99%	85-115%		
Cadmium	24.98		0.100	ug/L	25.00		100%	85-115%		
Chromium	24.86		0.500	ug/L	25.00		99%	85-115%		
Lead	23.58		0.200	ug/L	25.00		94%	85-115%		
Selenium	121.1		1.000	ug/L	125.0		97%	85-115%		
Silver	25.06		0.200	ug/L	25.00		100%	85-115%		
Calibration Check (BCA0038-CCV2)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	24.80		0.100	ug/L	25.00		99%	85-115%		
Barium	25.06		0.300	ug/L	25.00		100%	85-115%		
Cadmium	24.86		0.100	ug/L	25.00		99%	85-115%		
Chromium	24.58		0.500	ug/L	25.00		98%	85-115%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
Calibration Check (BCA0038-CCV2)					Prepared: 01/06/25 Analyzed: 01/08/25					
Lead	24.08		0.200	ug/L	25.00		96%	85-115%		
Selenium	126.8		1.000	ug/L	125.0		101%	85-115%		
Silver	25.39		0.200	ug/L	25.00		102%	85-115%		
Calibration Check (BCA0038-CCV3)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	24.47		0.100	ug/L	25.00		98%	85-115%		
Barium	23.89		0.300	ug/L	25.00		96%	85-115%		
Cadmium	24.48		0.100	ug/L	25.00		98%	85-115%		
Chromium	24.10		0.500	ug/L	25.00		96%	85-115%		
Lead	23.68		0.200	ug/L	25.00		95%	85-115%		
Selenium	118.0		1.000	ug/L	125.0		94%	85-115%		
Silver	24.67		0.200	ug/L	25.00		99%	85-115%		
Calibration Check (BCA0038-CCV4)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	24.28		0.100	ug/L	25.00		97%	85-115%		
Barium	24.64		0.300	ug/L	25.00		99%	85-115%		
Cadmium	24.68		0.100	ug/L	25.00		99%	85-115%		
Chromium	24.07		0.500	ug/L	25.00		96%	85-115%		
Lead	23.47		0.200	ug/L	25.00		94%	85-115%		
Selenium	119.9		1.000	ug/L	125.0		96%	85-115%		
Silver	24.58		0.200	ug/L	25.00		98%	85-115%		
Calibration Check (BCA0038-CCV5)					Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	24.53		0.100	ug/L	25.00		98%	85-115%		
Barium	24.63		0.300	ug/L	25.00		99%	85-115%		
Cadmium	24.82		0.100	ug/L	25.00		99%	85-115%		
Chromium	24.12		0.500	ug/L	25.00		96%	85-115%		
Lead	23.78		0.200	ug/L	25.00		95%	85-115%		
Selenium	124.4		1.000	ug/L	125.0		99%	85-115%		
Silver	24.92		0.200	ug/L	25.00		100%	85-115%		
Matrix Spike (BCA0038-MS1)		**Source: A24L0343-01**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	1,019		0.100	ug/L	1,000	2.112	102%	70-130%		
Barium	1,010		0.300	ug/L	1,000	11.43	100%	70-130%		
Cadmium	987.3		0.100	ug/L	1,000	ND	99%	70-130%		
Chromium	1,008		0.500	ug/L	1,000	1.606	101%	70-130%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
Matrix Spike (BCA0038-MS1)		**Source: A24L0343-01**			Prepared: 01/06/25 Analyzed: 01/08/25					
Lead	963.0		0.200	ug/L	1,000	2.628	96%	70-130%		
Selenium	1,105		1.000	ug/L	1,000	ND	111%	70-130%		
Silver	505.0		0.200	ug/L	500.0	ND	101%	70-130%		
Matrix Spike (BCA0038-MS2)		**Source: A24L0343-08**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	998.5		0.100	ug/L	1,000	0.778	100%	70-130%		
Barium	973.0		0.300	ug/L	1,000	6.728	97%	70-130%		
Cadmium	992.5		0.100	ug/L	1,000	ND	99%	70-130%		
Chromium	997.8		0.500	ug/L	1,000	0.593	100%	70-130%		
Lead	945.9		0.200	ug/L	1,000	0.293	95%	70-130%		
Selenium	1,066		1.000	ug/L	1,000	ND	107%	70-130%		
Silver	505.9		0.200	ug/L	500.0	ND	101%	70-130%		
Matrix Spike (BCA0038-MS3)		**Source: A24L0455-03**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	1,046		0.100	ug/L	1,000	35.34	101%	70-130%		
Barium	1,113		0.300	ug/L	1,000	118.2	100%	70-130%		
Cadmium	985.5		0.100	ug/L	1,000	ND	99%	70-130%		
Chromium	975.5		0.500	ug/L	1,000	3.030	97%	70-130%		
Lead	946.5		0.200	ug/L	1,000	0.131	95%	70-130%		
Selenium	1,052		1.000	ug/L	1,000	ND	105%	70-130%		
Silver	477.6		0.200	ug/L	500.0	ND	96%	70-130%		
Matrix Spike (BCA0038-MS4)		**Source: A24L0459-08**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	993.9		0.100	ug/L	1,000	1.033	99%	70-130%		
Barium	982.7		0.300	ug/L	1,000	5.882	98%	70-130%		
Cadmium	964.3		0.100	ug/L	1,000	ND	96%	70-130%		
Chromium	979.7		0.500	ug/L	1,000	0.350	98%	70-130%		
Lead	955.3		0.200	ug/L	1,000	0.261	96%	70-130%		
Selenium	914.7		1.000	ug/L	1,000	ND	91%	70-130%		
Silver	491.2		0.200	ug/L	500.0	ND	98%	70-130%		
Matrix Spike (BCA0038-MS5)		**Source: A24L0513-01**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	111.3		0.100	ug/L	100.0	11.21	100%	70-130%		
Barium	224.1		0.300	ug/L	100.0	122.8	101%	70-130%		
Cadmium	101.2		0.100	ug/L	100.0	0.100	101%	70-130%		
Chromium	98.97		0.500	ug/L	100.0	0.457	99%	70-130%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
Matrix Spike (BCA0038-MS5)		**Source: A24L0513-01**			Prepared: 01/06/25 Analyzed: 01/08/25					
Lead	992.6		0.200	ug/L	100.0	863.0	130%	70-130%		
Selenium	93.89		1.000	ug/L	100.0	ND	94%	70-130%		
Matrix Spike Dup (BCA0038-MSD1)		**Source: A24L0343-01**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	1,009		0.100	ug/L	1,000	2.112	101%	70-130%	1	15
Barium	1,009		0.300	ug/L	1,000	11.43	100%	70-130%	0.09	15
Cadmium	1,023		0.100	ug/L	1,000	ND	102%	70-130%	4	15
Chromium	995.5		0.500	ug/L	1,000	1.606	99%	70-130%	1	15
Lead	965.5		0.200	ug/L	1,000	2.628	96%	70-130%	0.3	15
Selenium	1,041		1.000	ug/L	1,000	ND	104%	70-130%	6	25
Silver	515.5		0.200	ug/L	500.0	ND	103%	70-130%	2	15
Matrix Spike Dup (BCA0038-MSD2)		**Source: A24L0343-08**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	983.5		0.100	ug/L	1,000	0.778	98%	70-130%	2	15
Barium	985.5		0.300	ug/L	1,000	6.728	98%	70-130%	1	15
Cadmium	966.3		0.100	ug/L	1,000	ND	97%	70-130%	3	15
Chromium	961.6		0.500	ug/L	1,000	0.593	96%	70-130%	4	15
Lead	931.8		0.200	ug/L	1,000	0.293	93%	70-130%	1	15
Selenium	993.3		1.000	ug/L	1,000	ND	99%	70-130%	7	25
Silver	495.1		0.200	ug/L	500.0	ND	99%	70-130%	2	15
Matrix Spike Dup (BCA0038-MSD3)		**Source: A24L0455-03**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	1,033		0.100	ug/L	1,000	35.34	100%	70-130%	1	15
Barium	1,127		0.300	ug/L	1,000	118.2	101%	70-130%	1	15
Cadmium	973.4		0.100	ug/L	1,000	ND	97%	70-130%	1	15
Chromium	988.6		0.500	ug/L	1,000	3.030	99%	70-130%	1	15
Lead	945.8		0.200	ug/L	1,000	0.131	95%	70-130%	0.08	15
Selenium	1,127		1.000	ug/L	1,000	ND	113%	70-130%	7	25
Silver	473.2		0.200	ug/L	500.0	ND	95%	70-130%	0.9	15
Matrix Spike Dup (BCA0038-MSD4)		**Source: A24L0459-08**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	993.3		0.100	ug/L	1,000	1.033	99%	70-130%	0.06	15
Barium	998.6		0.300	ug/L	1,000	5.882	99%	70-130%	2	15
Cadmium	963.8		0.100	ug/L	1,000	ND	96%	70-130%	0.05	15
Chromium	959.8		0.500	ug/L	1,000	0.350	96%	70-130%	2	15
Lead	953.2		0.200	ug/L	1,000	0.261	95%	70-130%	0.2	15

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0038 - EPA 200.8 Digested (Continued)										
Matrix Spike Dup (BCA0038-MSD4)		**Source: A24L0459-08**			Prepared: 01/06/25 Analyzed: 01/08/25					
Selenium	995.5		1.000	ug/L	1,000	ND	100%	70-130%	8	25
Silver	495.4		0.200	ug/L	500.0	ND	99%	70-130%	0.8	15
Matrix Spike Dup (BCA0038-MSD5)		**Source: A24L0513-01**			Prepared: 01/06/25 Analyzed: 01/08/25					
Arsenic	110.8		0.100	ug/L	100.0	11.21	100%	70-130%	0.4	15
Barium	220.4		0.300	ug/L	100.0	122.8	98%	70-130%	2	15
Cadmium	99.15		0.100	ug/L	100.0	0.100	99%	70-130%	2	15
Chromium	99.28		0.500	ug/L	100.0	0.457	99%	70-130%	0.3	15
Lead	993.4		0.200	ug/L	100.0	863.0	130%	70-130%	0.09	15
Selenium	107.0		1.000	ug/L	100.0	ND	107%	70-130%	13	25
Batch: BCA0091 - No Prep - WetChem										
Blank (BCA0091-BLK1)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	ND		0.100	ug/L						
Blank (BCA0091-BLK2)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	ND		0.100	ug/L						
LCS (BCA0091-BS1)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.960		0.100	ug/L	1.000		96%	85-115%		
LCS (BCA0091-BS2)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.990		0.100	ug/L	1.000		99%	85-115%		
Calibration Blank (BCA0091-CCB1)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.057			ug/L						
Calibration Blank (BCA0091-CCB2)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.050			ug/L						
Calibration Blank (BCA0091-CCB3)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.063			ug/L						
Calibration Blank (BCA0091-CCB4)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.067			ug/L						

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0091 - No Prep - WetChem (Continued)										
Calibration Blank (BCA0091-CCB5)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.043			ug/L						
Calibration Check (BCA0091-CCV1)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	2.310		0.100	ug/L	2.500		92%	85-115%		
Calibration Check (BCA0091-CCV2)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	2.400		0.100	ug/L	2.500		96%	85-115%		
Calibration Check (BCA0091-CCV3)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	2.520		0.100	ug/L	2.500		101%	85-115%		
Calibration Check (BCA0091-CCV4)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	2.440		0.100	ug/L	2.500		98%	85-115%		
Calibration Check (BCA0091-CCV5)					Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	2.320		0.100	ug/L	2.500		93%	85-115%		
Duplicate (BCA0091-DUP1)		**Source: A24L0348-01**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	ND		0.100	ug/L		ND				20
Duplicate (BCA0091-DUP2)		**Source: A24L0364-02**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	0.093		0.100	ug/L		0.086			8	20
Duplicate (BCA0091-DUP3)		**Source: A24L0438-03**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	ND		0.100	ug/L		ND				20
Duplicate (BCA0091-DUP4)		**Source: A25A0089-01**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	ND		0.100	ug/L		ND				20
Matrix Spike (BCA0091-MS1)		**Source: A24L0348-01**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	3.720		0.100	ug/L	3.333	ND	112%	79.4-121%		
Matrix Spike (BCA0091-MS2)		**Source: A24L0364-02**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	3.870		0.100	ug/L	3.333	0.086	114%	79.4-121%		
Matrix Spike (BCA0091-MS3)		**Source: A24L0438-03**			Prepared: 01/08/25 Analyzed: 01/09/25					

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

Metals by EPA 200 Series Methods (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0091 - No Prep - WetChem (Continued)										
Matrix Spike (BCA0091-MS3)		**Source: A24L0438-03**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	3.760		0.100	ug/L	3.333	ND	113%	79.4-121%		
Matrix Spike (BCA0091-MS4)		**Source: A25A0089-01**			Prepared: 01/08/25 Analyzed: 01/09/25					
Mercury	3.760		0.100	ug/L	3.333	ND	113%	79.4-121%		

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0162 - EPA 3510C (Sep Funnel)										
Blank (BCA0162-BLK1)					Prepared: 01/06/25 Analyzed: 01/10/25					
1,2,4-Trichlorobenzene	ND	U	4.00	ug/L						
1,2-Dichlorobenzene	ND	U	4.00	ug/L						
1,2-Diphenylhydrazine	ND	U	3.00	ug/L						
1,3-Dichlorobenzene	ND	U	5.00	ug/L						
1,4-Dichlorobenzene	ND	U	4.00	ug/L						
2,4,5-Trichlorophenol	ND	U	6.00	ug/L						
2,4,6-Trichlorophenol	ND	U	7.00	ug/L						
2,4-Dichlorophenol	ND	U	6.00	ug/L						
2,4-Dimethylphenol	ND	U	6.50	ug/L						
2,4-Dinitrophenol	ND	U	6.00	ug/L						
2,4-Dinitrotoluene	ND	U	4.00	ug/L						
2,6-Dinitrotoluene	ND	U	4.00	ug/L						
2-Chloronaphthalene	ND	U	4.00	ug/L						
2-Chlorophenol	ND	U	6.00	ug/L						
2-Methylnaphthalene	ND	U	4.00	ug/L						
2-Methylphenol	ND	U	10.0	ug/L						
2-Nitroaniline	ND	U	3.00	ug/L						
2-Nitrophenol	ND	U	6.00	ug/L						
3,3'-Dichlorobenzidine	ND	U	10.0	ug/L						
3-Nitroaniline	ND	U	8.00	ug/L						

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)

Blank (BCA0162-BLK1) Prepared: 01/06/25 Analyzed: 01/10/25

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,6-Dinitro-2-methylphenol	ND	U	7.00	ug/L						
4-Bromophenyl phenyl ether	ND	U	4.00	ug/L						
4-Chloro-3-methylphenol	ND	U	6.00	ug/L						
4-Chloroaniline	ND	U	4.00	ug/L						
4-Chlorophenyl phenyl ether	ND	U	5.00	ug/L						
4-Methylphenol	ND	U	10.0	ug/L						
4-Nitroaniline	ND	U	5.00	ug/L						
4-Nitrophenol	ND	U	10.0	ug/L						
Acenaphthene	ND	U	4.00	ug/L						
Acenaphthylene	ND	U	3.00	ug/L						
Aniline	ND	U	5.00	ug/L						
Anthracene	ND	U	4.00	ug/L						
Benzidine	ND	U	3.00	ug/L						
Benzo(a)anthracene	ND	U	4.00	ug/L						
Benzo(a)pyrene	ND	U	4.00	ug/L						
Benzo(b)fluoranthene	ND	U	5.00	ug/L						
Benzo(g,h,i)perylene	ND	U	6.00	ug/L						
Benzo(k)fluoranthene	ND	U	6.00	ug/L						
Benzoic Acid	ND	U	6.00	ug/L						
Benzyl alcohol	ND	U	4.00	ug/L						
Bis(2-chloroethoxy)methane	ND	U	3.00	ug/L						
Bis(2-chloroethyl)ether	ND	U	4.00	ug/L						
Bis(2-Chloroisopropyl)ether	ND	U	4.00	ug/L						
Bis(2-ethylhexyl)phthalate	ND	U	5.00	ug/L						
Butyl benzyl phthalate	ND	U	4.00	ug/L						
Carbazole	ND	U	5.00	ug/L						
Chrysene	ND	U	4.00	ug/L						
Dibenz(a,h)anthracene	ND	U	5.00	ug/L						
Dibenzofuran	ND	U	4.00	ug/L						
Diethyl phthalate	ND	U	4.00	ug/L						
Dimethylphthalate	ND	U	4.00	ug/L						
Di-n-butyl phthalate	ND	U	4.00	ug/L						
Di-n-octyl phthalate	ND	U	5.00	ug/L						
Fluoranthene	ND	U	4.00	ug/L						
Fluorene	ND	U	4.00	ug/L						

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)										
Blank (BCA0162-BLK1)					Prepared: 01/06/25 Analyzed: 01/10/25					
Hexachlorobenzene	ND	U	4.00	ug/L						
Hexachlorobutadiene	ND	U	4.00	ug/L						
Hexachlorocyclopentadiene	ND	U	3.00	ug/L						
Hexachloroethane	ND	U	6.00	ug/L						
Indeno(1,2,3-cd)pyrene	ND	U	5.00	ug/L						
Isophorone	ND	U	5.00	ug/L						
Naphthalene	ND	U	4.00	ug/L						
Nitrobenzene	ND	U	4.00	ug/L						
N-Nitrosodimethylamine	ND	U	3.50	ug/L						
N-Nitrosodi-n-propylamine	ND	U	5.00	ug/L						
N-Nitrosodiphenylamine	ND	U	6.00	ug/L						
Pentachlorophenol	ND	U	4.00	ug/L						
Phenanthrene	ND	U	5.00	ug/L						
Phenol	ND	U	5.00	ug/L						
Pyrene	ND	U	5.00	ug/L						
Pyridine	ND	U	5.00	ug/L						
Surrogate: 2,4,6-Tribromophenol							*76%*	*0-120%*		
Surrogate: 2-Chlorophenol-D4							*87%*	*0-120%*		
Surrogate: 2-Fluorobiphenyl							*75%*	*40-120%*		
Surrogate: 2-Fluorophenol							*83%*	*0-120%*		
Surrogate: Nitrobenzene-D5							*76%*	*40-120%*		
Surrogate: Terphenyl-D14							*88%*	*40-120%*		
LCS (BCA0162-BS1)					Prepared: 01/06/25 Analyzed: 01/10/25					
1,2,4-Trichlorobenzene	5.82		4.00	ug/L	10.00		58%	60-130%		
1,2-Dichlorobenzene	6.18		4.00	ug/L	10.00		62%	60-130%		
1,2-Diphenylhydrazine	5.96		3.00	ug/L	10.00		60%	60-130%		
1,3-Dichlorobenzene	6.19		5.00	ug/L	10.00		62%	60-130%		
1,4-Dichlorobenzene	6.28		4.00	ug/L	10.00		63%	60-130%		
2,4,5-Trichlorophenol	6.04		6.00	ug/L	10.00		60%	60-130%		
2,4,6-Trichlorophenol	ND	U	7.00	ug/L	10.00		0%	60-130%		
2,4-Dichlorophenol	5.92	U	6.00	ug/L	10.00		59%	60-130%		
2,4-Dimethylphenol	ND	U	6.50	ug/L	10.00		0%	60-130%		
2,4-Dinitrotoluene	5.93		4.00	ug/L	10.00		59%	60-130%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)

LCS (BCA0162-BS1) Prepared: 01/06/25 Analyzed: 01/10/25

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
2,6-Dinitrotoluene	5.98		4.00	ug/L	10.00		60%	60-130%		
2-Chloronaphthalene	5.87		4.00	ug/L	10.00		59%	60-130%		
2-Chlorophenol	6.33		6.00	ug/L	10.00		63%	60-130%		
2-Methylnaphthalene	5.96		4.00	ug/L	10.00		60%	60-130%		
2-Methylphenol	ND	U	10.0	ug/L	10.00		0%	60-130%		
2-Nitroaniline	6.15		3.00	ug/L	10.00		62%	60-130%		
2-Nitrophenol	5.63	U	6.00	ug/L	10.00		56%	60-130%		
3,3'-Dichlorobenzidine	ND	U	10.0	ug/L	10.00		0%	60-130%		
3-Nitroaniline	ND	U	8.00	ug/L	10.00		0%	60-130%		
4,6-Dinitro-2-methylphenol	ND	U	7.00	ug/L	10.00		0%	60-130%		
4-Bromophenyl phenyl ether	6.10		4.00	ug/L	10.00		61%	60-130%		
4-Chloro-3-methylphenol	6.13		6.00	ug/L	10.00		61%	60-130%		
4-Chloroaniline	5.92		4.00	ug/L	10.00		59%	60-130%		
4-Chlorophenyl phenyl ether	6.16		5.00	ug/L	10.00		62%	60-130%		
4-Methylphenol	ND	U	10.0	ug/L	10.00		0%	60-130%		
4-Nitroaniline	6.45		5.00	ug/L	10.00		64%	60-130%		
4-Nitrophenol	ND	U	10.0	ug/L	10.00		0%	60-130%		
Acenaphthene	5.87		4.00	ug/L	10.00		59%	60-130%		
Acenaphthylene	6.24		3.00	ug/L	10.00		62%	60-130%		
Aniline	5.99		5.00	ug/L	10.00		60%	60-130%		
Anthracene	6.39		4.00	ug/L	10.00		64%	60-130%		
Benzo(a)anthracene	6.39		4.00	ug/L	10.00		64%	60-130%		
Benzo(a)pyrene	6.91		4.00	ug/L	10.00		69%	60-130%		
Benzo(b)fluoranthene	6.99		5.00	ug/L	10.00		70%	60-130%		
Benzo(g,h,i)perylene	7.59		6.00	ug/L	10.00		76%	60-130%		
Benzo(k)fluoranthene	6.71		6.00	ug/L	10.00		67%	60-130%		
Benzoic Acid	ND	U	6.00	ug/L	10.00		0%	60-130%		
Benzyl alcohol	6.59		4.00	ug/L	10.00		66%	60-130%		
Bis(2-chloroethoxy)methane	6.06		3.00	ug/L	10.00		61%	60-130%		
Bis(2-chloroethyl)ether	6.67		4.00	ug/L	10.00		67%	60-130%		
Bis(2-Chloroisopropyl)ether	5.93		4.00	ug/L	10.00		59%	60-130%		
Bis(2-ethylhexyl)phthalate	6.90		5.00	ug/L	10.00		69%	60-130%		
Butyl benzyl phthalate	6.78		4.00	ug/L	10.00		68%	60-130%		
Carbazole	6.81		5.00	ug/L	10.00		68%	60-130%		
Chrysene	6.37		4.00	ug/L	10.00		64%	60-130%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)										
LCS (BCA0162-BS1)					Prepared: 01/06/25 Analyzed: 01/10/25					
Dibenz(a,h)anthracene	7.47		5.00	ug/L	10.00		75%	60-130%		
Dibenzofuran	6.13		4.00	ug/L	10.00		61%	60-130%		
Diethyl phthalate	6.12		4.00	ug/L	10.00		61%	60-130%		
Dimethylphthalate	5.93		4.00	ug/L	10.00		59%	60-130%		
Di-n-butyl phthalate	6.82		4.00	ug/L	10.00		68%	60-130%		
Di-n-octyl phthalate	7.53		5.00	ug/L	10.00		75%	60-130%		
Fluoranthene	6.49		4.00	ug/L	10.00		65%	60-130%		
Fluorene	6.13		4.00	ug/L	10.00		61%	60-130%		
Hexachlorobenzene	69.2		4.00	ug/L	10.00		692%	60-130%		
Hexachlorobutadiene	6.05		4.00	ug/L	10.00		60%	60-130%		
Hexachloroethane	6.56		6.00	ug/L	10.00		66%	60-130%		
Indeno(1,2,3-cd)pyrene	5.26		5.00	ug/L	10.00		53%	60-130%		
Isophorone	5.48		5.00	ug/L	10.00		55%	60-130%		
Naphthalene	6.15		4.00	ug/L	10.00		62%	60-130%		
Nitrobenzene	6.10		4.00	ug/L	10.00		61%	60-130%		
N-Nitrosodimethylamine	6.14		3.50	ug/L	10.00		61%	60-130%		
N-Nitrosodi-n-propylamine	6.27		5.00	ug/L	10.00		63%	60-130%		
N-Nitrosodiphenylamine	ND	U	6.00	ug/L	10.00		0%	60-130%		
Pentachlorophenol	4.12		4.00	ug/L	10.00		41%	60-130%		
Phenanthrene	6.57		5.00	ug/L	10.00		66%	60-130%		
Phenol	6.40		5.00	ug/L	10.00		64%	60-130%		
Pyrene	6.70		5.00	ug/L	10.00		67%	60-130%		
Pyridine	6.69		5.00	ug/L	10.00		67%	60-130%		
Surrogate: 2,4,6-Tribromophenol							*78%*	*60-120%*		
Surrogate: 2-Chlorophenol-D4							*80%*	*60-120%*		
Surrogate: 2-Fluorobiphenyl							*73%*	*60-120%*		
Surrogate: 2-Fluorophenol							*76%*	*60-120%*		
Surrogate: Nitrobenzene-D5							*74%*	*60-120%*		
Surrogate: Terphenyl-D14							*85%*	*60-120%*		
LCS Dup (BCA0162-BSD1)					Prepared: 01/06/25 Analyzed: 01/10/25					
1,2,4-Trichlorobenzene	9.56		4.00	ug/L	10.00		96%	60-130%	49	40
1,2-Dichlorobenzene	9.59		4.00	ug/L	10.00		96%	60-130%	43	40
1,2-Diphenylhydrazine	10.4		3.00	ug/L	10.00		104%	60-130%	54	40

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)

LCS Dup (BCA0162-BSD1) Prepared: 01/06/25 Analyzed: 01/10/25

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,3-Dichlorobenzene	9.61		5.00	ug/L	10.00		96%	60-130%	43	40
1,4-Dichlorobenzene	9.60		4.00	ug/L	10.00		96%	60-130%	42	40
2,4,5-Trichlorophenol	10.1		6.00	ug/L	10.00		101%	60-130%	50	40
2,4,6-Trichlorophenol	9.58		7.00	ug/L	10.00		96%	60-130%	50	40
2,4-Dichlorophenol	9.32		6.00	ug/L	10.00		93%	60-130%	45	40
2,4-Dimethylphenol	8.05		6.50	ug/L	10.00		80%	60-130%	35	40
2,4-Dinitrotoluene	10.1		4.00	ug/L	10.00		101%	60-130%	52	40
2,6-Dinitrotoluene	10.2		4.00	ug/L	10.00		102%	60-130%	52	40
2-Chloronaphthalene	10.1		4.00	ug/L	10.00		101%	60-130%	53	40
2-Chlorophenol	9.41		6.00	ug/L	10.00		94%	60-130%	39	40
2-Methylnaphthalene	9.79		4.00	ug/L	10.00		98%	60-130%	49	40
2-Methylphenol	11.0		10.0	ug/L	10.00		110%	60-130%	42	40
2-Nitroaniline	11.0		3.00	ug/L	10.00		110%	60-130%	56	40
2-Nitrophenol	8.97		6.00	ug/L	10.00		90%	60-130%	46	40
3,3'-Dichlorobenzidine	ND	U	10.0	ug/L	10.00		0%	60-130%		40
3-Nitroaniline	11.0		8.00	ug/L	10.00		110%	60-130%	54	40
4,6-Dinitro-2-methylphenol	6.28	U	7.00	ug/L	10.00		63%	60-130%	49	40
4-Bromophenyl phenyl ether	10.8		4.00	ug/L	10.00		108%	60-130%	55	40
4-Chloro-3-methylphenol	10.2		6.00	ug/L	10.00		102%	60-130%	50	40
4-Chloroaniline	10.1		4.00	ug/L	10.00		101%	60-130%	52	40
4-Chlorophenyl phenyl ether	10.9		5.00	ug/L	10.00		109%	60-130%	55	40
4-Methylphenol	9.95	U	10.0	ug/L	10.00		100%	60-130%	42	40
4-Nitroaniline	11.3		5.00	ug/L	10.00		113%	60-130%	55	40
4-Nitrophenol	8.69	U	10.0	ug/L	10.00		87%	60-130%	38	40
Acenaphthene	10.2		4.00	ug/L	10.00		102%	60-130%	54	40
Acenaphthylene	11.0		3.00	ug/L	10.00		110%	60-130%	55	40
Aniline	11.0		5.00	ug/L	10.00		110%	60-130%	59	40
Anthracene	11.0		4.00	ug/L	10.00		110%	60-130%	53	40
Benzo(a)anthracene	10.7		4.00	ug/L	10.00		107%	60-130%	50	40
Benzo(a)pyrene	ND	U	4.00	ug/L	10.00		0%	60-130%		40
Benzo(b)fluoranthene	11.3		5.00	ug/L	10.00		113%	60-130%	47	40
Benzo(g,h,i)perylene	12.3		6.00	ug/L	10.00		123%	60-130%	47	40
Benzo(k)fluoranthene	10.8		6.00	ug/L	10.00		108%	60-130%	47	40
Benzoic Acid	6.22		6.00	ug/L	10.00		62%	60-130%	34	40
Benzyl alcohol	10.0		4.00	ug/L	10.00		100%	60-130%	42	40

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)

LCS Dup (BCA0162-BSD1) Prepared: 01/06/25 Analyzed: 01/10/25

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane	9.92		3.00	ug/L	10.00		99%	60-130%	48	40
Bis(2-chloroethyl)ether	10.7		4.00	ug/L	10.00		107%	60-130%	47	40
Bis(2-Chloroisopropyl)ether	9.16		4.00	ug/L	10.00		92%	60-130%	43	40
Bis(2-ethylhexyl)phthalate	11.8		5.00	ug/L	10.00		118%	60-130%	53	40
Butyl benzyl phthalate	11.5		4.00	ug/L	10.00		115%	60-130%	52	40
Carbazole	11.7		5.00	ug/L	10.00		117%	60-130%	53	40
Chrysene	10.8		4.00	ug/L	10.00		108%	60-130%	52	40
Dibenz(a,h)anthracene	12.0		5.00	ug/L	10.00		120%	60-130%	46	40
Dibenzofuran	10.6		4.00	ug/L	10.00		106%	60-130%	54	40
Diethyl phthalate	10.5		4.00	ug/L	10.00		105%	60-130%	53	40
Dimethylphthalate	10.2		4.00	ug/L	10.00		102%	60-130%	53	40
Di-n-butyl phthalate	11.8		4.00	ug/L	10.00		118%	60-130%	54	40
Di-n-octyl phthalate	12.2		5.00	ug/L	10.00		122%	60-130%	47	40
Fluoranthene	11.1		4.00	ug/L	10.00		111%	60-130%	52	40
Fluorene	10.7		4.00	ug/L	10.00		107%	60-130%	54	40
Hexachlorobenzene	10.7		4.00	ug/L	10.00		107%	60-130%	147	40
Hexachlorobutadiene	10.0		4.00	ug/L	10.00		100%	60-130%	49	40
Hexachloroethane	10.1		6.00	ug/L	10.00		101%	60-130%	42	40
Indeno(1,2,3-cd)pyrene	11.4		5.00	ug/L	10.00		114%	60-130%	73	40
Isophorone	9.05		5.00	ug/L	10.00		90%	60-130%	49	40
Naphthalene	9.96		4.00	ug/L	10.00		100%	60-130%	47	40
Nitrobenzene	9.96		4.00	ug/L	10.00		100%	60-130%	48	40
N-Nitrosodimethylamine	9.03		3.50	ug/L	10.00		90%	60-130%	38	40
N-Nitrosodi-n-propylamine	9.40		5.00	ug/L	10.00		94%	60-130%	40	40
N-Nitrosodiphenylamine	8.97		6.00	ug/L	10.00		90%	60-130%	54	40
Pentachlorophenol	5.30		4.00	ug/L	10.00		53%	60-130%	25	40
Phenanthrene	11.3		5.00	ug/L	10.00		113%	60-130%	53	40
Phenol	9.80		5.00	ug/L	10.00		98%	60-130%	42	40
Pyrene	11.4		5.00	ug/L	10.00		114%	60-130%	52	40
Pyridine	10.2		5.00	ug/L	10.00		102%	60-130%	41	40
Surrogate: 2,4,6-Tribromophenol							*121%*	*60-120%*		
Surrogate: 2-Chlorophenol-D4							*110%*	*60-120%*		
Surrogate: 2-Fluorobiphenyl							*119%*	*60-120%*		
Surrogate: 2-Fluorophenol							*105%*	*60-120%*		
Surrogate: Nitrobenzene-D5							*112%*	*60-120%*		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)

LCS Dup (BCA0162-BSD1) Prepared: 01/06/25 Analyzed: 01/10/25

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Surrogate: Terphenyl-D14							*135%*	*60-120%*		

Calibration Check (BCA0162-CCV1) Prepared: 01/06/25 Analyzed: 01/10/25

1,2,4-Trichlorobenzene	14.1		4.00	ug/L	15.00		94%	70-130%	
1,2-Dichlorobenzene	14.0		4.00	ug/L	15.00		94%	70-130%	
1,2-Diphenylhydrazine	14.4		3.00	ug/L	15.00		96%	70-130%	
1,3-Dichlorobenzene	14.0		5.00	ug/L	15.00		94%	70-130%	
1,4-Dichlorobenzene	13.9		4.00	ug/L	15.00		93%	70-130%	
2,4,5-Trichlorophenol	14.6		6.00	ug/L	15.00		98%	70-130%	
2,4,6-Trichlorophenol	14.5		7.00	ug/L	15.00		97%	70-130%	
2,4-Dichlorophenol	14.4		6.00	ug/L	15.00		96%	70-130%	
2,4-Dimethylphenol	14.1		6.50	ug/L	15.00		94%	70-130%	
2,4-Dinitrophenol	12.0		6.00	ug/L	15.00		80%	70-130%	
2,4-Dinitrotoluene	14.5		4.00	ug/L	15.00		96%	70-130%	
2,6-Dinitrotoluene	14.3		4.00	ug/L	15.00		96%	70-130%	
2-Chloronaphthalene	14.2		4.00	ug/L	15.00		94%	70-130%	
2-Chlorophenol	14.1		6.00	ug/L	15.00		94%	70-130%	
2-Methylnaphthalene	14.0		4.00	ug/L	15.00		93%	70-130%	
2-Methylphenol	14.2		10.0	ug/L	15.00		94%	70-130%	
2-Nitroaniline	14.5		3.00	ug/L	15.00		97%	70-130%	
2-Nitrophenol	14.4		6.00	ug/L	15.00		96%	70-130%	
3,3'-Dichlorobenzidine	14.0		10.0	ug/L	15.00		94%	70-130%	
3-Nitroaniline	14.5		8.00	ug/L	15.00		97%	70-130%	
4,6-Dinitro-2-methylphenol	13.5		7.00	ug/L	15.00		90%	70-130%	
4-Bromophenyl phenyl ether	14.3		4.00	ug/L	15.00		96%	70-130%	
4-Chloro-3-methylphenol	14.3		6.00	ug/L	15.00		95%	70-130%	
4-Chloroaniline	15.1		4.00	ug/L	15.00		101%	70-130%	
4-Chlorophenyl phenyl ether	14.4		5.00	ug/L	15.00		96%	70-130%	
4-Methylphenol	14.2		10.0	ug/L	15.00		95%	70-130%	
4-Nitroaniline	14.5		5.00	ug/L	15.00		97%	70-130%	
4-Nitrophenol	15.2		10.0	ug/L	15.00		102%	70-130%	
Acenaphthene	14.1		4.00	ug/L	15.00		94%	70-130%	
Acenaphthylene	14.1		3.00	ug/L	15.00		94%	70-130%	
Aniline	15.1		5.00	ug/L	15.00		101%	70-130%	
Anthracene	14.1		4.00	ug/L	15.00		94%	70-130%	

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)

Calibration Check (BCA0162-CCV1) Prepared: 01/06/25 Analyzed: 01/10/25

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Benzidine	13.1		3.00	ug/L	15.00		87%	70-130%		
Benzo(a)anthracene	14.3		4.00	ug/L	15.00		95%	70-130%		
Benzo(a)pyrene	14.4		4.00	ug/L	15.00		96%	70-130%		
Benzo(b)fluoranthene	14.1		5.00	ug/L	15.00		94%	70-130%		
Benzo(g,h,i)perylene	14.2		6.00	ug/L	15.00		95%	70-130%		
Benzo(k)fluoranthene	14.0		6.00	ug/L	15.00		94%	70-130%		
Benzoic Acid	13.9		6.00	ug/L	15.00		93%	70-130%		
Benzyl alcohol	14.4		4.00	ug/L	15.00		96%	70-130%		
Bis(2-chloroethoxy)methane	14.3		3.00	ug/L	15.00		95%	70-130%		
Bis(2-chloroethyl)ether	14.1		4.00	ug/L	15.00		94%	70-130%		
Bis(2-Chloroisopropyl)ether	14.1		4.00	ug/L	15.00		94%	70-130%		
Bis(2-ethylhexyl)phthalate	14.8		5.00	ug/L	15.00		99%	70-130%		
Butyl benzyl phthalate	14.8		4.00	ug/L	15.00		99%	70-130%		
Carbazole	13.4		5.00	ug/L	15.00		89%	70-130%		
Chrysene	14.0		4.00	ug/L	15.00		94%	70-130%		
Dibenz(a,h)anthracene	14.3		5.00	ug/L	15.00		95%	70-130%		
Dibenzofuran	14.1		4.00	ug/L	15.00		94%	70-130%		
Diethyl phthalate	14.2		4.00	ug/L	15.00		95%	70-130%		
Dimethylphthalate	14.1		4.00	ug/L	15.00		94%	70-130%		
Di-n-butyl phthalate	14.2		4.00	ug/L	15.00		95%	70-130%		
Di-n-octyl phthalate	15.0		5.00	ug/L	15.00		100%	70-130%		
Fluoranthene	14.0		4.00	ug/L	15.00		93%	70-130%		
Fluorene	14.4		4.00	ug/L	15.00		96%	70-130%		
Hexachlorobenzene	14.1		4.00	ug/L	15.00		94%	70-130%		
Hexachlorobutadiene	14.0		4.00	ug/L	15.00		94%	70-130%		
Hexachlorocyclopentadiene	14.4		3.00	ug/L	15.00		96%	70-130%		
Hexachloroethane	14.0		6.00	ug/L	15.00		93%	70-130%		
Indeno(1,2,3-cd)pyrene	14.2		5.00	ug/L	15.00		95%	70-130%		
Isophorone	14.2		5.00	ug/L	15.00		95%	70-130%		
Naphthalene	13.9		4.00	ug/L	15.00		93%	70-130%		
Nitrobenzene	14.2		4.00	ug/L	15.00		95%	70-130%		
N-Nitrosodimethylamine	13.6		3.50	ug/L	15.00		90%	70-130%		
N-Nitrosodi-n-propylamine	14.0		5.00	ug/L	15.00		93%	70-130%		
N-Nitrosodiphenylamine	14.3		6.00	ug/L	15.00		96%	70-130%		
Pentachlorophenol	13.7		4.00	ug/L	15.00		91%	70-130%		

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

ANALYSIS REPORT

Date Received: 12/31/24
Date Reported: 01/13/25

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Quality Control
(Continued)

SEMIVOLATILES BY GC/MS (Continued)

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0162 - EPA 3510C (Sep Funnel) (Continued)										
Calibration Check (BCA0162-CCV1)					Prepared: 01/06/25 Analyzed: 01/10/25					
Phenanthrene	14.1		5.00	ug/L	15.00		94%	70-130%		
Phenol	14.0		5.00	ug/L	15.00		93%	70-130%		
Pyrene	14.3		5.00	ug/L	15.00		95%	70-130%		
Pyridine	13.3		5.00	ug/L	15.00		89%	70-130%		
Surrogate: 2,4,6-Tribromophenol							*96%*	*70-130%*		
Surrogate: 2-Chlorophenol-D4							*93%*	*70-130%*		
Surrogate: 2-Fluorobiphenyl							*95%*	*70-130%*		
Surrogate: 2-Fluorophenol							*93%*	*70-130%*		
Surrogate: Nitrobenzene-D5							*95%*	*70-130%*		
Surrogate: Terphenyl-D14							*98%*	*70-130%*		

Quality Control
(Continued)

Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: BCA0004 - No Prep - WetChem										
Calibration Check (BCA0004-CCV1)					Prepared & Analyzed: 01/02/25					
pH	6.8			pH Units	6.860		100%	85-115%		
Duplicate (BCA0004-DUP1)		**Source: A24L0495-01**			Prepared & Analyzed: 01/02/25					
pH	6.1		0.1	pH Units		6.0			2	10
Batch: BCA0107 - No Prep - WetChem										
Calibration Blank (BCA0107-CCB1)					Prepared: 01/09/25 Analyzed: 01/10/25					
Total Solids	ND	U		mg/L						
Duplicate (BCA0107-DUP1)					Prepared: 01/09/25 Analyzed: 01/10/25					
Total Solids	0.02	U	1.00	mg/L					200	20

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

Am Test Inc.
13600 NE 126th Place Suite C
Kirkland, WA
(425) 885-1664
www.amtestlab.com

ANALYSIS REPORT

Professional Analytical Services

Vanguard Laboratory
2635 Parkmont Lane SW, Suite A
Olympia, WA 98502
Attention: Tori Johnson
Project Name: Vanguard Laboratory (ENV)
Project #: Titan Earthworks (V241226-2)

Date Received: 12/31/24
Date Reported: 01/13/25

Notes and Definitions

Item	Definition
U	The compound was analyzed for but was not detected (Non-detect) at or above the MRL/MDL.
Dry	Sample results reported on a dry weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.
RPD	Relative Percent Difference
%REC	Percent Recovery
Source	Sample that was matrix spiked or duplicated.

The contents of this report apply to the sample(s) analyzed in accordance with the chain of custody document.
No duplication of this report is allowed, except in its entirety.

AmTest Chain of Custody Record

AMTEST LABORATORIES

13600 NE 126th PL, Suite C, Kirkland, WA 98034
Ph (425) 885-1664 Fx (425) 820-0245
www.amtestlab.com

A24L0513

Chain of Custody No. 5000

Client Name & Address:	Invoice To:
Vanguard Laboratory 2635 Parkmont Lane SW Suite A Olympia WA 98502	SAME
Contact Person: Tori Johnson	Invoice Contact:
Phone No: 360-967-7010	PO Number:
Fax No:	Invoice Ph/Fax:
E-mail: tori@vanguardlaboratory.com	Invoice E-mail:
Report Delivery: (Choose all that apply) Mail / Fax / Email / Posted Online	Data posted to online account: YES / NO Web Login ID:

Special Instructions:

Requested TAT: (Rush must be pre-approved by lab)
Standard RUSH (5 Day / 3 Day / 48 HR / 24 HR)

Temperature upon Receipt: 0.9°C

Project Name: Titan Earthworks
Project Number: V241226-2

AmTest ID	Client ID (35 characters max)	Date Sampled	Time Sampled	Matrix	No. of containers	Analysis Requested: Total Lead	Dissolved Lead HNO3 Ensea	RCRA-8	% Solid	pH	8270 SVOCs				QA/QC
01	Grab	12/26	1400	WW	5	X	X	X	X	X	X				

Collected/Relinquished By:	Date	Time	Received By:	Date	Time
	12/31/24		KM	12/31/24	1211
Relinquished By:	Date	Time	Received By:	Date	Time
Relinquished By:	Date	Time	Received By:	Date	Time

COMMENTS:

Appendix M

Disposal Weight Tickets for Wastewater

124282

PRS Group, Inc.

ENTRY LOG FOR NON-HAZARDOUS ITEMS

3003 Taylor Way
Tacoma, WA 98421
Phone: (253)383-4175 Fax: (253)383-4531
prs@prsplant.net

Date:	1/17/2025	**Carrier:**	northern	**Vehicle #:**	119
Drivers Signature:		**Plant Employee:**	kenny	**Time:**	9:26 AM

Generator	Profile #	Work Order, BOL, Manifest	% Water:	% Oil / Fuel:	pH:	Flash >140:	x
			100%	0%	7	Other Flash:	
			% Solids:	% Other:	Tank # / Area:	Chlor Test NA:	x
			0%	0%	5b	Chlor <1000:	

Used Oil	"A" & "C" Category Waste	Used Oil Filters	Off Spec Fuel	Oil / Water Mix	Oily Solids / Sludge	PCS	Absorbent	Spent Antifreeze	Wash Out
	4500g								

Notes:

* The information contained in this entry log describes your waste as specified in the specific waste profile approved in to the PRS facility. Please verify the information for accuracy prior to signing.

124294

PRS Group, Inc.

ENTRY LOG FOR NON-HAZARDOUS ITEMS

3003 Taylor Way
Tacoma, WA 98421
Phone: (253)383-4175 Fax: (253)383-4531
prs@prsplant.net

Date:	1/17/2025	**Carrier:**	northern	**Vehicle #:**	119
Drivers Signature:		**Plant Employee:**	kenny	**Time:**	11:32 AM

Generator	Profile #	Work Order, BOL, Manifest	% Water: 100%	% Oil / Fuel: 0%	pH: 7	Flash >140: x
						Other Flash:
			% Solids: 0%	% Other: 0%	Tank # / Area: 5b	Chlor Test NA: x
						Chlor <1000:

Generator	Profile #	Work Order, BOL, Manifest	Used Oil	"A" & "C" Category Waste	Used Oil Filters	Off Spec Fuel	Oil / Water Mix	Oily Solids / Sludge	PCS	Absorbent	Spent Antifreeze	Wash Out
titan earthwork	10442-c	81018		3000g								

Notes:

* The information contained in this entry log describes your waste as specified in the specific waste profile approved in to the PRS facility. Please verify the information for accuracy prior to signing.

BILL OF LADING

PRODUCT TRANSPORT MANIFEST

N° 35466

MARINE VACUUM SERVICE, INC.

24 HOUR EMERGENCY PHONE NUMBER (206) 762-0240

FAX NUMBER 206-763-8084

TRUCK NUMBER _____ DATE 1/21/25

WO# 81029

TO DESTINATION
NAME Marine Vacuum Service, Inc.
STREET 1516 South Graham Street
CITY/STATE Seattle, WA 98108

FROM SHIPPER
NAME Northern Environmental
STREET 6530 Martin Way
CITY/STATE Olympic, WA.

QUANTITY	PROPER SHIPPING NAME	UN (PLACARD) NUMBER
500 gal	Waste Water + Sediment	
	Wash Out	
5%	SLUDGE in Sediment	

RECEIVER MVS: Boy DATE 1/21/25

SHIPPER X [signature] DATE 1-21-25

NOTE:

Customer warrants that the waste petroleum products being transferred by the above collector do not contain any contaminates including without limitations, pesticides, chlorinated solvents at concentrations greater than 1000 PPM, any detectable levels of PCBs, or any other material classified as dangerous or hazardous waste by 40 CFR Part 261, Subpart C and D (implementing the Federal Resource Conservation and Recover Act), or by any equivalent state dangerous or hazardous substance classification programs. Should laboratory tests find this waste not in compliance with 40 CFR Part 261, customer (generator) agrees to pay for all disposal costs incurred.

Appendix N
Air Monitoring Data

Rose Environmental

6715 Greenwood Avenue North
Seattle, WA 98103

Phone: 206.679.0699
www.roseenvironmental.com

October 4, 2024

Mr. Nick Seeley
Project Manager | Remediation Manager
Titan Earthwork
1585 Valentine Avenue Southeast
Pacific, WA 98047
Phone: (253) 255.4308
Email: nick.seeley@titanearth.com

Subject: Lead Exposure Evaluation – 6530 Martin Way East, Lacey, Washington

Dear Nick:

On September 18, 2024, Rose Environmental conducted personal and area air monitoring for airborne lead exposure during removal of lead-contaminated soil and abatement of lead contamination operations in the former police firing range located at 6530 Martin Way East in Lacey, Washington. The air monitoring was conducted to document airborne lead particulate where employees may be exposed during lead contamination removal activities.

Personal protective equipment worn by Titan Earth workers included half-faced respirators with P100 and organic vapor cartridges, Tyvek suits, latex gloves worn under leather work gloves, booties, and boots. Work area containments were erected using sheets of six-mil polyethylene. A HEPA-filtered air scrubber with a pre-filter was operated within the work area.

Two area samples were operated downwind of the work area during abatement activities. The wind was blowing from the south on the date of our survey. One area sample was placed on the excavator cab and one personal sample was placed on a laborer within the work zone.

Air Sampling for Lead

The samples were collected onto pre-weighed 37-mm mixed cellulose ester (MCE) filters of 0.8 pore size using a low-flow sampling pump operated at a flow rate of approximately 2.0 liters per minute. The sampling chain was pre and post-calibrated by a calibrated rotameter. The samples plus one blank were submitted to NVL Laboratory's American Industrial Hygiene Association (AIHA)-accredited laboratory in Seattle, Washington for inductively coupled argon plasma, atomic emission spectroscopy (ICP-AES) of lead by NIOSH Method 7300.

Results Table –Air Monitoring for Lead

Sample Number	Description	Date	Time (min)	Duration Concentration (µg/m^3)
1001	Area Sample – Inside Firing Range Work Area/Excavator Cab During Abatement Activities	09/18/2024	8:41 – 16:20 (459)	**30**
1002	Personal Sample – Duane Gillan Inside Firing Range Work Area During Abatement Activities		8:41 – 16:21 (460)	**52**
1003	Area Sample – ~20' Downwind of Work Area at Northeast Perimeter		8:28 – 16:26 (478)	<5.2
1004	Area Sample – ~20' Downwind of Work Area at Northwest Perimeter		8:31 – 16:29 (478)	<5.2
1005	Field Blank		-	N/A
			DOSH 8-hour TWA Action Level:	**30**
			DOSH 8-hour TWA PEL:	**50**

Note: mg/m^3 (milligrams contaminant per cubic meter of air)
Calculated TWA assumes zero lead exposure for the remainder of the shift

The measured air concentrations of lead for the two area samples collected adjacent to the work areas during abatement activities on September 18, 2024, were below the laboratory's analytical limit detection (<5.2 µg/m^3), and were also below the State of Washington Division of Occupational Safety and Health (DOSH) 8-hour TWA Permissible Exposure Limit (PEL) of 50 µg/m^3 and Action Level of 30 µg/m^3.

The personal sample on Mr. Gillan collected during abatement activities was above both the DOSH 8-hour TWA PEL of 50 µg/m^3 and Action Level of 30 µg/m^3.

The area sample taken from within the work area during abatement activities was equal to the DOSH Action Level of 30 µg/m^3, but below the PEL of 50 µg/m^3.

Conclusion and Recommendations

Half-face cartridge-style air-purifying respirators worn by Titan Earth employees have a NIOSH Assigned Protection Factor of 10, which allows work in areas with airborne lead concentrations up to 10-times the PEL, or up to 500 µg/m^3. As such, actual worker breathing zone concentrations (behind the respirator) were below the PEL and Action Level.

September 19, 2024

Wayne Sehman
Rose Environmental
6715 Greenwood Ave. N
Seattle, WA 98107

NVL Batch # 2416885.00

RE: Total Metal Analysis
Method: NIOSH 7082 Lead by FAA <air>
Item Code: FAA-01

Client Project: CRC-13632
Location: 6530 Martin Way East. Lacey, WA

Dear Mr. Sehman,

NVL Labs received 5 sample(s) for the said project on 9/18/2024. Preparation of these samples was conducted following protocol outlined in NIOSH 7082, unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with NIOSH 7082 Lead by FAA <air>. The results are usually expressed in ug/filter and ug/m^3. Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. If samples were collected by the customer, then the reported test results apply only to the samples as received by NVL Labs. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Manager Metals/Org Laboratory

Enc.: Sample results

Analysis Report

Total Lead (Pb)

Client: Rose Environmental
Address: 6715 Greenwood Ave. N
Seattle, WA 98107

Attention: **Mr. Wayne Sehman**
Project Location: 6530 Martin Way East. Lacey, WA

Batch #: 2416885.00
Matrix: Air
Method: NIOSH 7082
Client Project #: CRC-13632
Date Received: 9/18/2024
Samples Received: 5
Samples Analyzed: 5

Lab ID	Client Sample #	Vol (L)	RL ug/m^3	Results in ug/filter	Results in ug/m^3
24100152	1001	918	5.5	28	30
24100153	1002	920	5.4	48	52
24100154	1003	956	5.2	< 5.0	< 5.2
24100155	1004	956	5.2	< 5.0	< 5.2
24100156	1005	0	N/A	< 5.0	N/A

Comments: Samples 1001. 1002, and 1004 had some plastic filter in the cassette.

Sampled by: Client
Analyzed by: Yasuyuki Hida Date Analyzed: 09/18/2024
Reviewed by: Shalini Patel Date Issued: 09/19/2024

Shalini Patel, Manager Metals/Org Laboratory

ug/ m^3 = Micrograms per cubicmeter
ug/filter = Micrograms per filter
RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise. Concentration (ug/m^3) not reported if sample volume is zero.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.
Preparation of above samples was conducted using microwave digestion in accordance with EPA Method 3051.

Bench Run No: 2024-0918-02

LEAD LABORATORY SERVICES

Company	Rose Environmental	**NVL Batch Number**	**2416885.00**
Address	6715 Greenwood Ave. N Seattle, WA 98107	**TAT** 1 Day **AH** No **Rush TAT**	
Project Manager	Mr. Wayne Sehman	**Due Date** 9/19/2024 **Time** 1:20 PM	
Phone	(206) 679-0699	**Email**	waynesehman.roseenv@gmail.com
Cell	(503) 313-9061	**Fax**	(206) 279-1756

Project Name/Number: CRC-13632 **Project Location:** 6530 Martin Way East. Lacey, WA

Subcategory Flame AA (FAA)

Item Code FAA-01 NIOSH 7082 Lead by FAA <air>

Total Number of Samples 5 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	24100152	1001		A
2	24100153	1002		A
3	24100154	1003		A
4	24100155	1004		A
5	24100156	1005		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	9/18/24	1320
Analyzed by	Yasuyuki Hida		NVL	9/18/24	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 9/18/2024
Time: 1:19 PM
Entered By: Fatima Khan

2416885

NVL
INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

METALS CHAIN OF CUSTODY

❑ 2 Hour ❑ 4 Hours ☒ 24 Hours
❑ 2 Days ❑ 3 Days ❑ 4 Days
❑ 5 Days ❑ 6-10 Days
Please call for TAT less than 24 Hours

Company ROSE ENVIRONMENTAL
Address 6715 GREENWOOD AVE N.
SEATTLE, WA 98103
Phone 206.679.0699

Project Manager WAYNE SEAMAN
Cell (503) 313-9061
Email WAYNE@ROSEENVIRONMENTAL.COM
Fax ( ) -

Project Name/Number CRC/13632
Project Location 6530 MARTIN WAY EAST, LACEY, WA

❑ Total Metals	❑ FAA (ppm	☒ Air Filter	❑ Paint Chips (%)	❑ Soil	RCRA 8	RCRA 11
❑ TCLP	❑ ICP (PPM	❑ Paint Chips (cm)	❑ Dust Wipes		❑ Barium ❑ Chromium ❑ Silver	❑ Copper
	❑ GFAA (ppb)	❑ Drinking Water	❑ Waste Water		❑ Arsenic ❑ Mercury ☒ Lead	❑ Zinc
	❑ CVAA (ppb)	❑ Other			❑ Selenium ❑ Cadmium	❑ Other

Reporting Instructions
❑ Call ( ) - ❑ Fax ( ) - ❑ Email

Total Number of Samples ____

	Sample ID	Description		A/R
1	1001	EXCAVATOR CAB	918 L	
2	1002	DUANE GILLAN, LABORER	920 L	
3	1003	DOWN WIND NE	950 L	
4	1004	DOWN WIND NW	956 L	
5	1005	FB	—	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Name	Signature	Company	Date	Time
Sampled by	WAYNE SEAMAN		ROSE	9/17/24	
Relinquish by					

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by				9/18/24	
Analyzed by					
Called by					
Faxed/Email by					



IMG_1410



IMG_1403



IMG_1404



IMG_1405



IMG_1406



IMG_1407



IMG_1408



IMG_1409

Nevertheless, employers and workers exposed to airborne lead concentrations in excess of the DOSH PEL and Action Level are required to follow application WAC 296 -155-176 regulatory requirements to protect workers from lead exposure, including training, an exposure control plan, regulated areas and signage, engineering and work practice controls, medical surveillance, housekeeping, handwashing/hygiene facilities, and recordkeeping.

Limitations of Survey

Rose Environmental LLC performed this inspection in accordance with the generally accepted standards of care that exist in the industrial hygiene profession in Washington State at the time of this study.

It has been a pleasure working with you. Please call me at your earliest convenience with any questions you may have regarding this report.

Respectfully,



Wayne Sehman
Project Manager/Industrial Hygienist
Rose Environmental LLC

Reviewed by,



Martin Rose, CIH, CSP
Principal/Senior Consultant
Rose Environmental LLC

Attachment: NVL Laboratory Report 2416885, Photo Contact Sheet

September 18, 2024

Matt Macfarlane
EHS-International, Inc.
1011 SW Klickitat Way. Suite 104
Seattle, WA 98134

NVL Batch # 2416847.00

RE: Total Metal Analysis
Method: NIOSH 7082 Lead by FAA <air>
Item Code: FAA-01

Client Project: 11535 Carpenter Road Clean Up Action
Location: N-A

Dear Mr. Macfarlane,

NVL Labs received 5 sample(s) for the said project on 9/18/2024. Preparation of these samples was conducted following protocol outlined in NIOSH 7082, unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with NIOSH 7082 Lead by FAA <air>. The results are usually expressed in ug/filter and ug/m^3. Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. If samples were collected by the customer, then the reported test results apply only to the samples as received by NVL Labs. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Manager Metals/Org Laboratory

Enc.: Sample results

Analysis Report
Total Lead (Pb)

Client: EHS-International, Inc.
Address: 1011 SW Klickitat Way. Suite 104
Seattle, WA 98134

Attention: **Mr. Matt Macfarlane**
Project Location: N-A

Batch #: 2416847.00
Matrix: Air
Method: NIOSH 7082
Client Project #: 11535 Carpenter Road Clean Up
Date Received: 9/18/2024
Samples Received: 5
Samples Analyzed: 5

Lab ID	Client Sample #	Vol (L)	RL ug/m^3	Results in ug/filter	Results in ug/m^3
24099735	11535-PERS01	1022	4.9	63	62
24099736	11535-Area01	1006	5.0	32	32
24099737	11535-Area02	1000	5.0	31	31
24099738	Field Blank 1	0	N/A	< 5.0	N/A
24099739	Field Blank 2	0	N/A	< 5.0	N/A

Sampled by: Client
Analyzed by: Yasuyuki Hida Date Analyzed: 09/18/2024
Reviewed by: Shalini Patel Date Issued: 09/18/2024

Shalini Patel, Manager Metals/Org Laboratory

ug/ m^3 = Micrograms per cubicmeter
ug/filter = Micrograms per filter
RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise. Concentration (ug/m^3) not reported if sample volume is zero.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.
Preparation of above samples was conducted using microwave digestion in accordance with EPA Method 3051.

Bench Run No: 2024-0918-02
FAA-01

LEAD LABORATORY SERVICES

Company	EHS-International, Inc.	**NVL Batch Number**	**2416847.00**
Address	1011 SW Klickitat Way. Suite 104 Seattle, WA 98134	**TAT** 1 Day **AH** No **Rush TAT**	
Project Manager	Mr. Matt Macfarlane	**Due Date** 9/19/2024 **Time** 8:00 AM	
Phone	(206) 381-1128	**Email**	mattm@ehsintl.com
Cell	(503) 349-4165	**Fax**	(206) 254-4279

Project Name/Number: 11535 Carpenter Road Clean Up **Project Location:** N-A

Subcategory Flame AA (FAA)

Item Code FAA-01 NIOSH 7082 Lead by FAA <air>

Total Number of Samples 5 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	24099735	11535-PERS01		A
2	24099736	11535-Area01		A
3	24099737	11535-Area02		A
4	24099738	Field Blank 1		A
5	24099739	Field Blank 2		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Drop Box				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	9/18/24	800
Analyzed by	Yasuyuki Hida		NVL	9/18/24	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 9/18/2024
Time: 8:46 AM
Entered By: Kelly AuVu

NVL
INDUSTRIAL HYGIENE SERVICES
LABORATORY + MANAGEMENT + TRAINING

METALS CHAIN OF CUSTODY

Turn Around Time
- ☐ 2 Hour
- ☐ 4 Hours
- ☑ 24 Hours
- ☐ 2 Days
- ☐ 3 Days
- ☐ 4 Days
- ☐ 5 Days

Please call for T/

2416847

Company EHSI
Address 1011 SW Klickitat Way #104
Seattle, Wa 98102
Phone 503-349-4165

Project Manager Matt Macfarlane
Cell (503) 349-4165
Email MattM@ehsintl.com
Fax ( ) -

Project Name/Number 11535 Carpenter Road Clean UP Action
Project Location

☑ Total Metals	☐ FAA (ppm	☑ Air Filter	☐ Paint Chips (%)	☐ Soil	RCRA 8			RCRA 11
☐ TCLP	☐ ICP (PPM	☐ Paint Chips (cm)	☐ Dust Wipes		☐ Barium	☐ Chromium	☐ Silver	☐ Copper
	☐ GFAA (ppb)	☐ Drinking Water	☐ Waste Water		☐ Arsenic	☐ Mercury	☑ Lead	☐ Zinc
	☐ CVAA (ppb)	☐ Other			☐ Selenium	☐ Cadmium		☐ Other

Reporting Instructions Email: ReeseM@ehsintl.com
☐ Call ( ) - ☐ Fax ( ) - ☑ Email MattM@ehsintl.com

Total Number of Samples 05

	Sample ID	Description	A/R
1	11535-PERS01	Personal air sample - excavator operator - Chris Aaron	
2	11535-Area 01	Indoor work area down wind area sample. Left side.	
3	11535-Area 02	Indoor work area down wind area sample. Right side.	
4	Field Blank 01	Field Blank.	
5	Field Blank 02	Field Blank.	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	Reese Myers	Reese Myers	EHSI	9.17.24	0732
Relinquish by	Reese Myers	Reese Myers	EHSI	9.17.24	1846

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by	[illegible]	[illegible]	[illegible]	9/18/24	800
Analyzed by					
Called by					
Faxed/Email by					

2416847

ehsi
A Subsidiary of SoundEarth Strategies
1011 SW Klickitat Way, Suite 104
Seattle, WA 98134
(206) 381-1128
(800) 666-2959
FAX: (206) 254-4279

Date: 9.17.24
EHSI Customer/ PO #:
Project Name: 11535 Carpenter Road Clean UP Action
Technician: Reese Myers
Contractor: Geoengineers/Titan Earthwork

AIR MONITORING DATA SHEET

Rotameter #: Cal. Exp. :

Sample #	Sample Code	Time On / Off	LPM On / Off	Total Minutes	Total Liter	Pump No.	Location/Activity of Person and Social Security No.
11535 -PERS 01	PERS	0732 / 1603	2.0 LPM / 2.0 LPM	511	1022.0	0767	Carpenter Road clean up action excavator operator Personal air Sample – Chris Aaron
11535 -Area 01	IA	0735 / 1558	2.0 LPM / 2.0 LPM	503	1006.0	0314	Carpenter Road Clean up action indoor work area down wind area sample. Left side
11535 -Area 02	IA	0740 / 1600	2.0 LPM / 2.0 LPM	500	1000.0	0328	Carpenter Road Clean up action ~~outdoor~~ indoor work area down wind area sample. Right side
Field Blank 01	BLK	– / –	– / –	–	–	–	Field Blank 01
Field Blank 02	BLK	– / –	– / –	–	–	–	Field Blank 02

SAMPLE CODES	
PRE=Pre-Abatement	PERS = Personal
CLR = Clearance	HEPA = Neg-Air Exhaust
AMB=Ambient	IA = Inside Area
BLK=Blank	OA = Outside Area

TURNAROUND TIME
☐ RUSH
☑ 24 HRS
☐ 48 HRS
☐ OTHER:

TECHNICIAN CERTIFICATION: I certify that the above samples were taken in compliance with applicable standards and regulations as well as the project specifications.

Reese Myers
Technician Signature

9.17.24
Date Signed

October 2, 2024

Matt Macfarlane
EHS-International, Inc.
1011 SW Klickitat Way. Suite 104
Seattle, WA 98134

NVL Batch # 2417713.00

RE: Total Metal Analysis
Method: NIOSH 7082 Lead by FAA <air>
Item Code: FAA-01

Client Project: 11535
Location: 6530 Martin Way E Lacey, WA 98516

Dear Mr. Macfarlane,

NVL Labs received 3 sample(s) for the said project on 10/2/2024. Preparation of these samples was conducted following protocol outlined in NIOSH 7082, unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with NIOSH 7082 Lead by FAA <air>. The results are usually expressed in ug/filter and ug/m^3. Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. If samples were collected by the customer, then the reported test results apply only to the samples as received by NVL Labs. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Manager Metals/Org Laboratory

Enc.: Sample results

Analysis Report
Total Lead (Pb)

Client: EHS-International, Inc.
Address: 1011 SW Klickitat Way. Suite 104
Seattle, WA 98134

Attention: **Mr. Matt Macfarlane**
Project Location: 6530 Martin Way E Lacey, WA 98516

Batch #: 2417713.00
Matrix: Air
Method: NIOSH 7082
Client Project #: 11535
Date Received: 10/2/2024
Samples Received: 3
Samples Analyzed: 3

Lab ID	Client Sample #	Vol (L)	RL ug/m^3	Results in ug/filter	Results in ug/m^3
24105032	11535-100124-01	1450	3.5	24	17
24105033	11535-100124-02	1300	3.9	44	34
24105034	11535-100124-03	2320	2.2	5.8	2.5

Sampled by: Client
Analyzed by: Yasuyuki Hida Date Analyzed: 10/02/2024
Reviewed by: Shalini Patel Date Issued: 10/02/2024

Shalini Patel, Manager Metals/Org Laboratory

ug/ m^3 = Micrograms per cubicmeter
ug/filter = Micrograms per filter
RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise. Concentration (ug/m^3) not reported if sample volume is zero.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.
Preparation of above samples was conducted using microwave digestion in accordance with EPA Method 3051.

Bench Run No: 2024-1002-06

LEAD LABORATORY SERVICES

Company	EHS-International, Inc.	**NVL Batch Number**	**2417713.00**
Address	1011 SW Klickitat Way. Suite 104 Seattle, WA 98134	**TAT** 1 Day **AH** No **Rush TAT**	
Project Manager	Mr. Matt Macfarlane	**Due Date** 10/3/2024 **Time**	10:15 AM
Phone	(206) 381-1128	**Email**	mattm@ehsintl.com
Cell	(503) 349-4165	**Fax**	(206) 254-4279

Project Name/Number: 11535 **Project Location:** 6530 Martin Way E Lacey, WA 98516

Subcategory Flame AA (FAA)

Item Code FAA-01 NIOSH 7082 Lead by FAA <air>

Total Number of Samples 3 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	24105032	11535-100124-01	Air Volume calculated by client for all samples	A
2	24105033	11535-100124-02		A
3	24105034	11535-100124-03		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Kelly AuVu		NVL	10/2/24	1015
Analyzed by	Yasuyuki Hida		NVL	10/2/24	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 10/2/2024
Time: 10:37 AM
Entered By: Kelly AuVu

CHAIN of CUSTODY SAMPLE LOG

2417713

L

Client EHS-International, Inc.
Street 1011 SW Klickitat Way, Suite 104
Seattle, WA 98134

NVL Batch Number
Client Job Number 11535
Total Samples 3
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☐ 3 Days ☐ 10 Days ☐ 2 Hrs ☒ 1 Day ☐ 4 Days ☐ 4 Hrs ☐ 2 Days ☐ 5 Days
Please call for TAT less than 24 Hrs

Project Manager Mr. Matt Macfarlane
Project Location 6530 Martin Way E Lacey WA 98516
Email address mattm@ehsintl.com
Phone: (206) 381-1128 Fax: (206) 254-4279 Cell (503) 349-4165

☐ Asbestos Air ☐ PCM (NIOSH 7400) ☐ TEM (NIOSH 7402) ☐ TEM (AHERA) ☐ TEM (EPA Level II) ☐ Other

☐ Asbestos Bulk ☐ PLM (EPA/600/R-93/116) ☐ PLM (EPA Point Count) ☐ PLM (EPA Gravimetry) ☐ TEM BULK

☐ Mold/Fungus ☐ Mold Air ☐ Mold Bulk ☐ Rotometer Calibration

METALS
☐ Total Metals
☐ TCLP
☐ Cr 6

Det. Limit
☒ FAA (ppm)
☐ ICP (ppm)
☐ GFAA (ppb)
☐ CVAA (ppb)

Matrix
☒ Air Filter
☐ Drinking water
☐ Dust/wipe (Area)
☐ Soil
☐ Paint Chips in %
☐ Paint Chips in cm2
☐ Waste Water
☐ Other

RCRA Metals
☐ All 8
☐ Arsenic (As)
☐ Barium (Ba)
☐ Cadmium (Cd)
☐ Chromium (Cr)
☒ Lead (Pb)
☐ Mercury (Hg)
☐ Selenium (Se)
☐ Silver (Ag)

Other Metals
☐ All 3
☐ Copper (Cu)
☐ Nickel (Ni)
☐ Zinc (Zn)

☐ Other Types of Analysis ☐ Fiberglass ☐ Nuisance Dust ☐ Other (Specify) _____ ☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments (e.g Sample are, Sample Volume, etc)	A/R
1		11535-100124-01	1450L	
2		11535-100124-02	1300L	
3		11535-100124-03	2320L	
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	Stacey Hansen		EHS1	10/2/24	
Relinquished by	Stacey Hansen		EHS1	10/2/24	
Received by	Kathleen		NVL	10/2/24	1015
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

Rose Environmental

6715 Greenwood Avenue North
Seattle, WA 98103

Phone: 206.679.0699
www.roseenvironmental.com

October 31, 2024

Mr. Nick Seeley
Project Manager | Remediation Manager
Titan Earthwork
1585 Valentine Avenue Southeast
Pacific, WA 98047
Phone: (253) 255.4308
Email: nick.seeley@titanearth.com

Subject: Lead Exposure Evaluation – 6530 Martin Way East, Lacey, Washington

Dear Nick:

On October 14, 2024, Rose Environmental conducted personal and area air monitoring for airborne lead exposure during removal of lead-contaminated soil and abatement of lead contamination operations in the former police firing range located at 6530 Martin Way East in Lacey, Washington. The air monitoring was conducted to document airborne lead particulate where employees may be exposed during lead contamination removal activities.

Personal protective equipment worn by Titan Earth workers included half-faced respirators with P100 and organic vapor cartridges, Tyvek suits, latex gloves worn under leather work gloves, booties, and boots. Work area containments were erected using sheets of six-mil polyethylene. A HEPA-filtered air scrubber with a pre-filter was operated within the work area.

Two area samples were operated downwind of the work area during abatement activities. The wind was blowing from the south on the date of our survey. One area sample was placed on the excavator cab and one personal sample was placed on a laborer within the work zone.

Air Sampling for Lead

The samples were collected onto pre-weighed 37-mm mixed cellulose ester (MCE) filters of 0.8 pore size using a low-flow sampling pump operated at a flow rate of approximately 2.0 liters per minute. The sampling chain was pre- and post-calibrated by a calibrated rotameter. The samples plus one blank were submitted to NVL Laboratory's American Industrial Hygiene Association (AIHA)-accredited laboratory in Seattle, Washington for inductively coupled argon plasma, atomic emission spectroscopy (ICP-AES) of lead by NIOSH Method 7300.

Results Table –Air Monitoring for Lead

Sample Number	Description	Date	Time (min)	Duration Concentration (µg/m^3)
1001	Personal Sample – Duane Gillan Inside Firing Range Work Area During Abatement Activities	10/14/2024	8:04 – 16:06 (964)	<5.2
1002	Area Sample – Inside Firing Range Work Area/Excavator Cab During Abatement Activities		8:04 – 16:06 (964)	<5.2
1003	Area Sample – ~20' Downwind of Work Area at Northeast Perimeter		8:11 – 16:11 (960)	<5.2
1004	Area Sample – ~20' Downwind of Work Area at Northwest Perimeter		8:13 – 16:13 (960)	<5.2
1005	Field Blank		-	N/A
			DOSH 8-hour TWA Action Level:	**30**
			DOSH 8-hour TWA PEL:	**50**

Note: mg/m^3 (milligrams contaminant per cubic meter of air)
Calculated TWA assumes zero lead exposure for the remainder of the shift

The measured air concentrations of lead for the two area samples collected adjacent to the work areas during abatement activities on October 14, 2024, were below the laboratory's analytical limit detection (<5.2 µg/m^3), and were also below the State of Washington Division of Occupational Safety and Health (DOSH) 8-hour TWA Permissible Exposure Limit (PEL) of 50 µg/m^3 and Action Level of 30 µg/m^3.

The personal and area samples collected within the work area during abatement activities were below both the State of Washington Division of Occupational Safety and Health (DOSH) 8-hour TWA Permissible Exposure Limit (PEL) of 50 µg/m^3 and Action Level of 30 µg/m^3.

Limitations of Survey

Rose Environmental LLC performed this inspection in accordance with the generally accepted standards of care that exist in the industrial hygiene profession in Washington State at the time of this study.

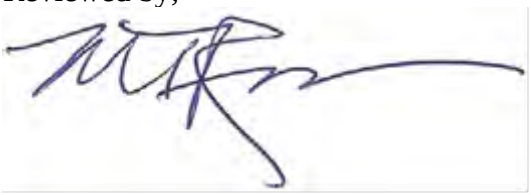
It has been a pleasure working with you. Please call me at your earliest convenience with any questions you may have regarding this report.

Respectfully,



Wayne Sehman
Project Manager/Industrial Hygienist
Rose Environmental LLC

Reviewed by,



Martin Rose, CIH, CSP
Principal/Senior Consultant
Rose Environmental LLC

Attachment: *NVL Laboratory Report 2418707*
Photographic Contact Sheet

October 16, 2024

Martin Rose
Rose Environmental
6715 Greenwood Ave. N
Seattle, WA 98107

NVL Batch # 2418707.00

RE: Total Metal Analysis
Method: NIOSH 7082 Lead by FAA <air>
Item Code: FAA-01

Client Project: 13632
Location: Carpenter Rd. Lacey, WA

Dear Mr. Rose,

NVL Labs received 5 sample(s) for the said project on 10/15/2024. Preparation of these samples was conducted following protocol outlined in NIOSH 7082, unless stated otherwise. Analysis of these samples was performed using analytical instruments in accordance with NIOSH 7082 Lead by FAA <air>. The results are usually expressed in ug/filter and ug/m^3. Test results are not blank corrected.

For recent regulation updates pertaining to current regulatory levels or permissible exposure levels, please call your local regulatory agencies for more detail.

At NVL Labs all analyses are performed under strict guidelines of the Quality Assurance Program. If samples were collected by the customer, then the reported test results apply only to the samples as received by NVL Labs. This report is considered highly confidential and will not be released without your approval. Samples are archived after two weeks from the analysis date. Please feel free to contact us at 206-547-0100, in case you have any questions or concerns.

Sincerely,

Shalini Patel, Manager Metals/Org Laboratory

Enc.: Sample results

Analysis Report

Total Lead (Pb)

Client: Rose Environmental
Address: 6715 Greenwood Ave. N
Seattle, WA 98107

Attention: **Mr. Martin Rose**
Project Location: Carpenter Rd. Lacey, WA

Batch #: 2418707.00
Matrix: Air
Method: NIOSH 7082
Client Project #: 13632
Date Received: 10/15/2024
Samples Received: 5
Samples Analyzed: 5

Lab ID	Client Sample #	Vol (L)	RL ug/m^3	Results in ug/filter	Results in ug/m^3
24111438	ZM364530010	964	5.2	< 5.0	< 5.2
24111439	ZM364530015	964	5.2	< 5.0	< 5.2
24111440	ZM364500009	960	5.2	< 5.0	< 5.2
24111441	ZM364500025	960	5.2	< 5.0	< 5.2
24111442	ZM364530040	0	N/A	< 5.0	N/A

Comments: Micro cassette were used for air sampling

Sampled by: Client
Analyzed by: Yasuyuki Hida Date Analyzed: 10/16/2024
Reviewed by: Shalini Patel Date Issued: 10/16/2024

Shalini Patel, Manager Metals/Org Laboratory

ug/ m^3 = Micrograms per cubicmeter
ug/filter = Micrograms per filter
RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise. Concentration (ug/m^3) not reported if sample volume is zero.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.
Preparation of above samples was conducted using microwave digestion in accordance with EPA Method 3051.

Bench Run No: 2024-1016-03

LEAD LABORATORY SERVICES

Company	Rose Environmental	**NVL Batch Number**	**2418707.00**
Address	6715 Greenwood Ave. N Seattle, WA 98107	**TAT** 1 Day **AH** No **Rush TAT**	
Project Manager	Mr. Martin Rose	**Due Date** 10/16/2024 **Time** 4:10 PM	
Phone	(206) 679-0699	**Email**	roseenv@gmail.com
		Fax	(206) 279-1756

Project Name/Number: 13632 **Project Location:** Carpenter Rd. Lacey, WA

Subcategory Flame AA (FAA)

Item Code FAA-01 NIOSH 7082 Lead by FAA <air>

Total Number of Samples 5 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	24111438	ZM364530010	Volume calculated by client	A
2	24111439	ZM364530015	Volume calculated by client	A
3	24111440	ZM364500009	Volume calculated by client	A
4	24111441	ZM364500025	Volume calculated by client	A
5	24111442	ZM364530040	Volume calculated by client	A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Fatima Khan		NVL	10/15/24	1610
Analyzed by	Yasuyuki Hida		NVL	10/16/24	
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Date: 10/15/2024
Time: 4:20 PM
Entered By: Rachelle Miller

2418707

NVL LABS
INDUSTRIAL HYGIENE SERVICES
Laboratory | Management | Training

METALS CHAIN OF CUSTODY

Turn Around Time
☐ 2 Hours ☐ 1 Hours ☒ 24 Hours
☐ 2 Days ☐ 3 Days ☐ 4 Days
☐ 5 Days ☐ 6-10 Days
Please call for TAT less than 24 Hours

Company: Rose Environmental
Address: 6715 Greenwood Ave N
Seattle, WA 98103
Phone: 206-679-0699

Project Manager: Martin Rose
Cell: ( ) -
Email: roseenv@gmail.com
Fax: ( ) -

Project Name/Number: 13632
Project Location: CARPENTER RD, LACEY, WA

☐ Total Metals ☐ TCLP
☒ FAA (ppm) ☐ ICP (PPM) ☐ CVAA (ppb) ☐ CVAA (ppb)
☒ Air Filter ☐ Paint Chips (Pb) ☐ Soil ☐ Paint Chips (cm²) ☐ Dust Wipes ☐ Drinking Water ☐ Waste Water ☐ Other
RCRA 8: ☐ Barium ☐ Chromium ☐ Silver ☐ Arsenic ☐ Mercury ☒ Lead ☐ Selenium ☐ Cadmium
RCRA 11: ☐ Copper ☐ Zinc ☐ Other

Reporting Instructions: PLEASE INCLUDE WAYNE@ROSEENVIRONMENTAL.COM
☐ Call ( ) - ☐ Fax ( ) - ☐ Email

Total Number of Samples _____

	Sample ID	Description	A/R
1	ZM364530010	PERSONAL - DUANE GILLAM / LABORER INSIDE CONTAINMENT	964L
2	ZM364530015	AREA - EXCAVATOR CAB INSIDE CONTAINMENT	964L
3	ZM364500009	AREA - NE PERIMETER OUTSIDE	960L
4	ZM364500025	AREA - NW PERIMETER OUTSIDE	960L
5	ZM364530040	FB	—
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

	Print Name	Signature	Company	Date	Time
Sampled by	WAYNE SEAMAN		ROSE	10/10/24	
Relinquish by					

Office Use Only

	Print Name	Signature	Company	Date	Time
Received by			NVL Labs	10/10/24	4:60
Analyzed by					
Called by					
Faxed/Email by					


IMG_1718


IMG_1696


IMG_1697


IMG_1698


IMG_1699


IMG_1700


IMG_1701


IMG_1702


IMG_1703


IMG_1704


IMG_1705


IMG_1706


IMG_1707


IMG_1708


IMG_1709


IMG_1710


IMG_1711


IMG_1712


IMG_1713


IMG_1714


IMG_1715


IMG_1716


IMG_1717