# Preliminary Application for Site Certificate for the Speedway Energy Facility

# Exhibit B. Structural Standard

**Submitted to**
**Oregon Energy Facility Siting Council**

**Prepared for**

Speedway Energy

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**July 2026**

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# Acronyms and Abbreviations

| Acronym/Abbreviation | Definition |
|---|---|
| Applicant | BGTF Speedway Project LLC |
| ASC | Application for Site Certificate |
| bgs | below ground surface |
| BMP | best management practice |
| BPA | Bonneville Power Administration |
| DOGAMI | Oregon Department of Geology and Mineral Industries |
| EFSC | Oregon Energy Facility Siting Council |
| ESCP | Erosion and Sediment Control Plan |
| Facility | Speedway Energy Facility |
| FEMA | Federal Emergency Management Agency |
| IBC | International Building Code |
| IEEE | Institute of Electrical and Electronics Engineers |
| NPDES | National Pollutant Discharge Elimination System |
| O&M | operations and maintenance |
| OAR | Oregon Administrative Rules |
| OSSC | Oregon Structural Specialty Code |
| POI | point of interconnection |
| SLIDO | Oregon Statewide Landslide Database |
| USGS | U.S. Geological Survey |

# 1.0 Introduction

BGTF Speedway Project LLC (Applicant) proposes construction and operation of the Speedway Energy Facility (Facility), a renewable energy facility incorporating wind, solar, and battery energy storage, located on privately owned land in unincorporated Sherman County, Oregon. The Facility's proposed point of interconnection (POI) to the regional electrical grid will be via a new Bonneville Power Administration (BPA) switchyard to be located adjacent to the existing BPA 500-kilovolt (kV) Ashe-Marion Transmission Line, which runs northeast/southwest through the site boundary.

Exhibit B presents information supporting demonstration of compliance with the Structural approval standard and submittal requirements in Oregon Administrative Rules (OAR) 345-022-0022.

# 2.0 Analysis Area

The analysis area for geologic and soil stability is the area within the proposed site boundary. The analysis area for historical seismic and potentially active faults included a 50-mile buffer around the proposed site boundary. The site boundary is defined in detail in the Background Information Exhibit and is shown on Figure B-1.

# 3.0 Geologic Report – OAR 345-022-0020(4)(a)

> *(4) To assist the Council in determining whether the standard outlined in (1) through (3) has been met, the Applicant must submit information from reasonably available sources regarding the geological and soil stability within the analysis area, including:*
>
> > *(a) A geologic report meeting the Oregon State Board of Geologist Examiners geologic report guidelines. Current guidelines must be determined based on consultation with the Oregon Department of Geology and Mineral Industries, as described in subsection (b);*

The required geological report is provided through the information in this exhibit, which includes analysis and findings from previous geotechnical investigations performed for areas within the site boundary. Current geologic report guidelines were determined based on consultation with the Oregon Department of Geology and Mineral Industries (DOGAMI) as described in Section 4.0 and Attachment B-1. In addition, a geotechnical investigation was conducted on behalf of the Applicant, which is included as Attachment B-2 (Geotechnical Investigation Report).

## 3.1 Topographic Setting

The site boundary is located immediately east and south from the City of Grass Valley, within Sherman County, Oregon. The site boundary is located in a general plateau region with flat to rolling hills. The topography consists of broad upland divides and gently rolling plateaus, with

steep-sided canyons occurring throughout the site boundary. The topography is mainly influenced by drainages that have relatively gentle to moderate slopes. However, steeper slopes are located along Rosebush Creek canyon where it traverses the site boundary trending north-south.

The site boundary occupies slopes from 0 to 75 percent, with an average of 6.3 percent. Elevations within the site boundary range from 1,957 to 2,629 feet above mean sea level.

This area is dominated by grassland/pasture and shrubland with additional areas of fallow or idle cropland, winter wheat, and miscellaneous land use (USDA-MRLA 2025).

## 3.2 Geologic Setting

The site boundary lies within the Walla Walla Plateau section of the Columbia Plateaus province of the Intermontane Plateaus, which is characterized by nearly level to steeply sloping, and its surface is a series of hills with incised valleys (NPS 2025). The majority of this area is comprised of scoured valleys within the basalt plateau, and the flood sediments filled these valleys over time. The Columbia Plateau area is characterized by loess hills, surrounding scablands, and alluvial deposits.

The topography in the province is dominated by geologically young lava flows that have occurred within the last 17 million years. Over 170,000 cubic kilometers of basaltic lava, known as the Columbia River basalts, cover the western part of the province. The native terrain within the site boundary is primarily gently to moderately sloping toward surrounding drainages and waterways. The site is situated between two major river systems, the Deschutes River to the west and the John Day River to the east, with Grass Valley Canyon and its associated creeks and tributaries running generally north to south, intersected by various smaller canyons and drainages oriented roughly perpendicular to both river systems. The site boundary is crossed by Rosebush Creek in the northern portion and Finnegan Creek is adjacent to the southern site boundary.

Figure B-1 (DOGAMI 2025a, OGDC 2026, and USGS 2025a) provides a geologic map for the site boundary. The shallow bedrock is mapped as the Tertiary Wanapum Basalt Frenchman Springs Member. Silt loam soils that are mostly less than 80 inches thick overlay the basalt bedrock (NRCS 2025).

The geologic descriptions below are summarized from the DOGAMI geologic maps and publications (DOGAMI 2025a), U.S. Geological Survey (USGS) publications (USGS 2025a), and Natural Resources Conservation Service (NRCS 2025) information.

### *3.2.1 Surficial Geologic Units*

Surficial deposits generally consist of silt loams derived from loess soil overlying fractured basalt (NRCS 2025). These silt loam soils have depths to bedrock of less than 80 inches. Small areas along drainages within the site boundary have alluvial soils with depths to bedrock greater than 80 inches. The depth to water rating is entirely greater than 80 inches.

Fifteen water well records were available for review from the Oregon Water Resources Department Groundwater Information Mapping Tool in the general vicinity of the site boundary (OWRD 2025). The total depth of the wells was from 76 to 578 feet below ground surface (bgs); and the total water

depth was from 43 to 373 feet bgs. The wells are listed as domestic, other, industrial/commercial, and test well use. The well logs indicate basalt and broken rock bedrock from 1 to 20 feet bgs, and that basalt is generally the screened aquifer. A more comprehensive review of available water well records from 1960 to 2023 (OWRD 2025) indicated that the static water level ranges from 16 to 527 feet below grade on wells located throughout and immediately outside the site boundary, and the majority of the well records reported water depths deeper than 100 feet.

### *3.2.2 Bedrock Geologic Units*

The surficial deposits are underlain by the Frenchman Springs Member (Tf) of Wanapum Basalt of the Yakima Basalt Subgroup, part of the Columbia River Basalt Group of Miocene Age. The Columbia River Basalt consists of numerous fine-grained lava flows that primarily erupted from fissures in eastern Washington and Oregon and western Idaho from approximately 23.8 to 5.3 million years ago. Many individual flows are interbedded with thin paleosols formed during periods of volcanic inactivity. Basalt flows near and within the site boundary are mapped as the Wanapum basalt formation Frenchman Springs Member of the Tertiary Columbia River Basalt Group (DOGAMI 2025a; USGS 2025a).

The Frenchman Springs Member is entirely mapped within the site boundary. The Frenchman Springs Member consists of medium- to dark-gray, fine-grained basalt with vesicular upper zones and columnar jointing. Exposures of the Grande Ronde Basalt, including both the upper flow of normal magnetic polarity (Tgn2) and upper flow of reversed magnetic polarity (Tgr2), occur outside the eastern and western limits of the site boundary, forming the canyon walls and incised drainage features.

The Wanapum Basalt formation consists of flows of gray to dark-gray, medium-grained, commonly plagioclase porphyritic basalt, and generally exhibits blocky to platy jointing. The Frenchman Springs Member is approximately 300 to 500 feet thick in the area of the Columbia Plateau.

### *3.2.3 Soils*

Soils were evaluated within the site boundary. Ninety-five percent of the soils overlying the geologic bedrock units are silt loam soils with most soil thicknesses of less than 2.5 feet. Permeability of the soils within the site boundary is generally moderate with moderately high runoff potential. Wind erosion susceptibility is generally moderately low and water erosion susceptibility is generally moderate to moderately high. Soils in the site boundary have a low to moderate compaction resistance.

# 4.0 Consultation with DOGAMI – OAR 345-022-0020(4)(b)

*(b) A summary of consultation with the Oregon Department of Geology and Mineral Industries regarding the appropriate methodology and scope of the seismic hazards and geology and soil-related hazards assessments, and the appropriate site-specific geotechnical work that must be performed before submitting the application for the Department to determine that the application is complete;*

The Applicant consulted with DOGAMI in a meeting on March 5, 2026. The general details of the Facility and the analysis area terrain and geology were discussed. The Applicant used the methods, data, and the initial study results from this Exhibit in the discussion. DOGAMI did not have suggestions for additional research or data sources and generally confirmed that what was shared during the meeting appeared to be accurate thus far in the process. The notes from the DOGAMI meeting are included as Attachment B-1.

# 5.0 Site-Specific Geotechnical Work – OAR 345-022-0020(4)(c)

*(c) A description and schedule of site-specific geotechnical work that will be performed before construction for inclusion in the site certificate as conditions;*

A geotechnical investigation was conducted on behalf of the Applicant and is included as Attachment B-2 (Geotechnical Investigation Report). The investigation included the following tasks: review of aerial photographs, geotechnical literature, geologic maps, and seismic hazard maps relevant to the area within the site boundary,

The site-specific geotechnical investigation included 240 geotechnical (soil/rock) borings; 30 infiltration (percolation) tests; 120 field electrical resistivity tests; 154 pile load tests; and geotechnical laboratory testing including 98 soil index, 80 standard proctor, 80 California Bearing Ratio (CBR), 80 corrosivity (resistivity, pH, sulfate content, chloride content, sulfides, and redox potential), 80 thermal conductivity, and 13 rock strength tests.

Attachment B-2 documents the available field and laboratory testing data, geological hazards, foundation design parameters and geotechnical construction recommendations, and provided recommendations for future subsurface investigations:

- Additional geotechnical borings and testing may be warranted based on the final design layout of solar photovoltaic arrays, collector substations, and other Facility structures. Infiltration testing will be required for the stormwater best management practices (BMPs).
- Once the battery energy storage system and wind turbine locations are finalized, additional geotechnical investigation should be conducted for the design of a cost-effective foundation system.
- A pile load testing program is recommended to be performed on production piles. For conventional directly driven piles, Tetra Tech recommends a minimum of 1 percent of piles or one (1) pile per block as confirmatory pile tests during construction. For pre-drilled piles,

Tetra Tech recommends that verification testing be performed on 100 percent of piles for the first 50 piles, until a pattern has been established. Thereafter, one pile per 10 pre-drilled locations, with a minimum of one (1) pile per block, should be tested for up to 1,000 piles. For greater than 1,000 piles per block, one pile per 25 pre-drilled locations should be tested. Alternatively, the quality control testing frequency for production piles should follow the minimum criteria established by the Engineering, Procurement and Construction (EPC) racking manufacturer/supplier or the EPC's structural engineer.

Information from Attachment B-2 has been incorporated into this Exhibit.

# 6.0 Transmission Lines and Pipelines – OAR 345-022-0020(4)(d)

*(d) For all transmission lines, and for all pipelines that would carry explosive, flammable or hazardous materials, a description of locations along the proposed route where the applicant proposes to perform site specific geotechnical work, including but not limited to railroad crossings, major road crossings, river crossings, dead ends (for transmission lines), corners (for transmission lines), and portions of the proposed route where geologic reconnaissance and other site specific studies provide evidence of existing landslides, marginally stable slopes or potentially liquefiable soils that could be made unstable by the planned construction or experience impacts during the facility's operation;*

The Facility's collector substations will connect to the central substation via aboveground 230-kV collector lines to be located in one central corridor that runs down the middle of the micrositing area. In addition, there will be a short stretch of 500 kV gen-tie transmission line that spans aboveground from the central substation to the POI at the BPA switchyard.

The Applicant will perform site-specific geotechnical work along the aboveground 230-kV collector lines and 500 kV gen-tie transmission line where potential geologic hazards have been identified to inform the final design of the proposed Facility.

The 230 kV collector lines will be supported by 120 pole-structures, consisting of 166 poles in a variety of pole-structure designs including 100 steel monopoles, 12 steel two-pole-structures, 6 steel three-pole-structures, and 6 steel four-pole-structures. The pole-structures will be an average of approximately 115 feet above ground, with a minimum height of approximately 50 feet and maximum height of approximately 135 feet. The spacing between pole-structures will be an average of approximately 600 feet depending on the terrain.

This aboveground gen-tie transmission line will be up to 650 feet in length and likely connected to H-frame poles or dead-end structures within the central substation and BPA switchyard, so no support pole-structures are anticipated outside of these two facilities. It is anticipated that the gen-tie line will be 80 to 135 feet in height.

The proposed Facility does not include pipelines carrying hazardous substances as described in OAR 345-021-0010(1)(h)(E).

# 7.0 Seismic Hazard Assessment – OAR 345-022-0020(4)(e)

*(e) An assessment of seismic hazards, in accordance with standard-of-practice methods and best practices, that addresses all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection, and an explanation of how the applicant will design, engineer, construct, and operate the facility to avoid dangers to human safety and the environment from these seismic hazards. Furthermore, an explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters. The applicant must include proposed design and engineering features, applicable construction codes, and any monitoring and emergency measures for seismic hazards, including tsunami safety measures if the site is located in the DOGAMI-defined tsunami evacuation zone; and*

## 7.1 Methods

Available reference materials were reviewed, and a desktop seismic-hazard assessment was conducted. Topographic and geologic conditions and hazards within the site boundary were evaluated using topographic and geologic maps, aerial photographs, existing geologic reports, and data from DOGAMI, the Oregon Water Resources Department, the USGS, and the Natural Resources Conservation Service.

A desktop seismic-hazard analysis characterized seismicity in the Speedway Energy Facility's vicinity to evaluate potential seismic impacts. This work was based on the potential regional and local seismic activity described in the existing scientific literature and on subsurface soil and groundwater conditions found in the desktop evaluations. The seismic-hazard analysis consisted of the following tasks:

1. Detailed review of USGS, National Geophysical Data Center, and DOGAMI literature and databases;
2. Identification of potential seismic events and characterization of those events in terms of a series of design events;
3. Evaluation of seismic hazards, including potential fault rupture, earthquake-induced landslides, liquefaction and lateral spread, settlement, and subsidence; and
4. Mitigation recommendations based on the characteristics of the subsurface soils and design earthquakes, including specific seismic events that might have a significant effect on the site, potential for seismic energy amplification at the site, and the site-specific acceleration response spectrum.

As described in Section 5.0, additional site-specific geotechnical investigations will be conducted prior to construction to inform the final design for Facility structures. It will be reported to DOGAMI following the Oregon State Board of Geologist Examiners' Guideline for Preparing Engineering Geologic Reports (Oregon State Board of Geologist Examiners 2014).

## 7.2 Maximum Considered Earthquake Ground Motion under IBC 2012

Overall, the DOGAMI Oregon HazVu: Statewide Geohazards Viewer mapping tool (DOGAMI 2025b) indicates that the Cascadia earthquake hazard is moderate, and the general earthquake hazard in the site boundary is rated strong. The USGS Seismic Hazard Mapping Model (USGS 2026) developed ground motions using a probabilistic seismic hazard analysis that covered the site boundary. Though these motions are not site-specific, they reasonably estimate the ground motions within the site boundary. For new construction, the site should be designed for the maximum considered earthquake, according to the most recently updated International Building Code (IBC; ICC 2024) supplemented by the Oregon Structural Specialty Code (OSSC; State of Oregon 2025). The USGS earthquake hazard tool analysis was run for the site boundary, and the design event (6.43 magnitude earthquake) has a 2 percent probability of exceedance in 50 years, or a 2,475-year return period. This event has a peak ground acceleration of 0.1857 acceleration from gravity at the bedrock surface for the site boundary. The values of peak ground acceleration on rock are an average representation of the acceleration most likely to occur at the site for all seismic events (crustal, intraplate, or subduction).

Based on a review of the 2021 Oregon Seismic Hazard Database (DOGAMI 2021), the site boundary is located in an area of moderate to strong perceived shaking, very light to light potential damage, and slight damage to buildings for an earthquake that has a 2 percent chance of occurring within the next 50 years; a light to moderate perceived shaking, none to very light potential damage, and very slight damage to buildings for an magnitude 9.0 Cascadia earthquake; and a low to very low probability of damaging shaking over the next 50 years.

In accordance with American Society of Civil Engineers (ASCE) Standard 7 (ASCE 2026), the site boundary is classified as Seismic Design Category "C." Seismic design parameters were developed following IBC 2024 and ASCE/SEI 7-22. Based on the information gathered from the geotechnical borings (Attachment B-2), it was determined the bedrock throughout the site is at shallow depths (i.e., varied from 0.6 to 18.8 feet below grade, and at an average depth of 3.5 feet below grade for all geotechnical borings completed). Using current geotechnical information, the Speedway Energy Facility will be designed for "Site Class C" (see Table B-1). Table B-1 shows the seismic design parameters based on Site Class C, reflecting the worst-case scenario surficial geology mapped within the site boundary. Site Class C represents the shallow basalt bedrock within the site boundary. Attachment B-2 provides the specific Site Class C seismic design parameters.

**Table B-1. Seismic Design Parameters—Maximum Considered Earthquake**

| Location | Site Class | Earthquake Magnitude | Peak Horizontal Ground Acceleration | Return Period |
|---|---|---|---|---|
| Site Boundary | B | 6.42 | 0.1356g | 2,475 years |
| Site Boundary | B | 6.55 | 0.05573g | 475 years |
| Site Boundary | BC | 6.39 | 0.1583g | 2,475 years |
| Site Boundary | BC | 6.53 | 0.0655g | 475 years |
| Site Boundary | C | 6.43 | 0.1857g | 2,475 years |
| Site Boundary | C | 6.57 | 0.07799g | 475 years |
| Source: USGS 2026. | | | | |

### *7.2.1 Earthquake Sources*

In northern Oregon, seismicity is generated when the Juan de Fuca Plate and the North American Plate converge at the Cascadia Subduction Zone. These plates converge at a rate of 1 to 2 inches per year, accumulating large amounts of stress that release abruptly in earthquake events. The four sources of earthquakes and seismic activity in this region are crustal, intraplate, volcanic, and the deep subduction zone (DOGAMI 2010). Geologic mapping in the vicinity of the site boundary (USGS 2025a) shows historic mapped anticline (Bordon Ridge) and syncline (Grass Valley) to the north, and numerous faults to the northeast.

Overall, earthquakes in Oregon are associated with active faults in four regional seismicity zones: the Cascade seismic zone, the Portland Hills zone (the Portland, Oregon, and Vancouver, Washington, metropolitan area), the south-central zone (Klamath Falls), and northeastern Oregon zone (Niewendorp and Newhouse 2003). Faults are considered active if there has been displacement in the last 10,000 years, and potentially active if there has been movement over the last Quaternary period (1.6 million years). Regionally, seismicity has been attributed to crustal deformation from the Cascadia Subduction Zone and volcanism. More than 6,000 earthquakes—most less than magnitude 3.0—have occurred in Oregon from 1981 to 1995, with 75 percent of these recorded since March 1993 (Wong and Bott 1995).

Earthquakes are caused by movements along crustal faults, generally in the upper 10 to 15 miles of the earth's crust. In the vicinity of the site boundary, earthquakes occur within the crust of the North American tectonic plate when built-up stresses near the surface are released through fault rupture. There are no inactive or potentially active faults mapped within the site boundary. Numerous undifferentiated, Quaternary-age, and Class B faults are mapped within 25 miles of the site boundary (Figure B-2). These faults are potentially active and have a slip-rate of less than 0.2 mm/year (USGS 1999). The DOGAMI Oregon HazVu: Statewide Geohazards Viewer earthquake hazard layer (DOGAMI 2025b), Oregon Geologic Data Compilation – Release 8 (OGDC-8; OGDC 2026), and the USGS Geologic Hazards Science Center (USGS 2025b; Figure B-2) show that the

nearest potentially active faults (Class B) are about 1 mile east of the site boundary. Class B faults have geologic evidence that demonstrates the existence of a fault or suggests Quaternary deformation, but either (1) the fault might not extend deeply enough to be a potential source of significant earthquakes, or (2) the currently available geologic evidence is too strong to confidently assign the feature as a Class C (insufficient geologic evidence) but not strong enough to assign it to Class A (active fault) (USGS 2025b). The potentially active faults shown in Figure B-2, within 50 miles of the site boundary, present the largest potential for seismic contribution to the Speedway Energy Facility. More detailed descriptions of faults in the vicinity of the site boundary are provided in Attachment B-2.

Large portions of the site boundary are located in areas where DOGAMI lidar mapping is available (DOGAMI 2026). Lidar hillshade mapping indicates areas of steep slopes are located along Rosebush Creek within the site boundary. No areas of highest hit hillshade appear to indicate recent faulting within the site boundary. However, an anomalous steep area along Rosebush Creek located approximately 0.65 miles north of the site boundary might be indicative of more recent fault activity.

Attachment B-2 assessed the potential for any regional faults to affect the Speedway Energy Facility, as described in Section 4.0. The investigation included a description of any potentially active faults, their potential risk to the Speedway Energy Facility, and any additional mitigation measures the Applicant will employ to design, construct, and operate the Facility safely. The site is considered to be located within a moderate to high seismic activity zone, and therefore there is potential for the occurrence of an earthquake-induced landslide and lateral spreading in the areas along the steep valley slopes. It is anticipated that the Facility structures will not be located within or near the steep valley slopes. However, the stability of the steep slopes throughout the site boundary should be assessed during the Facility design. No other geological hazards were reported.

The 2013 Oregon Resilience Plan by the Oregon Seismic Safety Policy Advisory Commission (OSSPAC 2013) simulated the impact of a magnitude 9.0 Cascadia earthquake scenario. This plan places the site boundary into the “very light” shaking category. This means that a magnitude 9.0 Cascadia scenario earthquake would produce a very light shaking event that would be felt outdoors, wake sleepers, disturb or spill liquids, upset small unstable objects, and potentially swing doors or move pictures (OSSPAC 2013).

Probabilistic seismic-hazard disaggregation at 475-year intervals is shown in Attachment B-3 and at 2,475-year intervals in Attachment B-4.

### *7.2.2 Recorded Earthquakes*

The USGS categorizes Sherman County as being in a zone that is designated as moderate to moderate-to-high hazard (14 to 20 percent occurrence region in 50 years) for potential earthquakes (USGS 2014). Figure B-2 displays the location and approximate magnitude of all recorded earthquakes within approximately 50 miles of the site boundary. The seismic events are grouped by magnitude and displayed with different-sized symbols based on the event’s strength.

Table B-2 summarizes the earthquakes magnitude 3.5 and greater recorded within 50 miles of the site boundary. One earthquake greater than magnitude 4.5 was recorded approximately 12 miles south of the site boundary. The nearest earthquake is magnitude 4.0 located less than 7 miles of the site boundary. Numerous earthquakes from magnitude 3.5 to 4.2 are located within 10 miles of the site boundary. Earthquakes between magnitude 3.0 and 4.0 are generally equivalent to a Modified Mercalli Intensity III associated with shaking that is "noticeable indoors but may not be recognized as an earthquake" (USGS 2025d).

**Table B-2. Significant Historical Earthquakes within 50 Miles of the Facility**

| Year | Month | Day | Latitude | Longitude | Moment Magnitude | Miles from Site Boundary |
|---|---|---|---|---|---|---|
| 1999 | 8 | 31 | 45.1863333 | -120.0908333 | 3.5 | 29.5 |
| 1990 | 10 | 19 | 45.341 | -121.6858333 | 3.5 | 39.8 |
| 1989 | 9 | 15 | 45.3726667 | -121.7068333 | 3.5 | 41.1 |
| 1988 | 9 | 29 | 45.8498333 | -120.2596667 | 3.5 | 35.4 |
| 1975 | 7 | 1 | 45.628 | -120.002 | 3.5 | 35.2 |
| 2010 | 12 | 30 | 45.1315 | -120.932 | 3.6 | 9 |
| 2010 | 1 | 2 | 45.137 | -120.9555 | 3.6 | 9.2 |
| 2009 | 4 | 20 | 45.1335 | -120.955 | 3.6 | 9.4 |
| 2008 | 12 | 27 | 45.131 | -120.9513333 | 3.6 | 9.5 |
| 2008 | 4 | 5 | 45.13 | -120.9425 | 3.6 | 9.3 |
| 2007 | 3 | 1 | 45.1238333 | -120.9341667 | 3.6 | 9.5 |
| 2000 | 2 | 1 | 45.19 | -120.1126667 | 3.6 | 28.4 |
| 1976 | 10 | 10 | 45.2703333 | -120.4995 | 3.6 | 9 |
| 1975 | 7 | 1 | 45.6053333 | -120.0161667 | 3.6 | 33.9 |
| 2007 | 6 | 14 | 45.1256667 | -120.944 | 3.8 | 9.6 |
| 2002 | 6 | 29 | 45.3423333 | -121.6798333 | 3.8 | 39.5 |
| 1997 | 3 | 22 | 45.1973333 | -120.0671667 | 3.9 | 30.4 |
| 2021 | 6 | 6 | 45.34233333 | -121.6935 | 3.94 | 40.2 |
| 1976 | 4 | 17 | 45.1585 | -120.8473333 | 4.0 | 6.3 |
| 2000 | 1 | 30 | 45.1971667 | -120.1248333 | 4.1 | 27.7 |
| 1974 | 12 | 13 | 45.265 | -121.599 | 4.1 | 35.5 |
| 2010 | 6 | 17 | 46.1088333 | -120.743 | 4.2 | 46.8 |
| 2008 | 7 | 14 | 45.1286667 | -120.95 | 4.2 | 9.6 |
| 2002 | 6 | 29 | 45.3348333 | -121.6863333 | 4.5 | 39.8 |
| 1976 | 4 | 13 | 45.0756667 | -120.8588333 | 4.6 | 12.1 |

Sources: USGS 2025d.

The Ground Response Spectra Assessment (Attachments B-5 and B-6) assessed the design response spectrum given in the 2021 IBC using the ASCE 7 Hazard Tool (ASCE 2026). Response spectra are provided for the maximum considered earthquake at the site boundary location. For the maximum considered earthquake, separate response spectra modified by the amplification factors for Site Class C are provided. The Speedway Energy Facility should be designed for the most conservative Site Class C.

### *7.2.3 Hazards Resulting from Seismic Events*

Potential seismic hazards from a design seismic event for the Speedway Energy Facility include seismic shaking or ground motion, fault displacement, instability from landslides or subsurface movement, and adverse effects from groundwater or surface water. These risks are discussed below. Since the Speedway Energy Facility is far from the Oregon coast, and not in a DOGAMI-defined tsunami evacuation zone (DOGAMI 2025c), tsunami inundation is not considered a hazard.

Williams and Madin (2021) have mapped the general earthquake peak ground acceleration in the vicinity of the site boundary as strong; however, the population density is 0 to 20 persons per acre and the damage to structures from a 7.0 magnitude earthquake in the vicinity is rated as less than 2 percent.

### *7.2.4 Seismic Shaking or Ground Motion*

The Facility will be designed to withstand the maximum risk-based design earthquake ground motions developed for the design seismic event that has a 2,475-year recurrence interval. The State of Oregon has adopted the IBC 2024 code for structural design. Specifically, this is Chapter 16, Section 1613 (Earthquake Loads) of the 2025 OSSC (State of Oregon 2025). Building codes are frequently updated; the IBC is updated every 3 years. The Applicant will design, engineer, and construct the Facility following the latest IBC, OSSC, and building codes adopted by the State of Oregon at the time of construction.

Based on soil data provided by the NRCS Web Soil Survey (see Exhibit C), and information from 15 water wells in the vicinity of the site boundary, the surficial materials in the site boundary range from Site Class B (Rock) to Class C (Very Dense Soil and Soft Rock). As described in Attachment B-2, Site Class C is the class appropriate for the Speedway Energy Facility (Attachment B-5).

Based on site-specific analyses, the original equipment manufacturer will provide the structural engineer with site-specific foundation loads and requirements. The structural engineer then completes the foundation analyses based on the design site-specific parameters. The geotechnical studies and analyses described in Section 5.0 provide site-specific parameters, including but not limited to moisture content and density, soil/bedrock bearing capacity, bedrock depth, settlement characteristics, structural backfill characteristics, soil improvement (if required), and dynamic soil/bedrock properties, including shear modulus and Poisson's Ratio of the subgrade. The foundation design engineer will use these parameters to design a suitable foundation and verify that the foundation/soil interaction meets or exceeds the original equipment manufacturer's site-

specific, minimum requirements. Additional geotechnical studies and analysis would be conducted as described in Section 5.0 as warranted based on the final design layout of solar photovoltaic arrays, collector substations, and other Facility structures.

### *7.2.5 Fault Rupture*

Fault displacement is unlikely because there are no active faults within the site boundary. The nearest known active or potentially active faults are approximately 1 mile east and 8 to 10 miles west of the site boundary as shown on Figure B-2. All these listed faults have a slip-rate of less than 0.2 mm/year (USGS 1999).

### *7.2.6 Liquefaction*

Liquefaction occurs when saturated and cohesionless soils are subjected to dynamic forces like intense or prolonged ground shaking and temporarily lose their strength and liquefy. There is no evidence of historic liquefaction or alluvial fan deposits within the site boundary. The soils in the site boundary are generally shallow, cohesive, and unsaturated. Groundwater is indicated to be from 16 to 527 feet bgs and generally within the basalt bedrock based on a search of water wells located in the vicinity of the site boundary; the majority of well records report water depths of greater than 100 feet (OWRD 2025). Along with the relatively moderate seismic event potential, this indicates that soil liquefaction within the site boundary is unlikely. Using Oregon HazVu: Statewide Geohazards Viewer (DOGAMI 2025b), the site boundary is not located within an area susceptible to liquefaction (Figure B-2). However, shallow groundwater might be locally present in alluvial deposits located in 100-year floodplains that are mapped within the site boundary or immediate vicinity as shown in Figure B-4.

In addition, according to Attachment B-2, the average depth to the bedrock is shallower than 4 feet below grade, and groundwater was encountered within the bedrock in only three out of 240 geotechnical borings at depths varying from 16 to 35 feet below grade. The potential for significant loss of strength of fine-grained materials and ensuing bearing failure or loss of lateral support during seismic shaking is considered to be low. Therefore, a liquefaction analysis is not judged to be a concern.

### *7.2.7 Lateral Spreading*

Lateral spreading involves the movement of a gently to steeply sloping (0.3 to 5 percent) relatively coherent surficial crust of soil due to the liquefaction of underlying sediments. As liquefaction occurs the crust can slide as intact blocks over the lower liquefied deposit. Surface displacements proceed down-slope or toward a steep free face such as a stream bank with the formation of fissures and scarps. Horizontal movements of up to several feet have been observed after earthquakes in fills, coastal alluvium, and river embankments. According to Attachment B-2, the lateral spreading risk may be moderate to high along the steep valley slopes. However, it is acknowledged that most of the site boundary is located within flat and gentle sloping topography.

### *7.2.8 Seismically Induced Landslides*

While regional seismicity could potentially trigger landslides and mass wasting processes in the site boundary, the risk is considered low to moderate for expected shaking in a magnitude 9.0 Cascadia earthquake event (DOGAMI 2025d) as depicted on Figure B-3. The landslide database does not show any historic landslides within the site boundary or within the immediate vicinity (DOGAMI 2025d). However, landslide records indicate events along the Deschutes River to the west and southwest northwest of the site boundary. The site boundary is mapped with areas of low to high susceptibility to landslides as shown in Figure B-3. Areas of moderate to high susceptibility are located along drainages and streams including the most prominent areas that are tributaries to Rosebush Creek in the northern site boundary and tributaries to Finnegan Creek in the southern site boundary. Construction will avoid steep slopes that are most susceptible to landslides. The stability of the steep slopes will be further assessed during the final Facility design and layout. More detailed discussion on the location and type of landslides is included in Section 7.1.

### *7.2.9 Subsidence*

Subsidence is the sudden sinking or gradual downward settling of surface land, often caused by groundwater drawdown, compaction, tectonic movements, mining, or explosive activity. Fifteen water well logs located within the vicinity of the site boundary indicate that the soils that are present on most of the site boundary are not saturated and groundwater is indicated to be at least 43 feet bgs within bedrock. geotechnical boring data shows the groundwater at the depth of 16 to 35 feet bgs and is within the bedrock. Subsidence due to a seismic event is highly unlikely in the site boundary as the overlying soils are shallow and unsaturated where the Speedway Energy Facility will be constructed. Attachment B-2 confirmed potential subsidence risk is highly unlikely.

### *7.2.10 Seismic Hazard Mitigation*

The State of Oregon uses the 2024 IBC, with current amendments by the OSSC. Pertinent design codes relating to geology, seismicity, and near-surface soil are found in OSSC Chapter 16, Section 1613 (State of Oregon 2025). Speedway Energy Facility infrastructure will be designed to meet or exceed all current design code standards. Substation equipment will meet all requirements in the latest version of the Institute of Electrical and Electronics Engineers (IEEE) 693-2018 standard (which directs the design and qualification of equipment installed in substations and its ability to withstand a seismic event.). The region has a moderate to moderate-to-high seismicity potential; however, the wind power facility, solar arrays, and battery storage infrastructure will be designed to resist seismic loads.

As discussed in Section 4.0, site-specific geotechnical exploration will provide data that will guide the Speedway Energy Facility infrastructure design to mitigate potential seismic-event hazards. The hazard of a surficial rupture along a fault is low, given the seismic history of the site displayed in geologic mapping. Because the Facility is in a sparsely populated area, there is minimal human safety and environmental risk. Mitigation for potential fault rupture is not needed. No structures

will be built on steep slopes prone to instability, thus avoiding potential impacts. Disaster resilience design guidelines are further described in Section 7.6.

# 8.0 Non-Seismic Geological Hazards – OAR 345-022-0020(4)(f)

> *(f) An assessment of geology and soil-related hazards which could, in the absence of a seismic event, adversely affect or be aggravated by the construction or operation of the facility, in accordance with standard-of-practice methods and best practices, that address all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection. An explanation of how the applicant will design, engineer, construct and operate the facility to adequately avoid dangers to human safety and the environment presented by these hazards, as well as:*

Non-seismic geologic hazards in the Columbia Plateau region include landslides, volcanic eruptions, collapsing soils, and erosion. The area within the site boundary is primarily relatively flat with an average slope of 6.3 percent and includes loess deposits over shallow bedrock. The Speedway Energy Facility will be constructed within the flat-lying portions of the site boundary. It will avoid steep slopes and drainages that could experience landslides and soil creep. A discussion of potential non-seismic geologic hazards is presented below.

## 8.1 Landslides

In 2021, DOGAMI released an update to the Oregon Statewide Landslide Database (SLIDO-4.4; DOGAMI 2025d). SLIDO is a statewide database of known landslides compiled from published maps. The database includes landslides, debris flows, alluvial fans, and colluvium or talus. The primary sources of this historical landslide information are published geologic reports and geologic hazard studies by the USGS and DOGAMI. The SLIDO-4.4 landslide database was used to overlay landslide areas or landslide-related features on Figure B-3; there are no mapped landslides within the site boundary and most of the area is mapped as low to high susceptibility for landslides. The areas of high to moderate landslide susceptibility are mapped along drainages and streams including the most prominent areas that are tributaries of Rosebush Creek in the northern site boundary and tributaries of Finnegan Creek in the southern site boundary. These discontinuous areas of high and moderate susceptibility for landslides are mapped along the drainages/canyons within the site boundary, but not within the site boundary as shown on Figure B-3. In addition, based on an evaluation of geologic material class and slope during both dry and wet conditions (DOGAMI 2021), the site boundary is located in an area of low susceptibility to dry landslides and low to moderate susceptibility to wet landslides. Site construction will follow appropriate IBC regulations for construction and avoid steep slopes.

Slopes within the vicinity of the site boundary range from approximately zero to 75 percent, with an average slope of 6.3 percent. The steepest slopes are only located along Rosebush Creek and a tributary in the northern portion of the site boundary and along the edges of the southern site

boundary where Finnegan Creek and its tributaries are located. If slope stability issues are identified in the final design geotechnical investigations, the structures will either be relocated during the micrositing process, or remedial measures will be implemented to improve slope stability.

## 8.2 Volcanic Activity

Volcanic activity in the Cascade Range is driven by the subduction of the Juan de Fuca Plate beneath the North American Plate. The closest volcano to the site boundary is Mount Hood (approximately 37 miles west). In addition, a volcano hazard zone is located approximately 10 miles west/southwest of the site boundary along a drainage. Most of the potential volcanic hazard impacts would occur within a 50-mile radius of the erupting volcano. Depending on the prevailing wind direction at the time of the eruption and the source of the eruption, ash fallout in the region surrounding the Speedway Energy Facility may occur. Because of the distance to the nearest volcanoes, the Facility's impacts from volcanic activity would be indirect and likely limited to ash fallout. In addition, the Facility is located approximately 4 miles east of a moderate volcanic hazard area along the Deschutes River that might be subject to pyroclastic flows from a volcanic eruption from these close volcanoes. However, because no significant tributaries are located in the site boundary, it is unlikely that there would be any adverse effects from volcanic activity on the construction or operation of the Facility.

## 8.3 Erosion

Erosion can occur when soils are increasingly exposed to wind or water. Wind erosion is influenced by wind intensity, vegetative cover, soil texture, soil moisture, the grain size of the unprotected soil surface, topography, and the frequency of soil disturbance. Wind erosion hazard is generally moderate to moderately low, and water erosion hazard is generally moderate to moderately high within the site boundary. Control measures will be implemented to mitigate wind and water erosion potential as identified in Exhibit C. Water erosion is primarily a function of soil type, vegetative cover, precipitation, and slope inclination. If left unmitigated, erosion from rainfall would be a hazard during construction.

Potential impacts related to erosion will be minimal and will be addressed through the implementation of erosion control measures required by the Facility's National Pollutant Discharge Elimination System (NPDES) 1200-C construction permit. The Draft Vegetation and Soil Management Plan identifying effective erosion and sediment control measures is provided in Exhibit C. These documents will be submitted to the Oregon Department of Environmental Quality. Erosion and sediment control measures will meet local, county, state, and federal requirements.

Construction activities can introduce the potential for increased erosion due to soil disturbance, loss of vegetation (exposure of soil), compaction, and changes to surface drainage patterns. BMPs described in the NPDES permit application will minimize the potential for wind or water erosion and sedimentation of soils disturbed by Facility construction. Typical measures include, but are not limited to, putting sedimentation control measures in place prior to or concurrently with the

initiation of construction in any given location to prevent uncontrolled soil exposure and potential erosion; water spraying on exposed soils and short-term soil stockpiles; covering longer-term soil stockpiles; placing gravel surfacing where appropriate immediately following clearing and grading to limit the time soils are exposed to wind or water erosion; and revegetating disturbed areas as soon as practicable following construction. The areas with soils that are sensitive to erosion and other factors (see Exhibit C) will be avoided whenever practical or will have the appropriate focused measures applied as necessary. The areas used only for construction will be reclaimed when the best season exists for replanting, typically in the fall or spring. Reclamation activities may include regrading to original land contours, replacing topsoil, and revegetation.

The general average annual rainfall for nearby Maupin, Oregon (approximately 11 miles southwest of the site boundary) is 8.59 inches of precipitation (Time and Date 2026). Additional precipitation data is provided in Exhibit O. The erosion potential and available precipitation make site soils sensitive to water erosion during winter and spring, particularly on steep slopes. A draft Erosion and Sediment Control Plan (ESCP) has been developed to reduce the potential for soil erosion (see Exhibit C-2). The ESCP includes structural and nonstructural BMPs. Structural BMPs include the installation of silt fences or other physical controls to divert flows from exposed soils or otherwise limit runoff and pollutants from exposed areas. Nonstructural BMPs include the implementation of materials handling procedures, disposal requirements, and spill prevention methods.

The Applicant will apply for a NPDES stormwater construction permit though the Your DEQ Online platform. In addition, Exhibit C contains a comprehensive list of mitigation measures to avoid wind and water erosion and soil impacts.

## 8.4 Flooding

Federal Emergency Management Agency (FEMA) National Flood Hazard data (FEMA 2025) were compared to the temporary and permanent disturbance areas in the site boundary to evaluate flood hazards. Figure B-3 provides a series of sheet maps of FEMA floodplains (FEMA 2025). Additional DOGAMI floodplain mapping was not available (DOGAMI 2025b). One-hundred year floodplains are mapped along Rosebush Creek in the middle of the site boundary (Figure B-3.4), along a tributary of the Deschutes River (Figure B-3.6), along tributary of Rosebush Creek (Figure B-3.6), along a drainage toward Finnegan Creek (Figure B-3.9), and along Finnegan Creek (Figure B-3.10). Floodplain impacts are listed on Table B-3. The Facility would include 0.1 acre of permanent impacts from a fenceline and an access road; and temporary construction impacts to 0.7 acre including an access road, a fenceline, and collection lines.

Seasonal thunderstorms can result in concentrated stormwater runoff and localized flooding. The Facility will be designed and engineered to comply with zoning ordinances and building codes that establish flood protection standards for all construction to avoid dangers to the infrastructure, as well as human safety and the environment, including criteria to ensure that the foundation will withstand flood forces. The engineered access roads and drainages will direct stormwater runoff away from structures and into drainage ditches and culverts as required in the ESCP. Therefore, the

risks and potential impacts to the Speedway Energy Facility, human safety, and the environment from flood hazards are expected to be low (Table B-3).

**Table B-3. 100-year Flood Zone Impacts for Work Areas and Access Roads**

| Facility Component (34.5-kV Collector Line - Wind, 34.5-kV Collector Line - Solar, etc.) | Stream Name | Crossing Method | Crossing Distance (feet) | Crossing Impacts, Permanent (Square Feet) | Crossing Impacts, Temporary (Square Feet) |
|---|---|---|---|---|---|
| 34.5-kV Collector Line - Wind | Rosebush Canyon | Boring | 363 | None | 18,432 |
| 34.5-kV Collector Line - Wind | Cottonwood Canyon | Boring | 153 | None | 7,747 |
| Fenceline - Solar | Sand Hollow | | 68 | 2,936 | 2,186 |
| 230-kV Collector Line | None | Overhead | 97 | None | 381 |
| Access Road - Solar | Finnegan Creek | | 110 | 1,532 | 2,668 |
| | | **Total** | **791** | **4,468** | **31,414** |

## 8.5 Shrinking and Swelling Soils

Clayey soils are the most susceptible to shrinking and swelling. Changes in soil moisture cause certain clay minerals in soils to either expand or contract. The amount and type of clay minerals in the soil influence the volume change. Structures or roads built on shrinking or swelling soil could be damaged by the change in the volume of the soil. Linear extensibility (shrink-swell potential) refers to the change in length of an unconfined clod as its moisture content is decreased from a moist state to a dry state.

Soils within the site boundary are primarily (over 85 percent) loess that is less than 80 inches in thickness. Loess is not generally considered a clayey soil or a soil that is susceptible for shrinking and swelling. If shrinking or swelling soils are present at foundation locations or along road alignments, soil improvement will be necessary. Soil improvement can include reworking and compacting onsite soils, over-excavating soils with shrink-swell potential and replacing them with compacted structural fill, constructing impermeable barriers to prevent saturation, or mixing soils to reduce the potential for shrinking and swelling.

Geotechnical laboratory testing results confirm that soils in the site boundary are likely to have low potential for shrink-swell behavior (Attachment B-2).

## 8.6 Disaster Resilience

*(A) An explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters; and*

Pertinent design codes related to geology, seismicity, and near-surface soils are contained in OSSC Chapter 16, Section 1613 (Earthquake Loads) (State of Oregon 2025). The Speedway Energy Facility will be designed to meet or exceed the minimum standards required by these design codes. The Applicant acknowledges that DOGAMI encourages, but does not require, design and build for disaster resilience and future climate conditions using science, data, and community wisdom to protect against and adapt to risks. With this in mind, the Applicant has extensive experience building energy facilities and designing projects to withstand non-seismic geologic hazards from a structural perspective.

The Facility will be designed, engineered, and constructed to meet all current standards to adequately avoid potential dangers to human safety presented by seismic hazards. A qualified engineer will assess and review the seismic, geologic, and soil hazards associated with the Facility infrastructure construction. Construction requirements will be modified, as needed, based on the site-specific characterization of seismic, geologic, and soil hazards. Substation structures will be designed under the current version of the OSSC. Substation, transmission line, and collector line equipment will be specified by the latest version of the IEEE standard (currently IEEE 693-2018). The Facility infrastructure will be in sparsely populated areas; therefore, the risks to human safety and the environment due to seismic hazards will be minimal.

The Speedway Energy Facility infrastructure will be designed, engineered, and constructed to meet or exceed all current standards. The Applicant proposes to design, engineer, and construct the Facility to avoid dangers to human safety-related and non-seismic hazards in many ways, including conducting site-specific geotechnical evaluations (see Section 4.0). Typical mitigation measures for non-seismic hazards include avoiding potential hazards, conducting subsurface investigations to characterize the soils to adequately plan and design appropriate mitigation measures, creating detailed geologic hazard maps to aid in laying out facilities, providing warnings in the event of hazards, and purchasing insurance to cover the Facility in the event of hazards.

## 8.7 Climate Change

*(B) An assessment of future climate conditions for the expected life span of the proposed facility and the potential impacts of those conditions on the proposed facility.*

The University of Washington conducted a study to assess climate vulnerability and adaptation in the Columbia River Plateau, where the Speedway Energy Facility is located (Michalak et al. 2014). The study involved downscaling five climate models (CCM3, CGM3.1, GISS-ER, MIROC3.2, and Hadley). Climate projections were downscaled to approximately a 1-kilometer resolution for over 40 different direct (mean annual temperature/precipitation) and derived (number of growing-degree days, actual and potential evapotranspiration) climate variables (Michalak et al. 2014). The

downscaling of the climate models for this area led to future projections of greater annual average and summer temperatures, and more severe storm events and wildfires, among other changes. These specific changes are expected to increase stress on power lines in the region.

Reinforcing the local electric grid with solar power and battery energy storage increases energy grid resilience in this part of Oregon. This reinforcement will be direct, by upgrading a system that is anticipated to experience higher loads under rising temperatures and related increases in power demand for summer cooling. It is also indirect by supporting the delivery of power generated through various sources, minimizing the potential reduction in hydropower's role under future conditions. All aspects of the Facility support resiliency in the face of future climate change and will be designed to withstand extreme events as explained above in Section 7.6.

# 9.0 Conclusions

The risk of seismic hazards to human safety at the Speedway Energy Facility is low to moderate with the implementation of geotechnical mitigation measures. The Applicant reviewed regional geologic information and performed a site-specific desktop analysis of potential seismic, geologic, and soils hazards. In addition, a geotechnical investigation has been conducted within areas of the site boundary that has evaluated seismic risk. The following supporting evidence is provided, with the remaining evidence to be provided before construction:

- The risk of seismic hazards to human safety at the Facility is considered low. The Applicant has adequately characterized the seismic hazard risk of the site under OAR 345-022 0020(1)(a) and considered seismic events and amplification for the Facility's site-specific subsurface profile. The Applicant will conduct an additional geotechnical investigation as warranted based on the final design layout. Facility components include wind turbines, solar photovoltaic arrays, collector substations, and other Facility structures and will follow the required design parameters for the Facility as described in Section 5.0. The Applicant has adequately characterized the seismic hazard risk of the site under OAR 345-022-0020(1)(a) and considered seismic events and amplification for the Facility's site-specific subsurface profile.
- The Applicant has demonstrated that the Speedway Energy Facility can be designed, engineered, and constructed to avoid dangers to human safety and the environment in case of a design seismic event by adhering to the most recently updated IBC requirements, following OAR 345-022-0020(1)(b). These standards require that for the design seismic event, the factors of safety used in the Facility design exceed specific values. For example, in the case of slope design, a factor of safety of at least 1.1 is usually required during seismic stability evaluation. This safety factor is introduced to account for uncertainties in the design process and ensure that performance is acceptable. If slope stability safety factors are not met, the Facility components will either be relocated during the micrositing process or remedial measures to improve slope stability will be implemented. For slope stability, the remedial measures could include the use of ground improvement methods (such as

retaining structures) to limit the movement to acceptable levels. Given the relatively low level of risk for the Facility, adherence to the IBC requirements will ensure that appropriate protection measures for human safety are taken.

- The Applicant has provided appropriate site-specific information and demonstrated (per OAR 345-022-0020(1)(c)) that the construction and operation of the Facility, in the absence of a seismic event, will not adversely affect or aggravate the geological or soil conditions of the Facility site or vicinity. The risks posed by non-seismic geologic hazards are generally considered low because the Facility can be designed to minimize or avoid the hazards of landslides and soil erosion. Landslide and slope stability issues will be identified during the final design and mitigated. Erosion hazard resulting from soil and wind action will be minimized by implementing an erosion control plan. The Applicant will notify ODOE in the event that site investigations or trenching reveal conditions in the foundation rock different from what was evaluated, or if shear zones, artesian aquifers, deformations, or clastic dikes are found in the vicinity of the site.
- The Applicant has demonstrated that the Facility can be designed, engineered, and constructed to avoid human safety and environment impacts from geological and soil hazards, per OAR 345-022-0020(1)(d). Accordingly, given the relatively small risks these hazards pose to human safety, standard methods of practice (including implementation of the current IBC) will be adequate for the design and construction of the Facility. Site-specific studies will be conducted, additional geotechnical work will be completed once the final locations of the structures are selected, and adequate measures will be implemented to control erosion.
- Finally, the Applicant has assessed future climate conditions for the expected life span of the Facility, and the potential impacts of those conditions on the Speedway Energy Facility.

Therefore, for the reasons outlined in this exhibit, the construction and operation of the proposed Speedway Energy Facility will comply with the structural standards as outlined in OAR 345-022-0020, as well as the standard in OAR 345-021-0010(1)(h).

# 10.0 References

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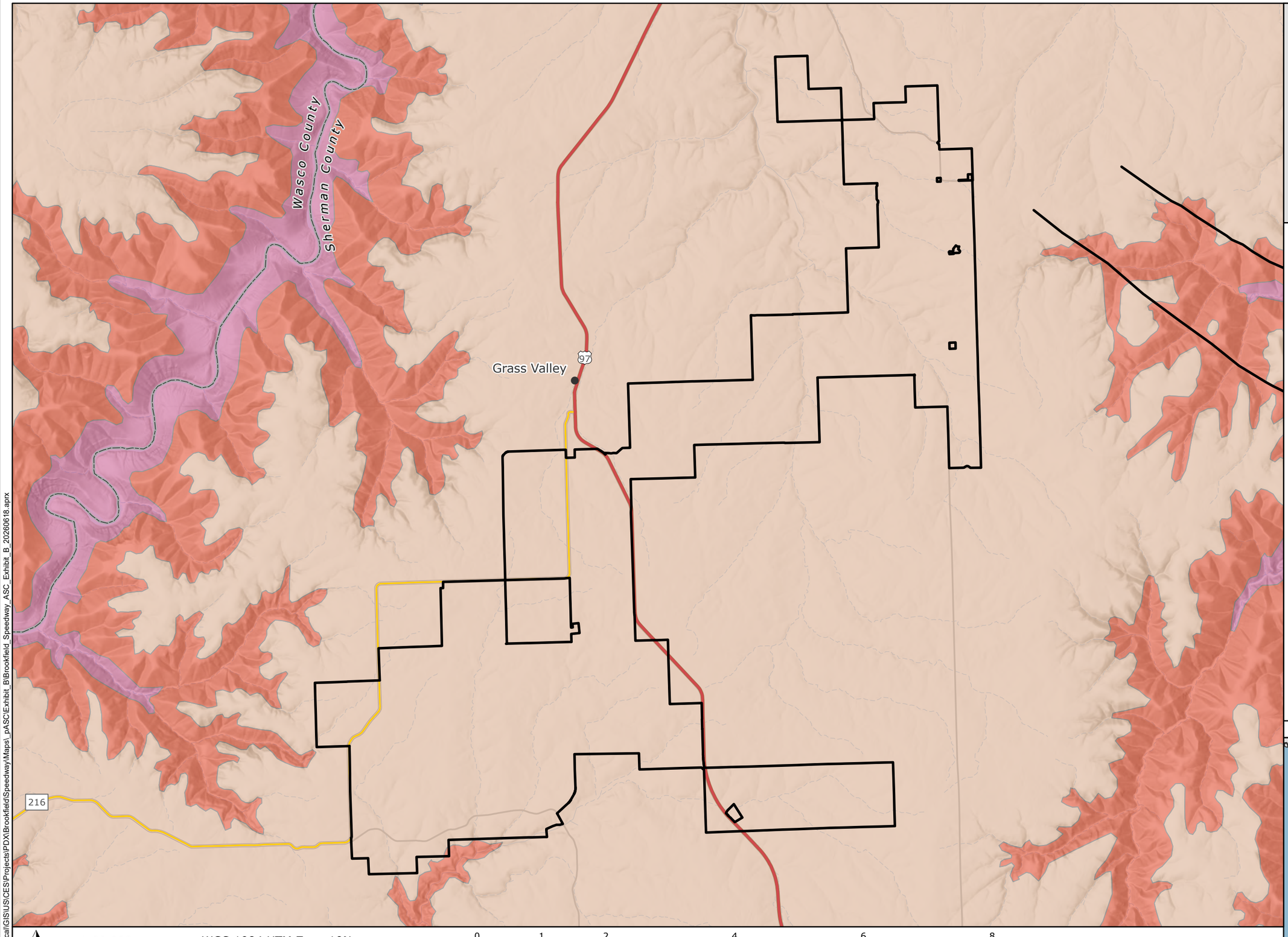
# 11.0 Approval Standards and Submittal Requirements

**Table B-4. Approval Standards and Submittal Requirements**

| Requirement | Location |
|---|---|
| OAR 345-022-0020 Structural Standard | – |
| **Approval Standards** | |
| (1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that: | |
| (a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site. | Section 7.0/ Section 5.0 |
| (b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a). | Section 7.0/ Section 5.0 |
| (c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and | Section 8.0/ Section 3.0 |
| (d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c). | Section 8.0/ This exhibit |
| (2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility. | - |
| (3) The Council may not impose the Structural Standard in section (1) to deny an application for a special criteria facility under OAR345-015-0310. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility. | - |
| **Submittal Requirements** | |
| (4) To assist the Council in determining whether the standard outlined in (1) through (3) has been met, the Applicant must submit information from reasonably available sources regarding the geological and soil stability within the analysis area, including: | – |
| (a) A geologic report meeting the Oregon State Board of Geologist Examiners geologic report guidelines. Current guidelines must be determined based on consultation with the Oregon Department of Geology and Mineral Industries, as described in subsection (b); | Section 3.0 |

| Requirement | Location |
|---|---|
| (b) A summary of consultation with the Oregon Department of Geology and Mineral Industries regarding the appropriate methodology and scope of the seismic hazards and geology and soil-related hazards assessments, and the appropriate site-specific geotechnical work that must be performed before submitting the application for the Department to determine that the application is complete; | Section 4.0 |
| (c) A description and schedule of site-specific geotechnical work that will be performed before construction for inclusion in the site certificate as conditions; | Section 5.0 |
| (d) For all transmission lines, and for all pipelines that would carry explosive, flammable or hazardous materials, a description of locations along the proposed route where the applicant proposes to perform site specific geotechnical work, including but not limited to railroad crossings, major road crossings, river crossings, dead ends (for transmission lines), corners (for transmission lines), and portions of the proposed route where geologic reconnaissance and other site specific studies provide evidence of existing landslides, marginally stable slopes or potentially liquefiable soils that could be made unstable by the planned construction or experience impacts during the facility's operation; | Section 6.0 |
| (e) An assessment of seismic hazards, in accordance with standard-of-practice methods and best practices, that addresses all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection, and an explanation of how the applicant will design, engineer, construct, and operate the facility to avoid dangers to human safety and the environment from these seismic hazards. Furthermore, an explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters. The applicant must include proposed design and engineering features, applicable construction codes, and any monitoring and emergency measures for seismic hazards, including tsunami safety measures if the site is located in the DOGAMI-defined tsunami evacuation zone; and | Section 7.0 |
| (f) An assessment of geology and soil-related hazards which could, in the absence of a seismic event, adversely affect or be aggravated by the construction or operation of the facility, in accordance with standard-of-practice methods and best practices, that address all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection. An explanation of how the applicant will design, engineer, construct and operate the facility to adequately avoid dangers to human safety and the environment presented by these hazards, as well as: | Section 8.0 |
| (A) An explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters; and | Section 8.6 |
| (B) An assessment of future climate conditions for the expected life span of the proposed facility and the potential impacts of those conditions on the proposed facility. | Section 8.7 |
| EFSC 4-2026, amend filed 04/23/2026, effective 04/23/2026 | |

# Figures




# Speedway Energy Facility

## Figure B-1 Geologic Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- City/Town
- County Boundary
- US Highway
- State Highway
- DOGAMI OGDC-8 Fault Line

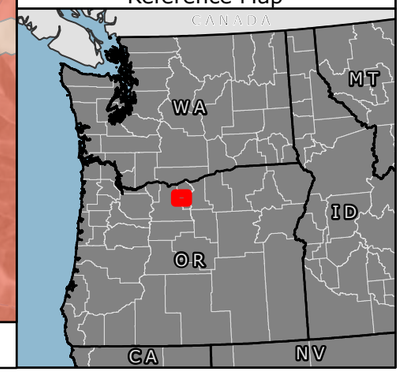
Surface Geology

- Tf - Wanapum Basalt, Frenchman Springs Member (Miocene)
- Tgn2 - Grande Ronde Basalt, upper flow of normal magnetic polarity (Miocene)
- Tgr2 - Grande Ronde Basalt, upper flow of reversed magnetic polarity (Miocene)

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 1 2 4 6 8 Miles

NOT FOR CONSTRUCTION

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# Speedway Energy Facility

## Figure B-2
## Historical Seismicity and Potentially Active Faults

**SHERMAN COUNTY, OR**

Yakima County
Cowlitz County
Skamania County
Klickitat County
Benton County
Clark County
Umatilla County
Hood River County
Multnomah County
Sherman County
Gilliam County
Morrow County
Clackamas County
Wasco County
Marion County
Grant County
Linn County
Wheeler County
Jefferson County
Crook County

- Facility Site Boundary
- Analysis Area (50 mile buffer)
- County Boundary
- State Boundary

Fault Age

- Class B
- Late Quaternary
- Latest Quaternary
- Middle and Late Quaternary
- Undifferentiated Quaternary

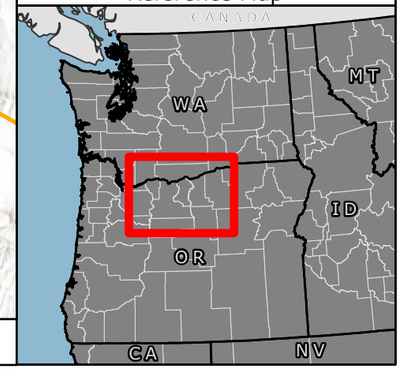
Earthquakes by Magnitude

- 2.5 - 2.9
- 3.0 - 3.9
- 4.0 - 4.9
- 5.1

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 10 20 40 60 80 Miles

NOT FOR CONSTRUCTION

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# Speedway Energy Facility

## Figure B-3 Special Flood Hazards and Landslides Index Map

**SHERMAN COUNTY, OR**

Figure B-3.1
Figure B-3.2
Figure B-3.3
Figure B-3.4
Figure B-3.5
Figure B-3.6
Figure B-3.7
Figure B-3.8
Figure B-3.9
Figure B-3.10
Figure B-3.11

Wasco County
Sherman County
Deschutes River
Grass Valley
Rosebush Creek
Draw Creek
John Day River
Elder Creek
Finnegan Creek
Kerr Creek

- Map Grid
- Facility Site Boundary
- Analysis Area (2 mile buffer)
- City/Town
- County Boundary
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone AE (Floodway; 100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 1 2 4 6 8 Miles

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# Speedway Energy Facility

## Figure B-3.1 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

Rosebush Creek

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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# Speedway Energy Facility

## Figure B-3.2 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

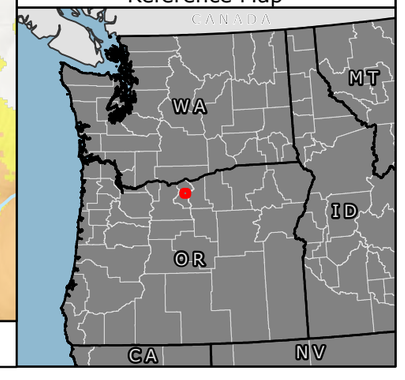
Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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0 0.5 1 2 Miles

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# Speedway Energy Facility

## Figure B-3.3 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

Deschutes River

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

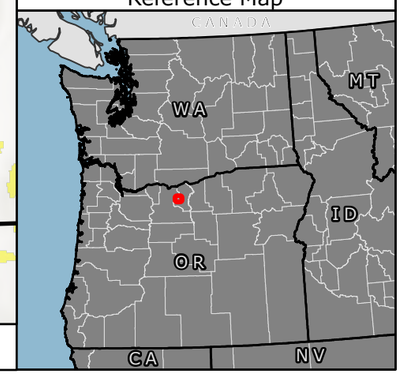
Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

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# Speedway Energy Facility

## Figure B-3.4 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

Rosebush Creek

Grass Valley

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- City/Town
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone AE (Floodway; 100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

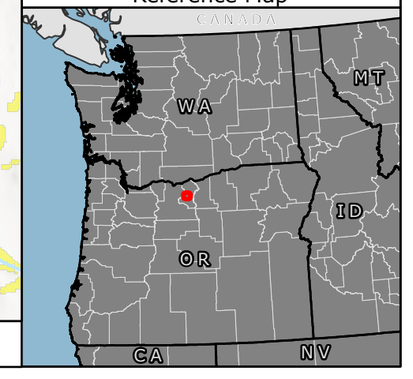
Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

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# Speedway Energy Facility

## Figure B-3.5 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

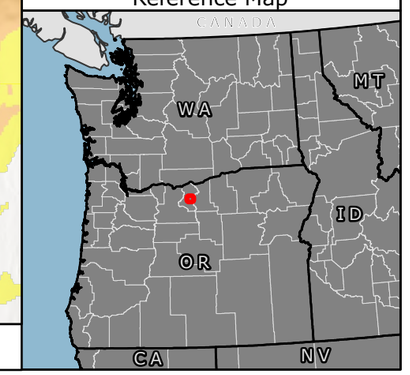
Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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# Speedway Energy Facility

## Figure B-3.6 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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# Speedway Energy Facility

## Figure B-3.7 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

Draw Creek

Rosebush Creek

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

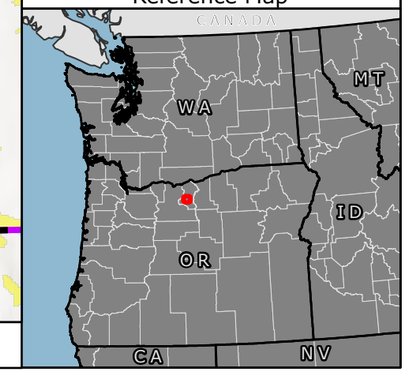
Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

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# Speedway Energy Facility

## Figure B-3.8 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

Facility Site Boundary

Analysis Area (2 mile buffer)

Stream/River (NHD)

Special Flood Hazard Areas

Zone A (100-Year Floodplain)

Zone X (Area of Minimal Flood Hazard)

Landslide Susceptibility

Low

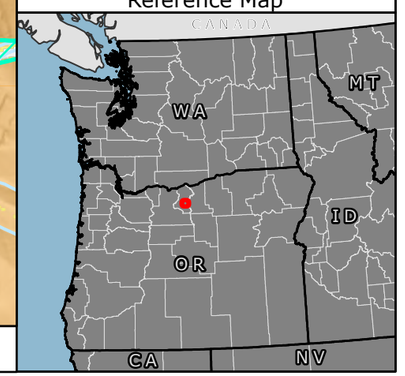
Moderate

High

TETRA TECH

Speedway Energy

Reference Map




Rosebush Creek

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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# Speedway Energy Facility

## Figure B-3.9 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

Landslide Susceptibility

- Low
- Moderate
- High

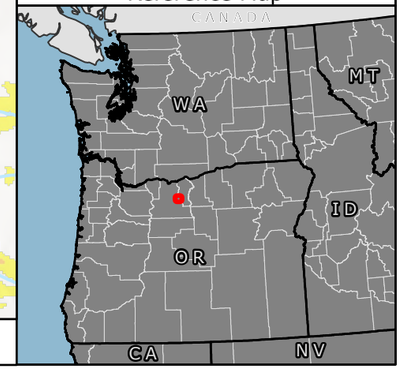
Kerr Creek

Finnegan Creek

TETRA TECH

Speedway Energy

Reference Map

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0 0.5 1 2 Miles

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# Speedway Energy Facility

## Figure B-3.10 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

Facility Site Boundary

Analysis Area (2 mile buffer)

Stream/River (NHD)

Special Flood Hazard Areas

Zone A (100-Year Floodplain)

Zone X (Area of Minimal Flood Hazard)

Landslide Susceptibility

Low

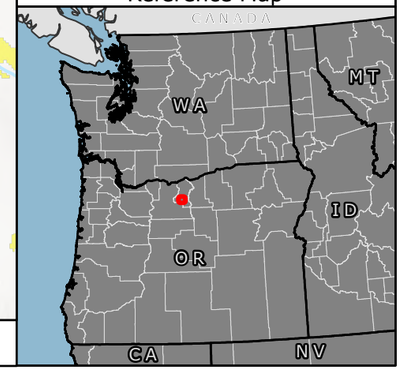
Moderate

High

TETRA TECH

Speedway Energy

Reference Map




Finnegan Creek

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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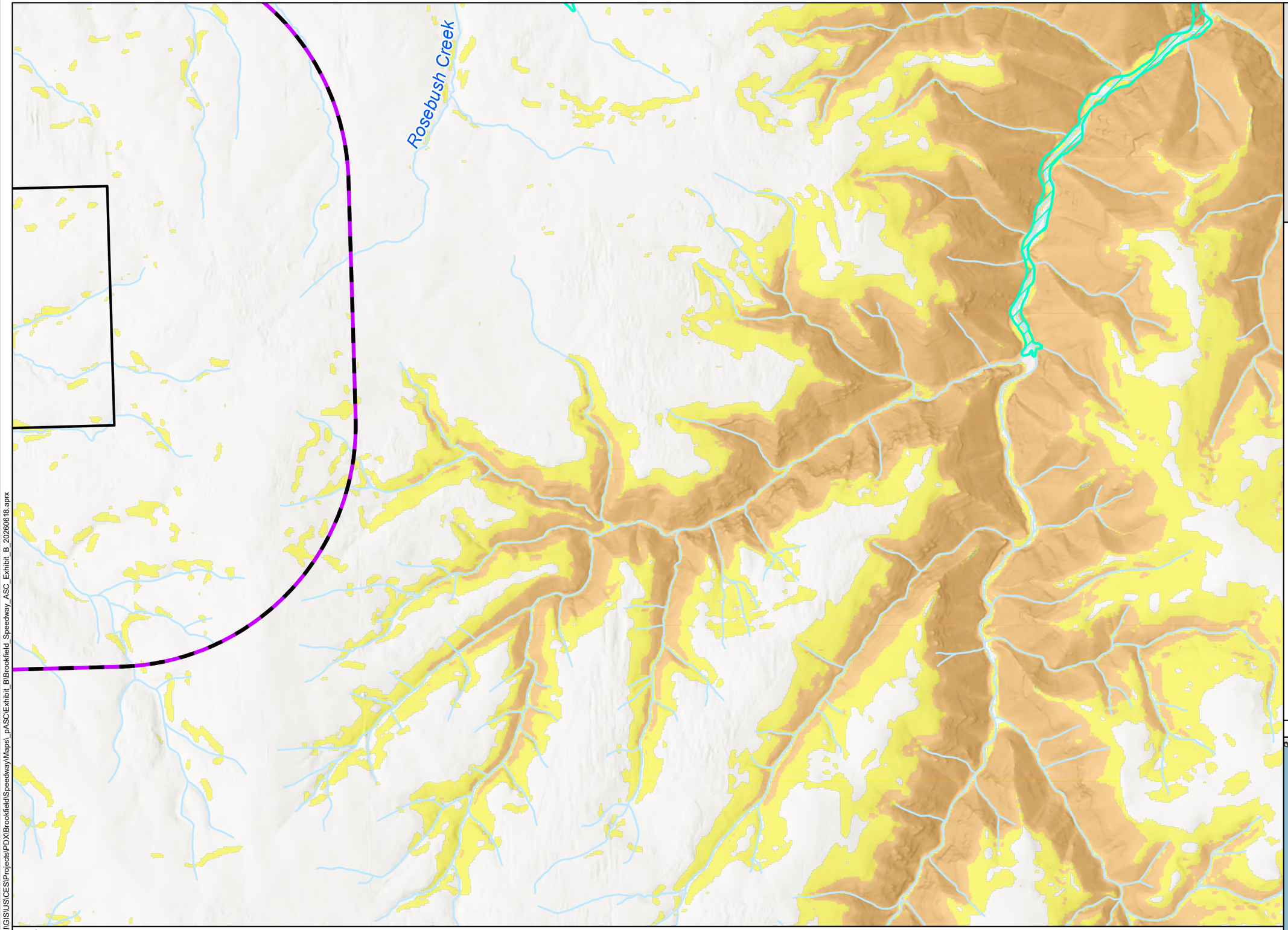



# Speedway Energy Facility

## Figure B-3.11 Special Flood Hazards and Landslides Detail Map

**SHERMAN COUNTY, OR**

- Facility Site Boundary
- Analysis Area (2 mile buffer)
- Stream/River (NHD)

Special Flood Hazard Areas

- Zone A (100-Year Floodplain)
- Zone X (Area of Minimal Flood Hazard)

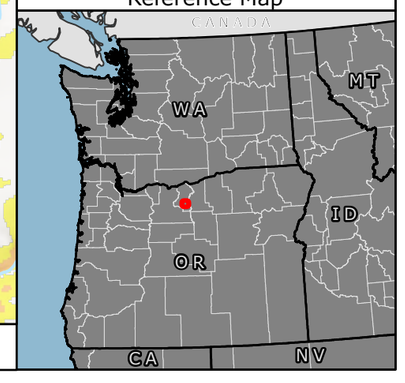
Landslide Susceptibility

- Low
- Moderate
- High

TETRA TECH

Speedway Energy

Reference Map

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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

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# Attachment B-1. Record of Correspondence with DOGAMI

# Speedway Energy Facility, Sherman County, Oregon

## Meeting to Discuss Project and Geological Survey Results – DOGAMI & Brookfield

### Attendees:

Oregon Department of Geology and Mineral Industries (DOGAMI)
Lalo Guerrero (LG)

Brookfield Renewable U.S. (Brookfield)
John Soininen (JS)
Vince Esposito (VE)
Ben Mallernee (BM)
Liam Caulfield (LC)

Tetra Tech
Paul Seilo (PS)
Rachel Miller (RM)
Victoria Rowe (VR)

**Location:** Teams Meeting (Virtual)
**Date/Time:** March 5, 2026; 10am PST/1pm EST

### Objective of Meeting:

The objective of the meeting was for Brookfield Renewable U.S. (Brookfield) to introduce the Speedway Energy Facility (Facility) to the Oregon Department of Geology and Mineral Industries (DOGAMI), specifically to discuss: (1) description of the Facility; (2) results from the geological surveys completed to date; and (3) request any additional information from DOGAMI.

### Discussion

#### Introductions, Company Overview, and Facility Descriptions:

Following a preview of the agenda and introductions, Vince Esposito (VE) provided a presentation that covered:

1. Brookfield Company Overview
2. Facility Description
3. Facility Location Information

#### Geological Survey Results:

Rachel Miller (RM) presented the following geological information and asked for input:

- Methods and scope of geologic hazard assessment and desktop seismic hazard assessment, within the 50-mile analysis area
- Data and resources used
- Results of desktop assessment

  - Geology – area is predominantly basalt with overlay of silt loam, with depth to bedrock less than 80 inches in flat areas, thicker in drainages.
    - Lalo Guerrero (LG) stated that everything looks in line, and it appears Tetra Tech is working with the most recent datasets. The geology results are as would be expected for the area.
  - Volcanic hazards – indirect and likely limited to ash fallout
    - LG noted the White River is the only one with evidence of past lahar flows that have reached the Columbia, and agreed that nothing that has been mapped close to site area.
  - Seismic hazards – facility will be designed for Site Class C. No active faults in site boundary. Earthquake activity within 50 miles up to magnitude 4.6.
  - Groundwater was encountered in only 3 of ~200 borings, at 16-35 ft below grade. Liquefaction not judged to be a concern.
    - LG – results make sense given depth to consolidated material, most water locked up in Columbia River basalt.
  - Landslide potential – average slope 6.3%; steep slopes tend to be along Rosebush Creek, tributaries, and drainages, which will generally be avoided to the extent practicable.
  - Floodplains – 100-yr floodplains are located along streams and drainages, the Facility will comply with zoning ordinances, and the risk of flood hazards for the project is generally low.
- Additional site-specific geotechnical investigations (as are necessary for the final design) will be conducted prior to construction

LG confirmed that everything shared looks good. No questions or any flags on any of the work done so far. Tetra Tech has incorporated the most recent datasets that DOGAMI is aware of.

## Next Steps:

- Tetra Tech to provide notes.
- Brookfield to submit pASC.

# Attachment B-2. Geotechnical Investigation Report

# Geotechnical Investigation Report

## Speedway Solar Geotechnical Exploration

City of Grass Valley, Sherman County, Oregon

February 27, 2026 (Revision No. 1)

**Prepared for**

Brookfield Renewable U.S.

200 Liberty Street, 14th Floor
New York, NY 10281

**Prepared by**

TETRA TECH

6 Century Drive, 3rd Floor
Parsippany, NJ 07054

# Geotechnical Investigation Report

## Speedway Solar Geotechnical Exploration

194-1284-0097
February 27, 2026 (Revision No. 1)

### Presented To

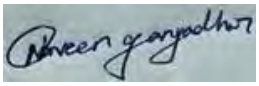
**Brookfield Renewable U.S.**
200 Liberty Street, 14th Floor
New York, NY 10281

### Presented By

**Tetra Tech, Inc**
6 Century Drive, 3rd Floor
Parsippany, NJ 07054

P +1-973-630-8000
www.tetratech.com

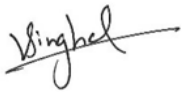
**Prepared by:**



2-25-2026

Naveen Challa — Date

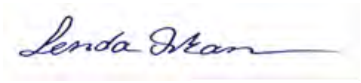
**Reviewed by:**



2-25-2026

Vinay Singhal, PE — Date

**Authorized by:**



2-27-2026

Senda Ozkan, PE — Date

**Restriction on Disclosure and Use of Data**
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TETRA TECH

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## ACRONYMS / ABBREVIATIONS

| Acronyms/Abbreviations | Definition |
|---|---|
| AC | Alternating Current |
| AAP | AASHTO Accreditation Program |
| AASHTO | American Association of State Highway and Transportation Officials |
| AMPP | Association for Materials Protection and Performance |
| AMSL | Above Mean Sea Level |
| ASCE | American Society of Civil Engineers |
| ASTM | American Society for Testing and Materials |
| BESS | Battery Energy Storage System |
| bgs | below ground surface |
| BPA | Bonneville Power Administration |
| bpf | blows per foot |
| BMP | Best Management Practice |
| CBR | California Bearing Ratio |
| DC | Direct Current |
| DOGAMI | Oregon Department of Geology and Mineral Industries |
| ERT | Electrical Resistivity Testing |
| EPC | Engineering, Procurement and Construction |
| ESAL | Equivalent Single Axle Load |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| FOS | Factor of Safety |
| GPS | Global Positioning System |
| GSU | Generator Step-Up Unit |
| GTFO | GeoTech Foundation Company – West |
| HDG | Hot-Dipped Galvanization |
| IBC | International Building Code |
| IEEE | Institute of Electrical and Electronics Engineers |

| | |
|---|---|
| ksi | kips per square inch |
| MCEG | Maximum Considered Earthquake Geometric Mean |
| MDD | Maximum Dry Density |
| mV | Millivolts |
| NAVD 88 | North American Vertical Datum of 1988 |
| NRCS | Natural Resources Conservation Service |
| OMC | Optimum Moisture Content |
| OSSC | Oregon Structural Specialty Code |
| OSHA | Occupational Safety and Health Administration |
| Project | Speedway Solar Geotechnical Exploration |
| pci | pounds per cubic inch |
| pcf | pounds per cubic foot |
| psf | pounds per square foot |
| PGA | Peak Ground Acceleration |
| PLT | Pile Load Testing |
| POI | Point of Interconnection |
| ppm | Parts per Million |
| PV | Photovoltaic |
| RECP | Rolled Erosion Control Product |
| RQD | Rock Quality Designation |
| Site | Grass Valley, Sherman County, Oregon |
| SLIDO | Statewide Landslide Information Database |
| SPT | Standard Penetration Test |
| Tetra Tech | Tetra Tech, Inc. |
| USCS | Unified Soil Classification System |
| USDA | United States Department of Agriculture |
| USGS | United States Geological Survey |

# 1.0 INTRODUCTION

On behalf of Brookfield Renewable U.S. (Brookfield), Tetra Tech, Inc. (Tetra Tech) performed a geotechnical investigation for the proposed Speedway Solar (Project) located near the City of Grass Valley, within Sherman County, Oregon (Site).

The purpose of the Project is to design and construct up to 1,800 megawatts alternating current (MWac) photovoltaic (PV) power generation facility and is planned to be developed on approximately 20,000 acres of undeveloped farmland. The PV generation facility may encompass various components including PV solar arrays, power conversion systems (inverters and transformers), several generator step-up unit (GSU) or electrical collector subsystems, substation at the point of interconnection (POI), internal access roads, operations and maintenance buildings, stormwater management facilities, and temporary staging areas for construction.

The Facility's proposed POI to the regional electrical grid will be via a new Bonneville Power Administration (BPA) switchyard located adjacent to the existing BPA 500-kilovolt Ashe-Marion Transmission Line, which runs northeast/southwest. The future development will include 500 MW battery energy storage system (BESS) and 420 MW wind power facilities with up to 100 wind turbines, which is excluded from this study.

This report presents a summary of site conditions and field investigation program including Site geology and geological hazards; subsurface stratigraphy; logs of borings, infiltration testing, electrical resistivity testing, pile load testing, and laboratory testing results; geotechnical evaluation for foundation design; and geotechnical recommendations for construction.

# 2.0 PROPOSED CONSTRUCTION

The proposed solar PV arrays are anticipated to be mounted on a single-axis or fixed-tilt tracking racking system. The preferred foundations for either racking system would be driven steel piles or ground screw piles. Electrical equipment are anticipated to be supported on concrete slabs-on-grade. Substation foundation elements are anticipated to be supported on mat foundation, spread footings and/or drilled piers. Design loads for the Project structures will be determined later.

Where possible, it is desirable to minimize grading, without extensive earthwork or treatment of in-situ soils. On-site access roads are expected along with a gravel site access driveway connected to the nearest existing adjacent Local or State Road(s). It is also expected that each Site parcel will be enclosed within a chain link perimeter fence and swing gate at the facility's main entrance. Trenches for electrical conductors for both direct current (DC), alternating current (AC), and communication systems are proposed throughout the Project Site.

# 3.0 SCOPE OF WORK

Tetra Tech's scope of services for this Project were completed in accordance with the Addendum Agreement No. PO-BSW25C0001-022, and consisted of the following tasks:

- Review aerial photographs, geotechnical literature, geologic maps, and seismic hazard maps relevant to the subject Site;
- Perform geotechnical investigation which includes geotechnical (soil/rock) borings, infiltration (percolation) testing, field electrical resistivity testing, pile load testing, and geotechnical laboratory testing; and
- Prepare this report documenting reference maps and illustrations, available field and laboratory testing data, summarize geological hazards, corrosion evaluation, provide foundation design parameters and geotechnical construction recommendations, and provide recommendations for future subsurface investigations, if required.

# 4.0 SITE CONDITIONS

## 4.1 SITE LOCATION

The Project Site is located immediately east and south from the City of Grass Valley, within Sherman County, Oregon. The City of Moro is located approximately 4 miles north, and Kent an unincorporated community is located approximately 1-mile south of the Project Site.

As shown in **Figures 1 and 2**, the buildable area of the Project Site is approximately 20,000 acres in size and is bounded by U.S. Route 97 (US 97) to the west which also runs through middle portion, Lone Rock Road to the east, and private properties and farmlands on all other sides. Sherars Bridge Highway (OR-216) runs generally north to south along the western boundaries and connects with US 97 near the City of Grass Valley. Grass Valley Canyon generally runs northwest to southeast through the central portion, with several unnamed tributaries flowing in a north to south direction.

## 4.2 SITE TOPOGRAPHY

As shown in **Figures 1 and 3**, the Project Site is indicated on the United States Geological Survey (USGS) topographic quadrangles of Erskine, Grass Valley, Moro, Sinamox and Rosebush (7.5-minute series) within Oregon. The Project Site is located in a general plateau region with flat-to-rolling hills areas, with elevations varying from EL. 2600 to EL. 2000 feet above mean sea level (AMSL). The topography consists of broad upland divides and gently rolling plateaus, with steep-sided canyons occurring throughout the Project Site (TOPO 2025).

The Project Site is comprised of privately owned land that is predominantly utilized for crop and livestock farming. No commercial or residential structures are located within the Project Site boundary; however, aerial imagery indicates a sparse number of residential or agricultural buildings located along the northern, eastern and southern boundaries.

The Site is situated between two major river systems, the Deschutes River to the west and the John Day River to the east with Grass Valley Canyon and its associated creeks and tributaries running generally north to south, intersected by various smaller canyons and drainages oriented roughly perpendicular to both river systems.

## 4.3 SITE PHYSIOGRAPHY

The Project Site lies within the *Walla Walla Plateau* section of the *Columbia Plateaus* province of the *Intermontane Plateaus*, which is characterized by nearly level to steeply sloping, and its surface is a series of hills with incised valleys. The majority of this area is comprised of scoured valleys within the basalt plateau, and the flood sediments filled these valleys over time. The *Columbia Plateau* area is characterized by loess hills, surrounding scablands, and alluvial deposits. This area is also dominated by grassland/pasture and shrubland with additional areas of fallow or idle cropland, winter wheat, and miscellaneous land use (USDA-MRLA 2025).

## 4.4 SITE SOILS

The surficial soil types mapped by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) are included for reference in **Appendix I**. The Project Site soils (USDA-NRCS 2025) predominantly consist of the Condon silt loam (8B/8C/9D) covering 53% and the Condon-Bakeoven complex (10C) covering 23% of the parcels. Additional major soils include Cantala silt loam (7B/7C) covering 13%, Walla Walla silt loam (31B/31C/32D) covering 4%, Anderly silt loam (1B/1C) covering 3%, and the Endersby-Hermiston complex (12A) covering 2% of the parcels. Minor soils covering less than 1% of the parcels include the Lickskillet-Bakeoven complex (17C), Lickskillet very stony loam (16D, Lickskillet-Rock outcrop complex (18E), Wrentham-Rock outcrop complex (37E), and Bakeoven very stony loam (6C).

The predominant Project Site soils are generally described as loess-derived silt loams underlain by fractured basalt, with localized areas of very stony loam and rock outcrops along canyon slopes. The depth to restrictive lithic bedrock varies significantly across the site, ranging from shallow (4 to 20 inches in Bakeoven and Lickskillet series) to moderately deep (20 to 40 inches in Condon and Anderly series), with Walla Walla soils exhibiting greater depths exceeding 60 inches.

All soils within the Project Site are classified as well-drained with moderate to high permeability in silt loam units and extremely low available water capacity in shallow stony soils. None of the mapped soils are classified as hydric.

## 4.5 SITE GEOLOGY

As shown in **Figure 4**, geologic mapping indicates the Project Site is primarily underlain by the *Frenchman Springs Member (Tf) of Wanapum Basalt* of the *Yakima Basalt Subgroup*, part of the *Columbia River Basalt Group of Miocene Age*. The *Columbia River Basalt Group* comprises of extensive tholeiitic basalt and basaltic andesite lava flows that erupted between approximately 6 and 17 million years ago, forming the broad plateau landscape of north-central Oregon (DOGAMI 1981).

The *Frenchman Springs Member* consists of medium- to dark-gray, fine-grained basalt with vesicular upper zones and columnar jointing. Exposures of the Grande Ronde Basalt, including both the upper flow of normal magnetic polarity (Tgn2) and upper flow of reversed magnetic polarity (Tgr2), occur outside the eastern and western limits of Project Site, forming the canyon walls and incised drainage features.

Bedrock is well indurated but locally fractured and weathered near surface exposures, overlain by varying thicknesses of loess and colluvium derived from basaltic parent material. Overall, the Project Site lies within the Columbia Plateau volcanic province, where thick Miocene basalt flows form the structural and geomorphic foundation of the region. These laterally continuous flows create the gently rolling upland topography observed across the Project Site.

## 4.6 SITE HYDROGEOLOGY

The Project Site lies within the *Columbia Plateau Physiographic Province*, where gently rolling uplands are dissected by seasonal drainages and shallow canyons that convey surface water during precipitation events. In general, surface runoff at the Project Site is directed towards wetlands, ponds, local drainages and ephemeral channels that ultimately discharge into various creeks and canyons and its unnamed tributaries of the Deschutes River drainage system on the west side and the John Day River drainage system on the east side through natural topographic gradients and site grading.

Soils data obtained from the USDA–NRCS (included in **Appendix I**) indicate that the Project Site soils are well drained to moderately well drained, with no hydric soils present, and are not subject to flooding or ponding. The depth to water table exceeds 80 inches across the site, consistent with the semi-arid climate and the permeability of the loess-derived silt loams and fractured basaltic bedrock.

Groundwater beneath the Project Site occurs primarily within the Columbia River Basalt Group, including the Wanapum and Grande Ronde Basalt formations. These basalt units form regionally extensive aquifers, where groundwater movement occurs mainly through fractures, joints, vesicular flow tops, and interflow zones. Recharge to these aquifers is limited under natural conditions, primarily resulting from infiltration of precipitation and localized surface runoff, with additional input from irrigation return flow in some agricultural areas (USFWS 2025).

Regional groundwater flow is expected to follow the topographic gradient, moving generally southwest toward the Deschutes River drainage system and southeast towards the John Day River drainage system. The groundwater conditions encountered during the geotechnical investigation are discussed further in **Section 6.7.**

# 5.0 GEOLOGIC HAZARDS

The Project Site is located within a moderate to high seismic activity zone, and therefore, there is potential for the occurrence of an earthquake-induced landslide and lateral spreading in the areas along the steep valley slopes. The stability of the steep slopes throughout the Project Site should be assessed during the Project designs. No other geological hazards are reported for the Project Site. A summary of geologic and geotechnical hazards for the Project Site is described below.

## 5.1 SEISMICITY, FAULT ACTIVITY, AND RECORDED EARTHQUAKES

The Project Site is located approximately 6 miles west to a quaternary fault area denoted as *Unnamed faults northwest of Condon*, considered as Class B due to low historical seismicity (No. 814). Faults northwest of Condon are predominantly northwest-trending, oblique strike-slip faults. These faults offset volcanic rocks of the Miocene Columbia River Basalts Group, but no scarps in Quaternary deposits have been described along these faults.

The Project Site is located approximately 15 miles southeast to a quaternary fault area denoted as *Faults near The Dalles*, considered as Class A due to recorded evidence of movement or deformation (No. 580). Faults near The Dalles in northern Oregon and southern Washington are northwest-striking, right-lateral strike-slip and minor normal faults. These faults offset Miocene and Pliocene volcanic and sedimentary rocks near the southern margin of the Yakima fold belt. No scarps on Quaternary deposits have been described, but one of these faults may offset Quaternary basalt and these faults form prominent regional lineaments that also suggest they may have undergone Quaternary displacement.

The Project Site is located approximately 23 miles southwest to a quaternary fault area denoted as *Luna Butte fault*, considered as Class A due to recorded evidence of movement or deformation (No. 479). The Luna Butte fault is a northwest-trending fault zone marked by right-lateral strike-slip and normal faults, and it is commonly coincided with anticlines of similar trend. The fault zone offsets Miocene and Pliocene volcanic and sedimentary rocks. No scarps in Quaternary deposits have been described, but stratigraphic and geomorphic evidence suggest displacement along the fault during the middle and/or late Quaternary. A subsidiary thrust splay, the Oak flat fault, may have undergone late Pleistocene or Holocene displacement.

The Project Site is located approximately 30 miles southwest to a quaternary fault area denoted as *Arlington-Shutler Butte fault*, considered as Class A due to recorded evidence of movement or deformation (No. 847). The Arlington-Shutler Butte fault is a northwest-striking fault zone marked by right-lateral strike slip and normal faults, and is coincident with anticlines of similar trend. The fault zone offsets Miocene and Pliocene volcanic and sedimentary rocks. No scarps on Quaternary deposits have been described, but geomorphic evidence suggests that the fault has undergone middle and late Quaternary displacement.

As shown in **Figure 5**, there are many other faults of similar category located on the northern and western side of the Project Site. All these listed faults have a slip-rate of less than 0.2 mm/year (USGS 1999).

The USGS categorizes Sherman County as being in a zone that is designated as moderate to moderate-to-high hazard (14 to 20% occurrence region in 50 years) for potential earthquakes (USGS 2014). The nearest earthquakes or seismic activity with a magnitude of 4.0 recorded on April 16, 1976, is located approximately 15 miles southwest of the Project Site.

## 5.2 SEISMIC ASSESSMENT

In accordance with ASCE Standard 7 (ASCE/SEI 7-22), the Project Site is classified as Seismic Design Category "C". An assessment was made of seismic response for the Site soil and bedrock conditions from the borings enveloping the foundation footprints in accordance with the Section 3.10.3 of AASHTO LRFD manual (AASHTO 2017) and Table 20.3-1 of ASCE Standard 7 (ASCE/SEI 7-22).

Based on the assessment, the Project Site soils are classified as Site Class "C." The seismic design parameters are provided in **Section 7.4** of this report.

## 5.3 LIQUEFACTION POTENTIAL

Liquefaction is a phenomenon associated with earthquakes during which loose, sandy to silty soils that are water saturated or nearly saturated behave like fluids. As seismic waves pass through these soil layers, the structure of the soil distorts and void spaces between soil particles (pores) collapse, pressurizing pore water and causing deformation and ground failure. Research and historical data indicate that liquefaction and the associated dynamic settlement generally occur at depths shallower than about 50 feet in loose, relatively clean granular soils and low plasticity silts.

Based on the geotechnical investigation, the average depth to the bedrock is shallower than 4 feet below ground surface (bgs) and groundwater encountered at depths varying from 16 to 35 feet bgs (below the top of bedrock). The potential for significant loss of strength of fine-grained materials and ensuing bearing failure or loss of lateral support during seismic shaking is considered to be low. Therefore, a liquefaction analysis was not performed and is not judged to be a concern.

## 5.4 LATERAL SPREADING HAZARD

Lateral spreading involves the movement of a gently to steeply sloping (0.3 to 5 percent) relatively coherent surficial crust of soil due to the liquefaction of underlying sediments. As liquefaction occurs the crust can slide as intact blocks over the lower liquefied deposit. Surface displacements proceed down-slope or toward a steep free face such as a stream bank with the formation of fissures and scarps. Horizontal movements of up to several feet have been observed after earthquakes in fills, coastal alluvium, and river embankments. The lateral spreading risk at the majority of the Project Site consisting of flat and gentle sloping topography is considered to be moderate, however, the lateral spreading risk may be moderate to high along the steep valley slopes.

## 5.5 EARTHQUAKE-INDUCED LANDSLIDES

The Project Site is located within a moderate earthquake expected shaking zone and therefore, there is potential for the occurrence of an earthquake-induced landslide in the areas along the steep valley slopes. The stability of the steep slopes throughout the Project Site should be assessed during the Project designs.

## 5.6 LANDSLIDE SUSCEPTIBILITY

The majority of project Site is generally characterized by gently rolling uplands underlain by basalt flows and loess-derived silt loams, resulting in an overall low susceptibility to landslides. Steeper slopes occur primarily along canyon and creek margins and drainage corridors (e.g., Grass Valley Canyon, Rosebush Canyon and its creeks and tributaries), where localized moderate to high susceptibility may exist due to increased slope gradients, shallow colluvium, and potential oversteepening.

Based on site topography, rainfall frequency, and seismic risk, there is generally low to moderate susceptibility to landslides at the Project Site. Based on the review of Statewide Landslide Information Database (SLIDO), the landslide hazard maps showed moderate landslide susceptibility within the Canyons and stream areas, and low susceptibility within the flat and gentle sloping topography (SLIDO 2025). The stability of the existing slopes throughout the Project Site should be assessed during the Project designs.

## 5.7 KARST SUBSIDENCE

Karst is a topography formed from the dissolution of soluble rocks such as limestone, dolomite, and gypsum. It is characterized by underground drainage systems with sinkholes and caves and unstable land surfaces. Based on a review of available karst mapping (USGS 2004), the Project Site geological formations are unlikely to be susceptible to karst-related subsidence. Note that the geotechnical investigations did not reveal any evidence of surface depressions, sinkholes, or karstic activities at the Project Site (USGS 2004).

## 5.8 GROUND SUBSIDENCE

The ground subsidence is the sudden sinking or the gradual downward settling of the land surface, and is often related to groundwater drawdown, compaction, tectonic movements, mining, or explosive activity. The ground subsidence due to a seismic event or karstic activities is highly unlikely at the Project Site.

## 5.9 VOLCANIC ACTIVITY

Volcanic activity in the Cascade Range is driven by the subduction of the Juan de Fuca plate beneath the North American plate. The closest volcano to the Project Site is Mount Hood located approximately 50 miles west. Volcanic activity can produce hazardous events including fallout of tephra (volcanic ash), lahars (volcanic mudflows or debris flows), pyroclastic flows (avalanches of hot volcanic material), lava flows, and landslides. The impacts to the Project Site from volcanic activity would be indirect and likely limited to ash fallout (HazVu 2025).

## 5.10 MINING

Based on available mine mapping from the DOGAMI database, there are no active or inactive mining operations, mine workings, or mineral prospect areas within or immediately adjacent to the Project Site.

There is an industrial mineral (gem) quarry located approximately 7 miles west of the Project Site. There are several aggregates quarries that are present within and immediately outside the Project boundaries (MILO 2025).

## 5.11 OIL AND GAS WELLS

Based on the review of available Oil & Gas Well Permit Database (OGWO 2025), there are no major oil or gas wells located within or near the Project Site.

## 5.12 SHALLOW GROUNDWATER

Based on review of available water well records from 1960 through 2023, the static water level ranges from 16 to 527 feet below grade on wells located throughout and immediately outside the Project Site boundaries. On majority of the well records, the groundwater is reported at depths deeper than 100 feet (OWRD 2019).

During the geotechnical investigation, groundwater encountered in three out of 240 borings (SB-01, SB-02 and WTG-03) drilled at the Site and at depths varying from 16 to 35 feet bgs, and is expected not to impact the proposed development on the Project Site. The groundwater encountered during the geotechnical investigation is discussed further in **Section 6.7** of this report.

## 5.13 FLOODING

According to the National Flood Hazard Layer (NFHL) map viewer and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels No. 41055C0325C, No. 41055C0350C, No. 41055C0481C, No. 41055C0482C, No. 41055C0500C, and No. 41055C0525C, the Project Site is predominantly located outside of major Flood Hazard Areas (FEMA 2025). The mapped Zone A and Zone AE floodplains are primarily confined to Grass Valley Canyon, Rosebush Canyon, and their associated creeks and tributaries. These flood zones follow the natural drainage corridors that convey stormwater and seasonal runoff toward the Deschutes and John Day Rivers.

The Project Site, by contrast, is situated on rolling uplands and gently sloping terrain well above these canyon floodplains. As a result, the Project Site lies within Zone X (areas of minimal flood hazard) and is unlikely to be affected by flooding events.

## 5.14 SOIL SHRINK/SWELL POTENTIAL

Changes in soil moisture cause certain clay minerals in soils to either expand or contract. The amount and type of clay minerals in the soil influence the volume change. Structures or roads built on shrinking or swelling soil could be damaged by the change in the volume of the soil. Linear extensibility (shrink-swell potential) refers to the change in length of an unconfined clod as its moisture content is decreased from a moist state to a dry state.

Based on the geotechnical laboratory testing results presented in **Table 4**, the Project Site soil's plasticity indices ranges from 4 to 39 percent, with an average of 9 percent within the upper 10 feet of surficial soil. Therefore, the Project Site soils are likely to have low potential for shrink-swell behavior (Holtz and Kovacs, 1981).

## 5.15 SOIL CORROSION POTENTIAL

The soil rate of corrosion against concrete is anticipated to be low for the majority of the Project Site. No areas of moderate or high concrete corrosion potential are identified within the Project boundary.

The soil rate of corrosion against uncoated steel is also anticipated to be low across most of the Project Site (approximately 97%), with moderate potential (2%) observed in small, isolated areas and high potential (1%) associated with limited occurrences of the Endersby–Hermiston complex soils. The predominant soils (Condon, Cantala, Anderly, and Walla Walla silt loams) are considered non-aggressive to buried steel or concrete structures. The soil corrosion information was mapped by the USDA/NRCS and is included for reference in **Appendix I**.

For soil corrosion testing results, refer to **Section 6.5.3** of this report. For corrosion evaluation, refer to **Section 7.4.5** of this report.

# 6.0 SUBSURFACE EXPLORATIONS

The geotechnical investigation consisted of geotechnical borings including standard penetration tests (SPT) and bulk soil sampling, infiltration testing, electrical resistivity testing, pile load testing, and general soil and rock laboratory testing. Geotechnical borings were performed to document and sample the soil and bedrock present at each of the proposed boring locations. Representative samples were selected for laboratory testing to assess engineering properties and general classification. In addition to the geotechnical investigation for solar racking structures, substation, and access roads, laboratory corrosion potential tests were conducted in support of the foundation recommendations.

## 6.1 GEOTECHNICAL SOIL AND ROCK BORINGS

Tetra Tech developed a subsurface exploration program that included a total of 240 geotechnical borings to identify the subsurface conditions at the Project Site. A total of 230 soil borings, referenced as PV-001 through PV-230, were performed for the solar PV arrays and were terminated upon auger refusals. Two (2) soil/rock borings, referenced as SB-01 and SB-02, were performed for the new substation at the POI area. Eight (8) soil/rock borings, referenced as WTG-01 through WTG-08, were performed for the future Wind Turbine Generators (WTGs). The WTGs boring locations were randomly selected to gather the top of bedrock and bedrock condition information throughout the Site. The Rock coring was performed using an NQ-size single-tube solid core barrel (ASTM D2113) beyond the refusal depths at two (2) substation (SB-01 and SB-02) and eight (8) WTGs borings (WTG-01 through WTG-08).

As listed in **Table 1,** the field engineers/geologists staked and recorded the coordinates of as-drilled location of geotechnical borings using a Global Positioning System (GPS) device. The **Subsurface Exploration Plans** showing the locations of the as-drilled geotechnical borings are included in **Appendix A**.

The field investigation work was conducted in general accordance with American Society for Testing and Materials (ASTM) standards, including ASTM D6151 – Using Hollow Stem Augers for Geotechnical Exploration and Soil Sampling, ASTM D1586 – Standard Penetration Test (SPT) and Split-Barrel Sampling for Soils, ASTM D2113 Standard Practice for Rock Core Drilling and Sampling of Rock for Site Exploration, and ASTM D4220 – Standard Practices for Preserving and Transporting Soil Samples.

The geotechnical borings were completed with two (2) drilling crews in September and October of 2025. Borings were advanced using track-mounted drilling rigs, Acker Rebel and Fraste Multidrill PL-G, equipped with an automatic hammer employing hollow-stem augers. The hammer efficiency for both rigs was assumed to be 80%. The GeoTesting Field Ops (GTFO – ANS Geo, Inc. in-house drilling) provided drilling rigs and crews, and also performed the Oregon One Call (#811) for public utility clearance at the staked boring locations.

The depth of borings varied from 0.6 to 40.0 feet bgs depending on auger refusal, SPT refusal, and target rock coring depth. The bedrock was encountered at an average depth of 3.5 feet bgs at the Project Site. As the depth to bedrock was shallow throughout the Project Site (i.e., varied from 0.6 to

18.8 feet bgs), unsampled offset borings were attempted at 217 out of total 240 borehole locations to confirm the top of bedrock at the primary boreholes.

Samples of the subsurface soils were taken using a 2-inch outside diameter drive sampler driven into the soil by repeated drops from a 140-pound automated hammer falling through 30 inches. In general, the samples were then collected continuously to a depth of 10 feet bgs and subsequently at every 5 feet intervals to the refusal or termination depth. The number of blows required to advance the sampler each successive 6-inch increment was recorded; the total number of blows required to advance the sampler the second and third 6-inch increments is termed as the standard penetration resistance (N-value). Penetration resistance values provide an estimate of the relative density or consistency of soils. All samples collected and cuttings observed during augering were visually classified and logged. The number of blows applied for each 6-inch increment was recorded unless one of the following occurred:

- Fifty or more blows were applied during any one of three 6-inch increments;
- A total of 150 or more blows had been applied in the three 6-inch sampling interval; or
- No observed advance of the sampler was noted after 10 successive blows of the hammer.

All soil samples collected, and cuttings observed during augering were visually classified and logged by a field engineer/geologist in accordance with the Unified Soil Classification System (USCS as described in ASTM D2487). Bulk soil samples were collected from 80 borehole locations at depths up to 5 feet bgs for the laboratory testing. The depth of groundwater was measured upon completion of each boring. Upon completion of borings and water level readings, the boreholes were backfilled in accordance with the requirements of Oregon.

The summary of borings, groundwater and bulk soil sample collection depths is provided in **Table 1**. The **Typed Boring Logs** showing the N-value, soil types, groundwater depths, and estimated top of rock information are provided in **Appendix B**. The **Core Box Photo Logs** and **Site Photographs** are also provided in **Appendix B**. Note that the soil strata boundaries shown on the logs are approximate and are intended to demarcate general changes in the composition of layers (e.g., the predominant soil type and stiffness) and other properties as interpreted from the samples taken within each boring.

## 6.2 INFILTRATION TESTING

Tetra Tech developed a subsurface exploration program that included a total of 30 field percolation tests to determine the infiltration rate at the Project Site. A total of 20 percolation tests, referenced as IT-PV-XXX, were performed at the select solar PV arrays borings. Two (2) percolation tests, referenced as IT-SB-01 and IT-SB-02, were performed near the substation borings, and eight (8) percolation tests, referenced as IT-WTG-01 through IT-WTG-08, were performed near the WTGs borings.

The infiltration test was performed in September and October of 2025 using a reduction-factor field percolation method following the guidelines provided by the Oregon State University (OSU 2018) developed in conjunction with the Oregon Department of Environmental Quality (ODEQ 2021).

Each percolation test hole was 10 inches in diameter and 8 to 12 inches in depth and were dug using a posthole digger and/or shovel. The test holes were pre-soaked for an hour then infiltration rates were

measured at 30 minutes interval. The stabilized measured infiltration rate at each test hole was computed based on the last of the four stabilized readings and reported in units of inches per hour (inches/hour). The design infiltration rate at the Project Site varied from 0.35 to 2.57 inches/hour, with an average design infiltration rate of 1.48 inches/hour.

The summary of infiltration testing results is provided in **Table 1**. The **Subsurface Exploration Plans** showing the locations of the percolation test holes are included in **Appendix A**. The full percolation testing results are included in **Appendix D**.

## 6.3 Electrical Resistivity Testing

Tetra Tech developed a subsurface exploration program that included a total of 120 field electrical resistivity tests (ERTs) to determine the apparent electrical resistivity at the Project Site. A total of 110 ERTs, referenced as ERT-PV-XXX, were performed at the select solar PV arrays borings. Two (2) ERTs, referenced as ERT-SB-01 and ERT-SB-02, were performed near the substation borings, and eight (8) ERTs, referenced as ERT-WTG-01 through ERT-WTG-08, were performed near the WTGs borings.

In-situ soil resistivity measurements were obtained by utilizing the Wenner 4-Pin Method in accordance with ASTM G57-06 and Institute of Electrical and Electronics Engineers (IEEE) Standard 81 “Standard Test Method for Field Measurement of Soil Resistivity using the Wenner Four-Electrode Method.” For the ERTs near the solar PV arrays boreholes, two (2) mutually perpendicular traverses were collected utilizing “a”-spacings of 1, 2, 3, 5, 10, 25, and 50 feet. For the ERTs near the substation and WTGs boreholes, two (2) mutually perpendicular traverses were collected utilizing “a”-spacings of 1, 2, 3, 5, 10, 25, 50, 75, 100, and 200 feet.

The mean electrical resistance varied from 11 to 455 ohms-meter, and averaged to be 127 ohms-meter at the Project Site.

The field ERTs were completed from September through November of 2025. The summary of electrical resistivity testing results is provided in **Table 1**. The **Subsurface Exploration Plans** showing the locations of the field ERTs are included in **Appendix A**. The full electrical resistivity testing results are included in **Appendix E**.

## 6.4 Pile Load Testing

Tetra Tech developed a subsurface exploration program that included pile load testing (PLT) at 126 borehole locations to evaluate site-wide subsurface conditions, constructability concerns, and to assess the load-bearing capacity of deep pile foundations for solar PV arrays. A total of 142 test piles, referenced as PT-PV-XXX, were installed near the select solar PV arrays borings. Three (3) test piles, referenced as PT-SB-01 and PT-SB-02, were installed near the substation borings, and nine (9) test piles, referenced as PT-WTG-01 through PT-WTG-08, were installed near the WTGs borings.

Based on the information gathered from the geotechnical borings, it was determined the Project Site bedrock is at shallow depths (i.e., varied from 0.6 to 18.8 feet bgs, and averaged to be 3.5 feet bgs) and pile driving was practically not possible at a majority of the Project Site. Therefore, Tetra Tech performed pre-drilling at 116 out of 154 test pile locations. For pre-drilling operations, a 5.875-inch diameter hole was pre-drilled at 110 test pile locations, and a 6.5-inch diameter hole was pre-drilled at

six (6) test pile locations. The pre-drilling of test piles was performed at depths varying from 6 to 12 feet bgs. The pre-drilled hole was backfilled with sand without additional compaction effort, and the pile was installed to the planned depth for the testing.

The PLT program included uplift/tension (pull) load testing in accordance with ASTM D3689, axial compression (push) load testing in accordance with ASTM D1143, and lateral load testing in accordance with ASTM D3966. At all 154-test pile location, W6x9 steel pile was installed to depths varying from 5 to 12 feet bgs. All piles were tested in tension loading followed by lateral loading. Only 41 selected piles were tested in compression loading prior to tension and lateral load tests.

Piles were driven to their target depth utilizing a Gayk HRE 4000 Pile Driver and the testing loads were applied using digital load cell. Following the installation, each pile was allowed a minimum of 48 hours of "setup" time (soak period) prior to testing. This is a typical recommended minimum setup time for load testing within unsaturated cohesive or cohesionless (granular) soil conditions allowing soil to better adhere to the surface area of the pile following the disturbance from installation. Testing was performed to soil failure, or to the maximum target loading of 15 kips for uplift/tension and compression load testing, and 6 kips for lateral load testing. At the end of the PLT program, 72 out of 154 test piles were fully extracted and properly disposed of from the Site, and the remaining 82 test piles were unable to be removed as they were stuck within the bedrock and therefore, cut-off near to the top of rock and left in place.

The piles' installation and testing were completed From October through December of 2025. The **Subsurface Exploration Plans** showing the locations of test piles are included in **Appendix A**. The results of Pile Load Testing are summarized in **Table 2,** and the pile installations and testing reports are provided in **Appendix F**.

## 6.5 LABORATORY TESTING

The select soil and rock samples obtained during the subsurface exploration were transported in accordance with ASTM D4220 to testing laboratory. Soil samples were visually classified in accordance with ASTM D2488 – Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), which is based on the Unified Soil Classification System (USCS). Representative samples were selected for testing to determine the physical properties of the soils and rock in general accordance with ASTM or other approved procedures.

The laboratory testing was completed in December 2025, and the purpose of each test is listed in **Table 3**. The lab testing data, along with the field information, were used to prepare the typed boring logs using gINT program and provided in **Appendix B**. The full **Laboratory Testing Reports** are provided in **Appendix C**.

### 6.5.1 SOIL INDEX

A total of 98 natural moisture contents, 98 gradation (sieve) analyses, 80 hydrometer analyses, and 98 Atterberg limits were performed for material classification and to determine the engineering properties of the materials. The soil index test results are summarized in **Table 4**.

### 6.5.2 SOIL CBR AND COMPACTION

A total of 30 California Bearing Ratio (CBR) tests and eighty (80) Standard Proctor tests were performed on the bulk soil samples to determine the maximum dry density (MDD), optimum moisture content (OMC), and load-bearing capacity of the access roadway subgrade. The MDD of tested soils varied from 98 to 122.6 pcf (average MDD of 108 pcf), and the OMC of tested soils varied from 11.2 to 22.1 percent (average OMC of 17 percent). The CBR value of tested soils varied from 1.8 to 10.6 percent (computed at 95% of MDD), averaging at 6 percent.

The soil CBR and standard proctor compaction test results along with CBR Rating (Bowles, 1992) are summarized in **Table 4**.

### 6.5.3 SOIL CORROSIVITY

A total of 80 corrosivity testing suites were performed on bulk soil samples to assess the potential for corrosion. Corrosion series testing included resistivity, pH, sulfate content, chloride content, sulfides, and redox potential. The result of the corrosivity testing indicates that pH of the soil ranges from 7.5 to 9.8 (average pH of 8.7) and the soil resistivity varies from 1,600 to 15,900 ohm-cm (average resistivity of 6,027 ohm-cm). The chloride content varies from 3 to 243 ppm (average chloride content of 46 ppm), and the sulfate content varies from <15 to 210 ppm (average sulfate content of 32 ppm). The redox potential varies from 103 to 276 mV (average redox potential of 195 mV).

The soil corrosion testing results are summarized in **Table 4**. The findings of corrosivity testing are discussed in **Section 7.4.5** of this report.

### 6.5.4 SOIL THERMAL CONDUCTIVITY

Thermal conductivity of soil is influenced by the degree of compaction, chemical and mineral constituents within the soil, moisture content, groundwater conditions, and variability of the soil's particle size and distribution among many other contributing factors. A total of 80 thermal conductivity tests were performed on bulk soil samples which remolded to 90% of the Standard Proctor MDD to determine the heat transfer rate of the representative material.

The thermal conductivity of tested soils at the OMC varies from 0.87 to 1.62 W/m-K (average thermal conductivity of 1.18 W/m-K). The thermal resistivity of tested soils at the OMC varies from 0.62 to 1.15 $m^2$-K/W (average thermal resistivity of 0.86 $m^2$-K/W). The soil thermal conductivity testing results are summarized in **Table 4**.

### 6.5.5 ROCK STRENGTH TESTING

A total of 13 unconfined compressive strength (UCS) tests were performed on intact rock samples collected from the substation and WTGs boreholes. Results of the testing indicated that the moist unit weight of the intact rock samples varies from 115.6 to 168.6 pcf (average rock unit weight of 154 pcf), and the unconfined compressive strength varies from 1,589.7 to 12,360.9 psi (average rock compressive strength of 6,528 psi). The rock strength testing results are summarized in **Table 5**.

## 6.6 SUBSURFACE STRATIGRAPHY

The results of the geotechnical borings and laboratory tests were compiled to understand the soil stratigraphy and lithology of the study areas. For the purpose of this report, the subsurface strata have been classified based on the USCS soil class and nature of origin of the soils and bedrock encountered during drilling. The subsurface soil strata within each specific area of the Project Site is described below, and the **Typed Boring Logs** are provided in **Appendix B**.

### 6.6.1 SUBSTATION (POI)

Two (2) borings, referenced as SB-01 and SB-02, were performed for the substation within the POI area. In general, the soils within this area consist predominantly of medium dense to dense Silty Sand (SM) and medium stiff to hard Sandy Lean Clay (CL). The moisture content of the tested samples ranges from 12 to 18 percent, with an average moisture content of 15 percent. The plasticity indices of the tested samples were non-plastic and 10.

### 6.6.2 WIND TURBINE GENERATORS

A total of eight (8) borings, referenced as WTG-01 to WTG-08, were performed randomly throughout the Site for WTGs. In general, the soils consist predominantly of very stiff to hard Sandy Lean Clay with Gravel (CL); and medium dense to very dense Silty Clayey Sand (SC-SM), Clayey Sand with Gravel (SC) and Clayey Gravel with Sand (GC). The moisture content of the tested samples ranges from 6 to 19 percent, with an average moisture content of 12 percent. The plasticity indices of the tested samples vary from 5 to 14 percent.

### 6.6.3 SOLAR PV ARRAYS

A total of 230 borings, referenced as PV-001 through PV-230, were performed for the solar PV arrays. In general, the soils consist predominantly of medium stiff to very stiff Sandy Silty Clay / Silty Clay with Sand (CL-ML), Sandy Silt (ML) and Lean Clay (CL); and medium dense to very dense Silty Clayey Sand (SC-SM) and Silty Sand (SM). The moisture content of the tested samples ranges from 2 to 30 percent, with an average moisture content of 12 percent. The plasticity indices of the tested samples vary from non-plastic to 39 percent.

## 6.7 GROUNDWATER CONDITIONS

The boreholes were observed while drilling and after completion for the presence and level of groundwater. Groundwater was observed after completion in three borings (SB-01, SB-02 and WTG-03) that utilized rock coring, at depths varying from 16 to 35 feet bgs (EL. 2190 to EL. 2294). The remaining 237 borings did not encounter groundwater at the Project Site.

It should be noted that a detailed groundwater study was beyond the scope of this investigation, and the reported observations are only indicative of conditions at the time the borings were completed at the locations indicated. Groundwater levels may vary due to multiple factors, including effects of coring, seasonal changes, Site topography, surface runoff, post development conditions, the layering and permeability of subsurface strata, water levels in waterways, utilities, and other factors that may not have been evident at the time of this study. Long-term observations would be necessary to evaluate the groundwater fluctuations at the Project Site.

# 7.0 FOUNDATION AND CONSTRUCTION RECOMMENDATIONS

The structural loadings of solar panels, electrical equipment including generators and transformers are expected to be relatively light compared to the structural loadings of substation. The principal factor in support of solar panel racking systems is uplift for wind resistance. Therefore, solar panel systems are generally supported on driven piles, ground screw or anchors, or concrete ballast foundations. Ancillary electrical equipment is typically supported by concrete pads or slabs but may be supported on piles as well.

The structural loadings of substation are expected to be high and are anticipated to be supported on mat foundations and/or drilled piers.

Note that the foundation recommendations for future development of BESS and wind power facilities are beyond the scope of this report.

Based on the results of the above-described investigation and testing, this section includes evaluation of the data together with conclusions and recommendations for use in the design and construction of solar arrays, energy storage equipment, substation, and facilities. Recommended design parameters for use in design of solar facility foundations are provided in this section.

## 7.1 SHALLOW FOUNDATIONS FOR SUBSTATION AND EQUIPMENT PADS

Based on the geotechnical investigation, the subsurface soils at the Project Site consists predominantly of medium stiff to very stiff Sandy Silty Clay / Silty Clay with Sand (CL-ML), Sandy Silt (ML) and Lean Clay (CL); and medium dense to very dense Silty Clayey Sand (SC-SM) and Silty Sand (SM). The surficial soils are underlain by Basalt bedrock which is located at shallow depths (i.e., depth varying from 0.6 to 18.8 feet bgs, and averaged to be 3.5 feet bgs).

Lightly loaded substation structures, auxiliary structures and equipment pads associated with the solar PV arrays can be supported by conventional shallow foundations consisting of column and/or strip footings bearing on the compacted structural fill underlain by in-situ soils or bedrock. As shallow foundations for equipment pads will be built on grade, and structure will not retain any soil, lateral earth pressure coefficients are not needed.

For the design of the shallow foundation of equipment pads or substation structures, following design parameters are recommended:

- Place footings at the depth of 24 inches and below for frost protection; or place equipment pads and mat foundations on compacted structural fill extended to the depth of 24 inches and below for frost protection. Alternatively, for foundations placed on insulation, place footings at a minimum depth of 12 inches.
- Allowable Foundation Bearing Pressure = 2,500 psf or less.
- Factor of Safety for Bearing = 3.0
- Footing Coefficient of Friction, tan $\delta$ = 0.40 (if concrete pad is bearing on native soil) or 0.55 (if concrete pad is bearing on structural fill)
- Allowable Total Settlement = 1-inch or less.

- Subgrade Modulus of Soil, K = 150 pounds per cubic inch (pci).
- As the Project Site is underlain by shallow bedrock, it is expected the top of bedrock depth may vary at each equipment pad location. It is recommended that the equipment pad foundation should bear entirely on either bedrock or structural fill.
- If foundation subgrade encountered any soft, loose, or deleterious bearing material that are unsuitable for foundation subgrades, over-excavate any unsuitable soils and backfill with compacted Structural fill (see Section 8.6).
- Design and construct all foundation excavations in accordance with Occupational Safety and Health Administration (OSHA) requirements.
- For mat foundations, the recommended $K_1$ modulus values are based on an assumed 1-foot square plate loading surface. For determination of the allowable subgrade modulus values ($k_s$) for actual mat foundation dimensions of mats bearing on the aforementioned soils, we recommend the use of the following relationship (Das 2022):

  $$k_s = K_1 \bullet [(B+1)/2B]^2$$

  Where, B equals the least mat foundation width

  Conduits extending through mat foundations should include flexible connections to accommodate potential movement of the foundation relative to the conduit.

## 7.2 DRILLED PIER FOUNDATIONS FOR SUBSTATION

Alternatively, if due to the space constraints or any other project design (unable to tolerate the movement of more than 1-inch) or construction limitations mat foundation is not suitable, then drilled pier foundations could be the viable foundation options for the substation structures. Due to the presence of potentially shallow bedrock (i.e., average depth to bedrock to be 3.5 feet bgs), a drilled pier (straight shaft) socketed into bedrock may be the preferred foundation alternative.

The design and construction recommendations presented in this section is applicable for a drilled pier (straight shaft) foundation system and should be considered when preparing the project documents.

- Drilled piers should be designed based on the soil/rock parameters provided in **Table 6** and in accordance with the methods outlined in AASHTO LRFD Bridge Design Specifications (AASHTO 2018).
- Drilled piers should be constructed in accordance with the procedures outlined in FHWA Drilled Shafts – Construction Procedures and LRFD Design Methods (FHWA 2018).
- Minimum recommended drilled pier (straight shaft) length is 10 feet below grade.
- Structural loads should be supported on drilled shafts at least 18 inches in diameter. Due to inherent soil disturbance during installation and moisture variations in the near-surface soils, it is assumed that no axial or lateral resistance will be developed within 5 feet of final grade.
- Uplift due to structural loads on the piers can be resisted by using 75% of the allowable skin friction values plus an allowance for pier weight.

- Each drilled pier should be reinforced with suitable, clean, tension steel over its entire length and should be embedded sufficient distance into the bedrock to resist potential uplift (tensile) forces from post construction heave and other uplift forces applied by structural loadings.
- The pier length-to-diameter ratio should not exceed 30.
- Concrete used in the piers should be a fluid mix with sufficient slump so it will fill the void between reinforcing steel and the drilled pier hole. The concrete slump should range from 5 to 8 inches.
- Based on the results of geotechnical investigation and our experience with similar properly constructed drilled pier foundations, it is anticipated that settlement for the pier socketed into bedrock will be negligible.
- Care should be taken so that the sides and bottom of the pier excavations are not disturbed during construction. Drilled pier holes should be thoroughly cleaned of loose soil and debris prior to placement of reinforcing steel and concrete. In addition, concrete should not be placed in a hole filled with more than 2 inches of water.
- While not anticipated, temporary casing may be required during the pier drilling to prevent caving of the holes and to control possible groundwater seepage.
- Drilled pier may not stay open without stabilizing measures and may need to be cased. Pier concrete should be placed immediately after completion of drilling and cleaning. Although not anticipated, groundwater may be encountered within the anticipated pier depth, and the dewatering of the piers may be expected. Due to potential sloughing and raveling, foundation concrete quantities may exceed calculated geometric volumes. Free-fall concrete placement in piers should be acceptable if provisions are taken to avoid striking the concrete on the sides of the hole or reinforcing steel. The use of a bottom-dump hopper, or a tremie pipe discharging near the bottom of the hole where concrete segregation will be reduced, is recommended.
- A geotechnical representative should observe the installation of the drilled piers on a full-time basis to observe that the appropriate bearing stratum is being penetrated and to observe other pier construction procedures.

## 7.3 PILE FOUNDATIONS FOR SOLAR PV ARRAYS

Driven piles are generally considered as a suitable foundation system to support the solar modules and tracking system(s) and transmit structural loads through the subsurface soil layers. Based on the results of the geotechnical investigation, steel wide-flanged (W-shape) driven piles can be utilized to support the proposed solar array racking foundations. A W-shape pile will function as friction pile which generally develops their axial capacity through side resistance of the pile section with the surrounding soil. For practical purposes, the design axial uplift loads will be resisted via skin friction along the perimeter of the pile and the vertical dead load of the solar panel rack supported by individual piles.

W6x9 steel sections (or similar pile section and weight) are suitable provided that the piles are sufficiently long to sustain the lateral design loads/moments and to achieve fixity. Pile lateral capacity analysis using LPile must be performed to determine the length of the piles per the factored design lateral loads and moments. The post-construction total and differential settlement for professionally designed and constructed piles is anticipated to be approximately 1 inch and ½ inch, respectively.

Based on the results of the geotechnical investigation, the surficial soils are underlain by Basalt bedrock which is located at shallow depths (i.e., depth varying from 0.6 to 18.8 feet bgs, and averaged to be 3.5 feet bgs), and are divided into four (4) zones as shown on **Piles Zoning Plan** included in **Appendix A**. The tested pile locations with respect to the designated zonings are listed below.

| Piles Zoning Designation | |
|---|---|
| **Piles with Direct Driving Condition** | |
| Zone 1 | PT-PV-001, 002, 004, 005, 007, 009, 010, 011, 015, 017, 019, 022, 025, 028, 030, 031, 034, 048, 060, 065, 084, 093, 098, 106, 111, 127, 164, and PT-WTG-01 |
| Zone 2 | PT-PV-029, 045, 077, 097, 101, 157, and PT-SB-01 |
| **Piles with Pre-Drilling Condition (5.875-inch predrilled hole)** | |
| Zone 3 | PT-PV-021, 030, 031, 035, 036, 040, 043, 047, 051, 052, 056, 058, 060, 062, 064, 068, 071, 072, 074, 079, 081, 084, 086, 089, 090, 095, 100, 102, 107, 109, 112, 114, 117, 118, 121, 122, 123, 126, 127, 128, 130, 132, 134, 136, 137, 141, 142, 144, 145, 147, 151, 154, 156, 160, 162, 163, 167, 169, 172, 173, 177, 178, 179, 181, 183, 184, 188, 189, 191, 193, 195, 197, 198, 203, 204, 205, 206, 207, 210, 211, 212, 214, 217, 221, 223, 226, 230; PT-SB-01, PT-SB-02; and PT-WTG-01 through PT-WTG-08 |
| Zone 4 | PT-PV-001, 002, 004, 005, 007, 009, 009, 010, 011, 015, 017, 019, 022, 025, 028, 029, 034, 045, 048, 060, 065, 077, 093, 097, 101, 106, 111, 157, and 164. |

The selection of appropriate soil/rock parameters is important in the foundation design of solar arrays. The soil strength parameters were developed based on the correlation between average SPT-values (N60), pocket penetrometer test (PPT), laboratory testing results, pile load testing results, and the available technical literature. The recommended design parameters for the LPile analyses are summarized in **Table 7**.

The recommended ultimate skin friction can be applied in compression and tension as required. Driven steel piles should extend to a sufficient depth to achieve both adequate axial compression and uplift as well as lateral load capacities. For both non-frost and frost loading, Tetra Tech recommends that allowable side resistance for axial (uplift and compression) loading within the upper 24-inch (2-foot) should be neglected due to freeze-thaw impact, ground disturbance, and scour (see **Section 7.4.3**). Both tip resistance and skin friction capacities can be combined to determine the total resisting capacity of the pile in axial compression. For steel W- or H-piles, the “box” area should generally be used for side resistance calculations and a W- or H-pile is likely to plug during driving.

The driven piles should be designed and constructed in accordance with the procedures outlined in FHWA Design and Construction of Driven Pile Foundations (FHWA 2016). The axial capacities of the driven pile should be computed using the following equations:

$$Q_{allowable\ (uplift)} = H \bullet P \bullet q_s$$

$$Q_{allowable\ (compression)} = H \bullet P \bullet q_s + P \bullet q_t$$

Where, $Q_{allowable}$ = allowable uplift or compression capacity of pile (lbs.)
H = pile embedment depth (feet)
P = pile perimeter "box" area per foot of pile length (i.e., W6x9 = 1.64 sf/ft)
$q_s$ = unit skin friction (psf)
$q_t$ = unit end-bearing resistance (lbs.)

Note that the design pile lengths for the solar arrays will be governed by the magnitudes of lateral loads and moments to which the piles will be subjected. Therefore, the pile lengths must be sufficient to maintain the fixity of the pile at design depth and is not dictated solely by axial loads. At the time of this report, the design lateral loads were not available to Tetra Tech. Once the solar arrays trackers (sizing and loadings) are determined, it is recommended to assess the lateral load capacity of the proposed driven steel piles using the load deflection (p-y) curves. Tetra Tech can evaluate the axial, lateral, and moment loadings for the select trackers based on site conditions and local building codes and complete the pile foundation design.

The zoning boundaries presented in the above table should be considered approximate. The axial and lateral performance varied across explored areas of the site, it is anticipated that localized areas of lower strength soils may exist within areas of higher strength soils, and vice versa. We recommend a production pile load testing program (post remediation plan) be performed to identify weak zones and depth to bedrock.

The actual amount of potential settlement is dependent upon the proposed pile size and applied load. Settlement of driven piles is anticipated to be minimal, estimated to be on the order of less than ½-inch under assumed loading conditions. Fill placed for general site grading is expected to be on the order of 2 feet or less across the site based on the relatively flat natural topography, and downdrag/settlement will be negligible for piles placed in native soil with minimal fill. If fill heights greater than 4 feet are required, Tetra Tech should be notified to reassess potential downdrag/ settlement.

Alternatively, the solar panel systems can be supported on ground screw piles to economize the additional cost related to the pre-drilling. It is recommended that the proprietary manufacturer complete the ground screw foundation design and perform the on-site field testing to evaluate the ground screw length and diameter and its ability to carry load in actual field conditions.

## 7.4 OTHER FOUNDATION CONSIDERATIONS

### 7.4.1 PILE PRE-DRILLING

Based on the results of the geotechnical investigation, the surficial soils are underlain by Basalt bedrock which is located at shallow depths (i.e., depth varying from 0.6 to 18.8 feet bgs, and averaged to be 3.5 feet bgs), and are divided into four (4) zones as shown on **Piles Zoning Plan** included in **Appendix A**. The exploration location where pre-drilling could be anticipated are listed below.

| Piles with Pre-Drilling Condition (5.875-inch predrilled hole) | |
|---|---|
| Zone 3 | PT-PV-021, 030, 031, 035, 036, 040, 043, 047, 051, 052, 056, 058, 060, 062, 064, 068, 071, 072, 074, 079, 081, 084, 086, 089, 090, 095, 100, 102, 107, 109, 112, 114, 117, 118, 121, 122, 123, 126, 127, 128, 130, 132, 134, 136, 137, 141, 142, 144, 145, 147, 151, 154, 156, 160, 162, 163, 167, 169, 172, 173, 177, 178, 179, 181, 183, 184, 188, 189, 191, 193, 195, 197, 198, 203, 204, 205, 206, 207, 210, 211, 212, 214, 217, 221, 223, 226, 230; PT-SB-01, PT-SB-02; and PT-WTG-01 through PT-WTG-08 |
| Zone 4 | PT-PV-001, 002, 004, 005, 007, 009, 009, 010, 011, 015, 017, 019, 022, 025, 028, 029, 034, 045, 048, 060, 065, 077, 093, 097, 101, 106, 111, 157, and 164. |

Pile installation by conventional driving methods to desired embedment depths without pre-drilling was practically not possible, particularly within Pile Zones 3 and 4. Driving piles into weathered rock or competent bedrock will likely result in early refusal and inadequate penetration or may cause excessive pile deflection or damage to pile head or toe. Therefore, it is recommended that all piles located within Pile Zones 3 and 4, pre-drilling of undersized holes will likely be required.

The objective of pre-drilling an undersized hole is to facilitate the driving of the web without disturbing the native soil material supporting the flanges. Additional testing should be completed on piles installed in pre-drilled undersized holes to evaluate the impacts to both axial and lateral capacity. The following recommendations outline pile driving for pre-drilled holes within Pile Zones 3 and 4:

- Tetra Tech recommends that all locations where bedrock is 6 feet or shallower should be predrilled using a drill bit with a diameter approximately 90% of selected W-section diagonal width. The predrilled hole should extend a minimum of 6 inches above the planned embedment depth.
- Auger drilling is expected to penetrate weathered rock material, however, a down-the-hole (DTH) hammer (Secoroc COP M6, DHD 350 or similar) will be required to penetrate competent bedrock material to advance the pre-drilled holes to anticipated design depths.
- The augered hole should be backfilled with loose sand or pea-gravel material.
- W-section pile should be installed within the pre-drilled hole and driven to the anticipated embedment depth through the loosely placed sand or pea-gravel material.
- A pile shoe (for tip protection) may be added to the toe of pile to assist in pile driving installation.

- A geotechnical representative should observe the installation of the pre-drilled holes and pile driving operations on a full-time basis to observe that the appropriate bearing stratum is being penetrated and to observe other pile construction procedures.
- Upon completion of the pre-production pile testing program, Tetra Tech should be retained to analyze load testing results, refine end bearing and skin friction bearing capacities in select shallow rock areas, and replicate LPile analysis with the field program by utilizing parameters including p-y multipliers.

### 7.4.2 FROST DEPTH

Oregon state requires that foundations and footings be placed below the frost line of the locality to protect against frost action during seasonal freezing. The minimum required frost depth for the shallow foundations in Sherman County is anticipated to be 24 inches (2.0 feet) below finished grade (OSSC 2025).

In accordance with Section R403.1.4 (ORSC 2023), the footings may also be protected from frost by insulation methods or by being supported on competent bedrock. Alternatively, for foundations placed on insulation, place footings at a minimum depth of 12 inches, considering an air freezing index of less than 1,500°F-days below the finished grade for frost protection.

### 7.4.3 ADFREEZE CONSIDERATIONS

Given the location of the project and soils encountered, the potential for frost heaving against pile foundations should be considered. Fine-grained soils, or granular soils with greater than 10 percent fine-grained content are frost-susceptible due to the inability to entrap moisture from infiltrating or evaporating prior to freezing. Trapped moisture will begin to create ice lenses, which will grip the steel pile or embedded structures, followed by ice-jacking due to frost heave. The phenomenon is more commonly referred to as “adfreeze stress,” which can be considered as an external, upward force applied to the pile. The magnitude of the upward force will depend on the depth/thickness of the frost zone, the interface bond stress between embedded structure/material and the surrounding area, and the surface area of the structure/material in contact with this bond stress (CGS 2006).

Following the methods outlined in the modified Berggren formula, the freeze-thaw penetration depth is directly proportional to the square root of thermal conductivity of the frozen soil and surface freezing index, and inversely proportional to the square root of volumetric latent heat of the soil. The thermal conductivity of frozen soil is a function of soil type (i.e., fine-grained or coarse-grained), moisture content, and dry density.

$$x = \lambda\sqrt{\frac{48k_{avg}nFI}{L}}$$

Where, x = freeze-thaw (adfreeze) penetration depth (feet);

$k_{avg}$ = thermal conductivity of soil, average of frozen and unfrozen (BTU/hr •ft•°F);

n = conversion factor for air freezing (or thawing) index to surface freezing (or thawing) index;

FI = air freezing index (°F-days); and

L = latent heat (BTU/ft$^3$).

Using various site-specific assumptions and laboratory testing data input into the modified Berggren Equation, the freeze-thaw penetration depth for a 50-year return period at the Project Site is computed to be 18 inches.

As predominantly clayey sand and sandy clay soils were observed near grade, Tetra Tech recommends that an adfreeze (uplift) bond stress of 1,500 psf (10.4 psi) be considered within the 18 inches ($L_f$ = 1.5 feet) freeze-thaw (adfreeze) penetration depth of steel pile for solar array foundation sizing and design (Kibriya & Tahir 2015). Use a Factor of Safety (FOS) of 1.5 to compute the allowable adfreeze (uplift) stress due to freeze-thaw for pile foundation design. The adfreeze stress in a pile can be computed using the equation shown below:

$$F_{ad} = \alpha \, P \bullet L_f \bullet FOS$$

Where, $F_{ad}$ = Allowable adfreeze Stress in pile (lbs.);

P = pile "box" perimeter per foot of pile length (feet) (i.e., W6x9 = 1.63 sf/ft);

$L_f$ = freeze-thaw (adfreeze) penetration depth (feet); and

α = adfreeze bond stress (psf); and

FOS = Factor of Safety.

### 7.4.4 SEISMIC DESIGN PARAMETERS

The seismic design requirements for the foundation design and construction of structures are based on Seismic Site Class "C" and a Risk Category of "I." The seismic design parameters outlined below are recommended for the foundation design and are based on the Section 1613 (OSSC 2025) and ASCE Standard 7 (ASCE/SEI 7-22).

| Description | | ASCE 7-22 |
|---|---|---|
| Site Class (Table 20.3-1 of ASCE, 2022) | | C* |
| Risk Category | | I |
| Seismic Design Category | | C |
| Coefficients for the Maximum Considered Earthquake, $MCE_R$ | Short Period (0.2 seconds), $S_S$ | 0.43** |
| | 1-Second Period, $S_1$ | 0.15** |
| Coefficients for the Maximum Considered Earthquake, $MCE_R$ (Site Modified) | Short Period (0.2 seconds), $S_{MS}$ | 0.48** |
| | 1-Second Period, $S_{M1}$ | 0.21** |
| Coefficients for the Design Earthquake | Short Period (0.2 seconds), $S_{DS}$ | 0.32** |
| | 1-Second Period, $S_{D1}$ | 0.14** |
| Site Modified Peak Ground Acceleration, $PGA_M$ (MCEG) | | 0.21** |

* Referenced Site Latitude and Longitude: 45.365833°, -120.707000°.

** Values were obtained using ASCE/SEI (USGS 2026) website (ASCE 7 Hazard Tool).

### 7.4.5 CORROSION EVALUATION

As shown in **Table 4**, the results of the corrosivity testing indicate that pH of the tested soil ranges from 7.5 to 9.8 and are not expected to contribute to the corrosion of the subgrade metallic structures. The average soil resistivity is 6,027 ohm-cm and the Project Site soils are predominantly considered to be "mildly corrosive" with some "corrosive" areas. The chloride content varies from 3 to 243 ppm, and the Project Site soils will have limited concerns for chloride-induced corrosion on the concrete elements of foundation. The sulfate content varies from <15 to 210 ppm, and the Project Site soils are not expected to significantly contribute to the corrosion of the steel posts. The redox potential varies from 103 to 276 mV, and the Project Site soils are predominantly considered to be "moderately corrosive" in terms of oxidizing capacity of the soil. The "Soil Corrosivity Classifications" were defined based on laboratory and field-testing results following the standard corrosion rate criteria provided by US National Bureau of Standards, and are included in **Appendix G**.

A Site corrosion evaluation was performed by a certified corrosion professional to determine the corrosion protection and service life of the steel and copper at above-grade (atmospheric) and below-grade (soil). Out of combined 200 tests (i.e., 80 lab electrical resistivity and 120 field ERT), 165 tests (82.5%) resulted as "mildly corrosive," and 35 tests (17.5%) resulted as "corrosive." The Corrosion Evaluation Report is included in **Appendix G**.

The atmospheric (above-grade) corrosivity at the Project Site is considered as "low corrosivity" for both steel and zinc coating. It is estimated that after 35 years of usage, 91% (or 68.8 µm) of the hot-dipped galvanization (HDG) zinc coating will remain, and 62% (or 11.8 µm) of the G90 zinc coating will remain. If G90 coating is selected, limited corrosion is expected on the surface of the steel posts. If HDG coating is selected, only aesthetic corrosion is expected at the end of the 35-year design life.

The overall soil (below-grade) corrosivity at the Project Site is considered as "Mildly Corrosive" with some "Corrosive" spots. At the end of the 35-year design life, it is anticipated that 0.07% (or 0.23 mils) of copper wire is expected to corrode in mildly corrosive soil environment, and 0.3% (or 0.96 mils) of copper wire is expected to corrode in corrosive soil environment.

In mildly corrosive soil environment, it is anticipated that 3 mils of HDG zinc coating will take approximately 22 years to be completely corroded. Limited corrosion (9% or 15.4 mils) is expected for the buried steel at the end of the 35-year design life. In corrosive soil environment, it is anticipated that 3 mils of HDG zinc coating will take approximately 13 years to be completely corroded. Some corrosion (25.2% or 42.9 mils) is expected for the buried steel at the end of the 35-year design life. It is recommended that the steel piles be designed with some corrosion allowances.

### 7.4.6 GROUNDWATER CONTROL

Based on groundwater levels measured in the borings, foundation excavations are expected to be situated above the ambient groundwater elevation at the Project Site. Dewatering may not be required for the proposed construction. Contractor shall maintain all foundation soil/rock materials relative to exposure time and saturation by surface runoff to prevent degradation of the soil/rock through oversaturation and loss of strength. Divert all surface runoff away from project excavations using curbing or appropriate barriers. The Contractor must (as much as practical) maintain a dry subgrade at all times.

### 7.4.7 TEMPORARY EXCAVATION SUPPORT

Open-cut excavations will be required to allow construction of the structure foundations. Shoring is not anticipated during the construction.

Design and construct foundation excavations in accordance with Occupational Safety and Health Administration (OSHA) requirements. Use the following soil parameters for the computation of Lateral Earth Pressure:

- Soil Effective Unit Weight, $\gamma'$ = 120 pcf
- Soil Effective Friction Angle, $\Phi'$ = 34°
- At-Rest Lateral Earth Pressure Coefficient, $K_o$ = 0.44
- Active Lateral Earth Pressure Coefficient, $K_a$ = 0.28
- Passive Lateral Earth Pressure Coefficient, $K_p$ = 3.54

## 7.5 ACCESS ROADS

Tetra Tech understands that the proposed development also includes the construction of gravel access roads connected to the existing adjacent State or Local Road(s). Based on the Site topography and subsurface conditions encountered, the use of on-site soils as a subgrade for construction of gravel roads is acceptable for periodic traffic for operations and maintenance personnel.

For gravel access roads around solar panel systems consisting of lightly loaded vehicles (10,000 to 30,000 18-kip Equivalent Single Axle Load [ESAL] traffic load), use 8-inch-thick compacted aggregates or crushed stone (similar to AASHTO No. 1) placed on a biaxial geogrid. For gravel access roads around substation consisting of heavy loaded vehicles (60,000 to 100,000 18-kip ESAL traffic load), use 14-inch-thick compacted aggregates or crushed stone (similar to AASHTO No. 1) placed on a biaxial geogrid.

The surficial soils and vegetation should be stripped, and the subgrade should be compacted to 95% of maximum dry density as determined by the Standard Proctor test (ASTM D698). After compaction of the subgrade, a biaxial geogrid (Class 2, Type A or Type B) should be placed over which aggregate should be compacted to a condition of non-movement under the compaction equipment.

Compacted native soil roads may pump and yield, increase in rut depth, and unstable conditions could develop during construction operations, particularly if the soils increase in moisture content and/or are subjected to repetitive construction traffic. If pumping and rut depths become excessive as construction work progresses, regrading and recompaction should be performed, as necessary. Care should be taken to reduce or eliminate trafficking of the unpaved access roads when the subgrade is relatively high in moisture content as this will result in accelerated rutting conditions. Scarification, moisture treatment as necessary, and recompaction of the roadways will likely be necessary as the roadways deteriorate. Cement stabilization of the subgrade may be recommended should rutting of the access road(s) persist.

# 8.0 GENERAL EXCAVATION AND COMPACTION REQUIREMENTS

## 8.1 STRIPPING AND GRUBBING

The "footprint" of the proposed structures and the parking/drive areas, plus a minimum margin of five feet, should be stripped of all surface vegetation, stumps, debris, organic topsoil, or other deleterious materials, as encountered. Buried utilities, if present, should be removed or plugged to eliminate conduits into which surrounding soils could erode.

After stripping, the Site should be grubbed or root-raked such that roots with a diameter greater than ½ inch, stumps, or small roots in a dense state, are completely removed. The actual depth(s) of stripping and grubbing must be determined by visual observation and judgment during the earthwork operation.

All existing foundations, slabs, asphalt, and any other underground structures should be removed from the proposed construction area. If pipes or any collapsible or leak prone utilities are not removed or completely filled (with grout or concrete), they might serve as conduits for subsurface erosion resulting in excessive settlements. Over-excavated areas resulting from the removal of underground structures and unsuitable materials (free of organic matter, coal, carbonaceous materials or other objectionable matter) should be backfilled in accordance with the fill soils section of this report.

## 8.2 SITE GRADING

The Site should be graded to direct surface runoff away from structures and foundations. A minimum of 6-inch fall in the first 10 feet adjacent to structures is recommended.

Moisture management will be a principal factor in foundation performance. The Site should be graded to prevent ponding of water near structures and plantings with high water demand should be avoided near structures. Stabilizing the upper soils with amendments such as lime, cement or pozzolanic fly ash would improve the soil behavior. Although not required at the Site, replacement of the upper soils with non-expansive, low-permeability soils would also improve the behavior of compaction efforts.

## 8.3 PROOF-ROLLING

Tetra Tech recommends proof-rolling the cleared surface to locate any unforeseen soft areas or unsuitable surface or near-surface soils, to increase the density of the upper soils, and to prepare the existing surface for the addition of the fill soils (as required). Proof-rolling should consist of at least 10 passes of a compactor capable of achieving the density requirements described in this section of the report. Each pass should overlap the preceding pass by 30 percent to achieve complete coverage. If deemed necessary, in areas that continue to "yield", remove all deleterious material and replace it with clean, compacted structural fill. The proof-rolling should occur after cutting and before filling. The number of passes can be reduced to 3 within the proposed parking/drive areas.

A density equivalent to or greater than 95 percent of the Standard Proctor (ASTM D698) maximum dry density for a depth of 2 feet in the structure areas and 1-foot in the parking/drive areas must be achieved beneath the stripped and grubbed ground surface. Additional passes and/or over-excavation

and re-compaction may be required if these minimum density requirements are not achieved. The soil moisture should be adjusted as necessary during compaction.

Care should be exercised to avoid damaging any neighboring structures while the compaction operation is underway. Prior to commencing compaction, occupants of adjacent structures should be notified and the existing condition (i.e., cracks) of the structures documented with photographs and survey (if deemed necessary). Compaction should cease if deemed detrimental to adjacent structures. Heavy vibratory compaction should not be used within 200 feet of existing structures.

## 8.4 CUT SLOPES

Construction may require temporary excavations into native soils. Safe, stable construction slopes are the responsibility of the Contractor and depend on the ground and site conditions encountered at the time of construction. Temporary cut slopes in soil at the Project Site should not be steeper than 1.5H to 1.0V.

In general, permanent soil slopes should be constructed no steeper than 2.0H to 1.0V, and flatter slopes should be provided where possible. Steeper slopes will be more difficult to maintain and subject to erosion problems. Any permanent slopes in excess of 10 feet in height should be reviewed by a geotechnical engineer. The surficial soil(s) at the Project Site are susceptible to erosion, and thus drainage control along the slope crest and slope face is important. The crest of slopes should be graded at two percent to promote drainage away from the slope face.

No formal stability analyses were performed to evaluate the subsequent slope recommendations. Published regulations, literature, and our experience with similar cuts and fills indicate the recommended slopes should have adequate factors of safety. If a detailed stability analysis is required, Tetra Tech should be notified.

## 8.5 CLIMATE CONSIDERATIONS

Snow and freezing temperatures have the potential to impact construction. Prolonged periods of freezing weather in the months of December through February may be difficult for construction since it is difficult to place concrete in subfreezing temperatures. Fill should not be placed during freezing temperatures, especially during winter months, unless construction practices are altered to compensate for these conditions. Under no circumstances should foundations be constructed on frozen materials.

## 8.6 STRUCTURAL FILL MATERIAL AND COMPACTION

Structural fill materials, for solar arrays equipment pads and substation mat foundations, should be free of unsuitable materials (free of organic matter such as roots and vegetation, coal, carbonaceous materials or other objectionable matter) and should comply with the latest Oregon Department of Transportation (ODOT) Section 330 – Earthwork Specifications (OSSC 2024).

Tetra Tech recommends using structural fill with less than 15 percent by dry weight of material passing the U.S. Standard No. 200 sieve size and the plasticity index of less than 6. Soils with more than 15 percent passing the No. 200 sieve can be used in some applications but will be more difficult to compact due to their inherent nature to retain soil moisture.

The structural fills should be placed in level lifts not to exceed 8 inches in uncompacted thickness. Each lift should be compacted to at least 97 percent of the Standard Proctor (ASTM D698) maximum dry density. Maintain soil within ±3 percent of optimum moisture content. The filling and compaction operations should continue in lifts until the desired elevation(s) is achieved. If hand-held compaction equipment is used, the lift thickness should be reduced to no more than 6 inches.

The compacted structural fills should be placed within the zone of influence of shallow foundations or equipment pads, as defined by a 1H:1V line, sloping downward and outward from 1-foot outside the bottom edge of footings/pads to the frost depth (i.e., 24 inches).

## 8.7 ON-SITE MATERIAL AND COMPACTION

The Project Site soils consist predominantly of Sandy Silty Clay / Silty Clay with Sand (CL-ML), Sandy Silt (ML), Lean Clay (CL), Silty Clayey Sand (SC-SM) and Silty Sand (SM) which can be used as a general fill material for embankments or other non-structural fill areas.

The general fill materials for embankment should be placed in level lifts not to exceed 8 inches in uncompacted thickness. Each lift should be compacted to at least 95 percent of the Standard Proctor (ASTM D698) maximum dry density. Maintain soil within ±3 percent of optimum moisture content. The filling and compaction operations should continue in lifts until the desired elevation(s) is achieved. Compact the upper 2 feet of soil layer to a stable condition so there is no rutting, displacement, or shear wave (i.e., bulging of soil surface in front and behind the roller) under compaction equipment.

# 9.0 ADDITIONAL GEOTECHNICAL INVESTIGATION

Additional geotechnical borings and testing may be warranted based on the final design layout of solar PV arrays, substation, and other project structures. Infiltration testing will be required for the Stormwater Best Management Practices (BMPs).

Once the BESS and WTGs location are finalized, additional geotechnical investigation should be conducted to characterize the Site adequately and for the design of cost-effective foundation system.

A pile load testing program is recommended to be performed on production piles. For conventional directly driven piles, Tetra Tech recommends a minimum of 1% of piles or one (1) pile per block as confirmatory pile tests during construction. For pre-drilled piles, Tetra Tech recommends that verification testing be performed on 100% of piles for the first 50 piles, until a pattern has been established. Thereafter, one pile per 10 pre-drilled locations, with a minimum of one (1) pile per block, should be tested for up to 1,000 piles. For greater than 1,000 piles per block, one pile per 25 pre-drilled locations should be tested. Alternatively, the production piles quality control testing frequency should follow the minimum criteria established by the Engineering, Procurement and Construction (EPC's) racking manufacturer/supplier or the EPC's structural engineer.

# 10.0 CONTINUING SERVICES

Two additional elements of geotechnical engineering service are important to the successful completion of this project:

**Consultation with Tetra Tech during the design phase.** This is essential to ensure that the intent of the recommendations is incorporated in design decisions related to the Project and the changes required in the design concept considering geotechnical aspects.

**Observation and monitoring during construction.** Tetra Tech should be retained to observe the earthwork phases of the project, including the site grading and excavations, to determine that the subsurface conditions are compatible with those described in our analysis. In addition, if environmental contaminants or other concerns are discovered in the subsurface, Tetra Tech personnel are available for consultation.

# 11.0 REPORT LIMITATIONS

The results, recommendations, and conclusions provided are based on Tetra Tech's preliminary investigation, which included field observations, subsurface explorations, laboratory tests and our present knowledge of the Site. It is possible that soil, rock, or groundwater conditions could vary between or beyond the points explored. If soil, rock, or groundwater conditions are encountered during construction that differ from those described herein, then Brookfield is responsible for ensuring that Tetra Tech is notified immediately so that we may reevaluate the recommendations of this report. This report is limited to the preliminary Site layout and boring locations investigated at the time of this report and the assumption that borings presented in the report are representative of the subsurface condition throughout the Site. If the Site layout is changed to incorporate new areas of the Site, additional soil testing may be recommended to evaluate whether soil conditions at the relocated areas are of similar characteristics to that assumed when designing this project.

Tetra Tech makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided. Tetra Tech has strived to perform our services in a manner consistent with that level of care and skill ordinarily exercised by other members of our profession currently practicing in the same locality under similar conditions at the time the services are provided. Tetra Tech's conclusions, opinions, and recommendations are based on a limited number of observations and data. It is likely that conditions may vary from any specific location tested and there may be undisclosed subsurface conditions that may require special consideration once these conditions are revealed during construction. It is understood that future additional geotechnical investigation may be performed to supplement the preliminary findings and recommendations presented in this report as the project progresses. Careful attention to soil conditions should be undertaken during the time of construction by qualified personnel.

This report may be used only by Brookfield and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than three years from the date of the report. The results, conclusions, and recommendations contained in this report are directed at and intended to be within the scope of work contained in the agreement executed by Tetra Tech and Brookfield. This report is not intended for any other purposes. Tetra Tech makes no claim or representation concerning any activity or condition falling outside the specified purposes to which this report is directed, said purposes being specifically limited to the scope of work as defined in our agreement. Inquiries regarding our scope of work or concerning any activity or condition not specifically contained therein should be directed to Tetra Tech for evaluation and, if necessary, further investigation.

Tetra Tech offers many levels of investigative and engineering services to meet the varied needs of different clients. Although risk can never be eliminated, more detailed and extensive studies provide more information, which may help understand and manage the level of risk. Since detailed study and analysis involves greater expense, our clients participate in determining levels of service, which provide information for their purposes at acceptable levels of risk. Brookfield and key members of the design team should discuss the issues covered in this report with Tetra Tech so that the issues are understood and applied in a manner consistent with the owner's budget, tolerance of risk and expectations for future performance and maintenance.

The work performed was based on project information provided by Brookfield and the registered design professional. Once the project construction plans are completed, Tetra Tech should be retained to review the plans and specifications and confirm that its recommendations were properly incorporated.

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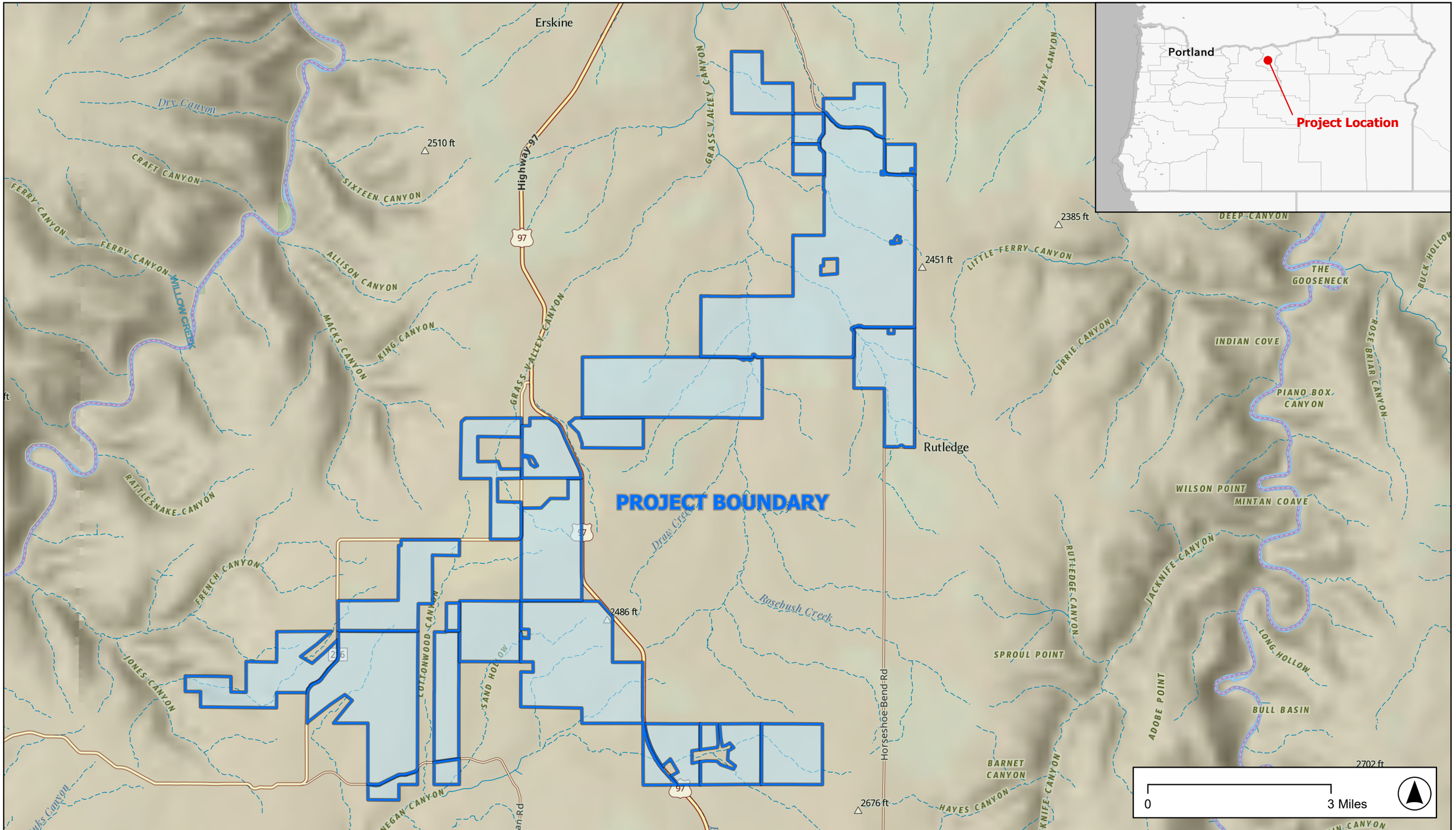
# FIGURES

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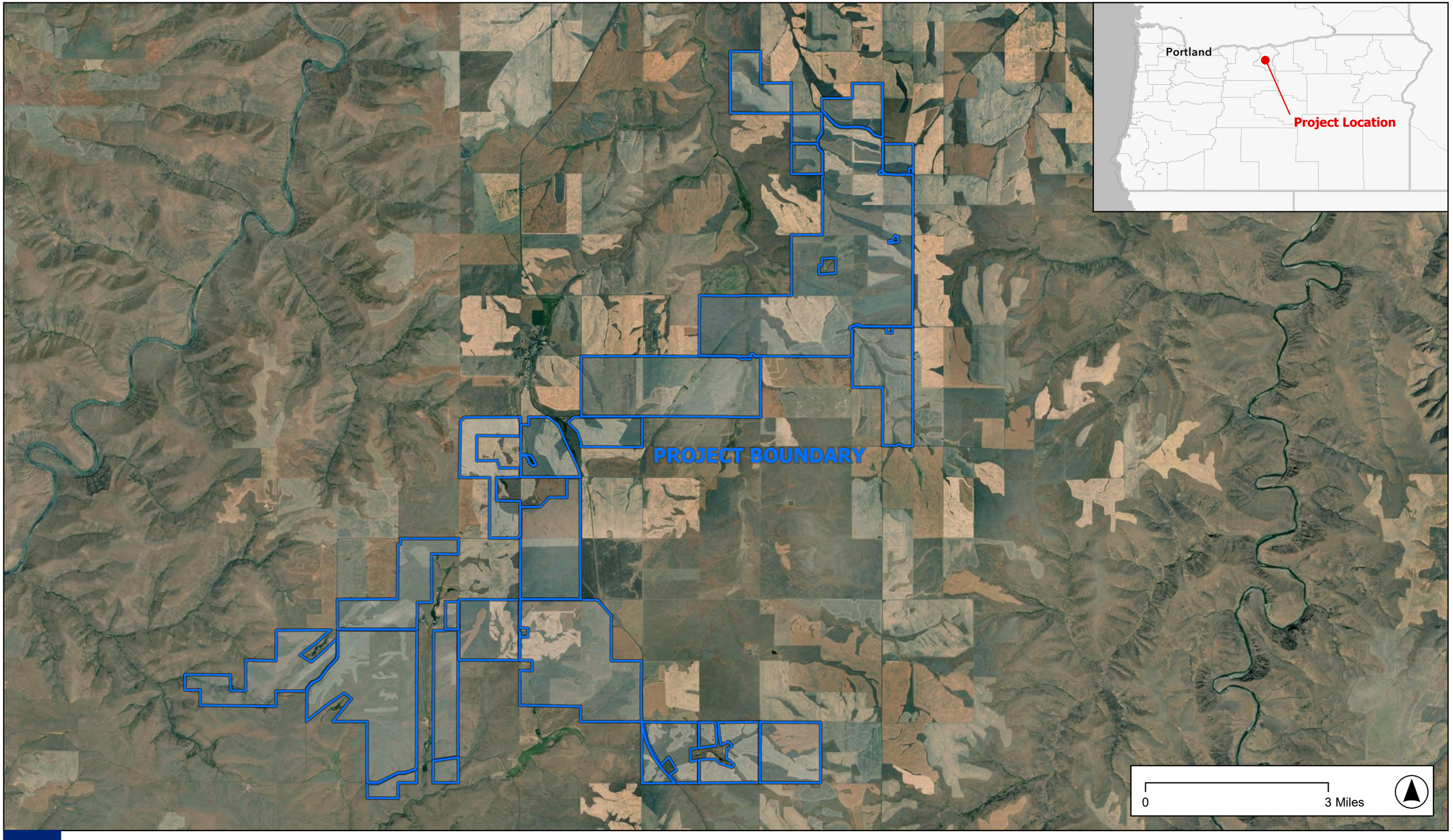
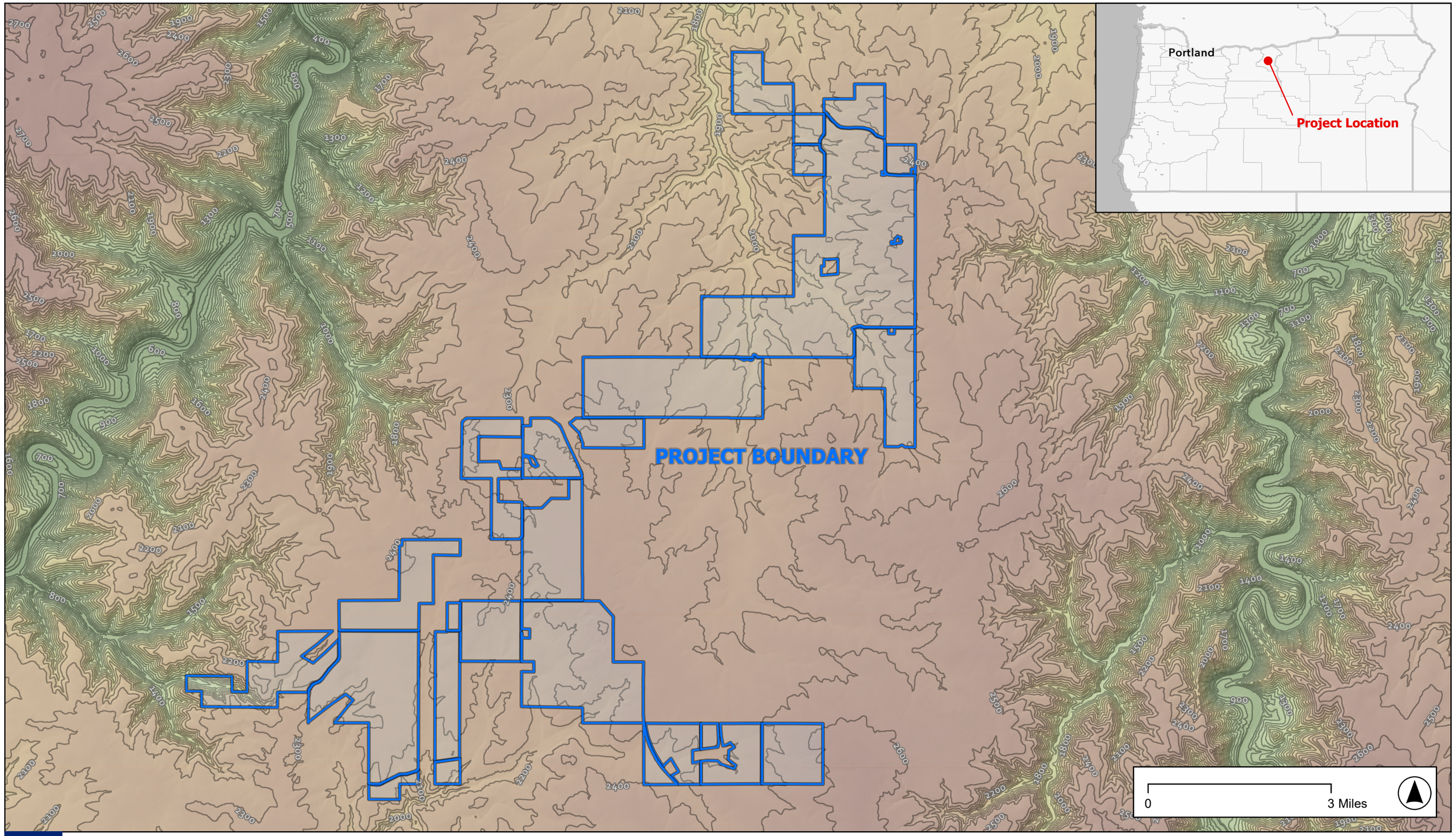
**PROJECT LOCATION MAP**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 1**

Path: E:\Speedway Solar\Speedway Solar.aprx - Map By: BRS - Date: 11/24/2025




TETRA TECH

**PROJECT AERIAL MAP**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 2**

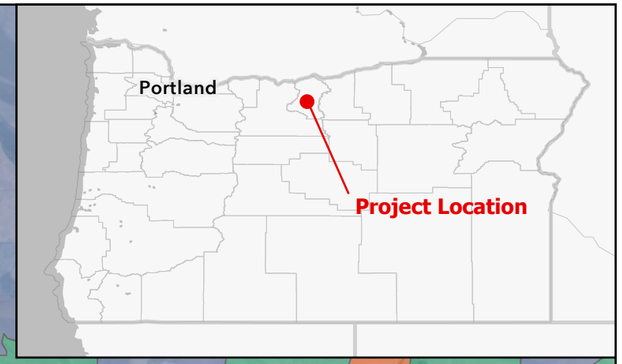



TETRA TECH

**SITE TOPOGRAPHY MAP**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 3**

Path: E:\Speedway Solar\Speedway Solar.aprx - Map By: BRS - Date: 11/24/2025

Frenchman Springs Member of Yakima Basalt (Tf)
Grande Ronde Basalt, upper flow of normal magnetic polarity (Tgn2)
Grande Ronde Basalt, upper flow of reversed magnetic polarity (Tgr2)

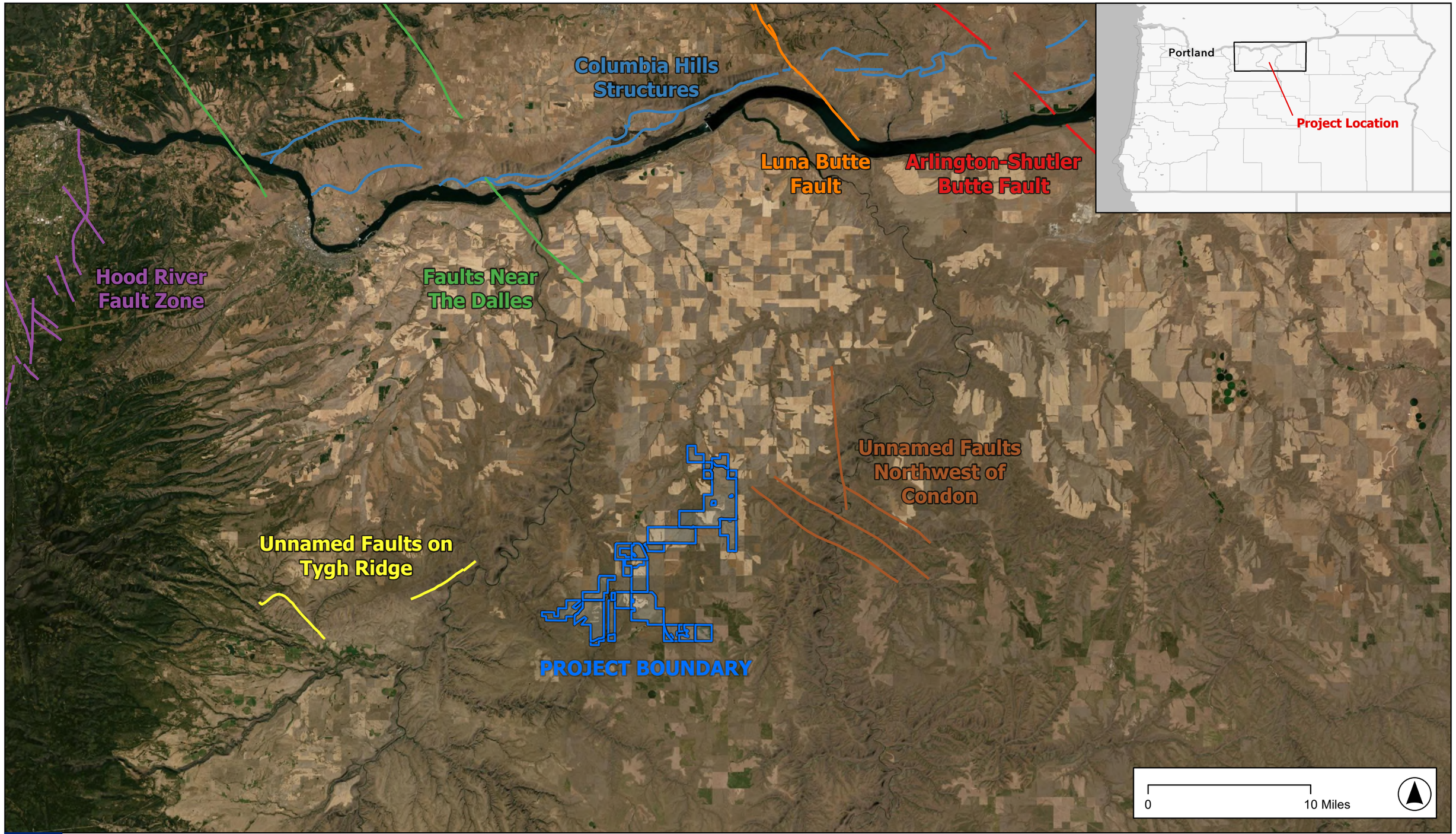



Tgr2
Tgn2
Tf
PROJECT BOUNDARY
Tf
Tf
Tf
Tf
Tgr2
Tf
Tgn2
Tf

0
3 Miles

TETRA TECH

**SITE GEOLOGY MAP**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 4**




TETRA TECH

**QUATERNARY FAULTS MAP**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 5**

# TABLES

## Table 1. Summary of Geotechnical Field Investigation

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUBSTATION (POINT OF INTERCONNECTION)** | | | | | | | | | | | | |
| SB-01 | 45.366511 | -120.706214 | 2162.8 | 6.00 | 17 | 38.00 | --- | 2 to 5 | IT-SB-01 | 1.46 | ERT-SB-01 | 151 |
| SB-02 | 45.364915 | -120.707647 | 2205.9 | 5.00 | 16 | 35.00 | 5.00 | 2 to 5 | IT-SB-02 | 0.41 | ERT-SB-02 | 175 |
| **WIND TURBINE GENERATORS** | | | | | | | | | | | | |
| WTG-01 | 45.418328 | -120.701084 | 2217.3 | 7.00 | NE | 40.00 | --- | 2 to 5 | IT-WTG-01 | 1.08 | ERT-WTG-01 | 149 |
| WTG-02 | 45.392519 | -120.664970 | 2361.6 | 4.00 | NE | 35.00 | 4.00 | 2 to 5 | IT-WTG-02 | 0.47 | ERT-WTG-02 | 117 |
| WTG-03 | 45.354610 | -120.672454 | 2328.7 | 3.00 | 35 | 35.00 | 3.00 | 2 to 5 | IT-WTG-03 | 0.65 | ERT-WTG-03 | 171 |
| WTG-04 | 45.342446 | -120.805997 | 2404.7 | 4.50 | NE | 34.00 | --- | 2 to 5 | IT-WTG-04 | 1.02 | ERT-WTG-04 | 89 |
| WTG-05 | 45.299634 | -120.843742 | 2343.1 | 4.00 | NE | 35.00 | --- | 2 to 5 | IT-WTG-05 | 1.45 | ERT-WTG-05 | 109 |
| WTG-06 | 45.264318 | -120.814433 | 2253.2 | 3.50 | NE | 35.00 | --- | 2 to 5 | IT-WTG-06 | 2.12 | ERT-WTG-06 | 251 |
| WTG-07 | 45.298202 | -120.760601 | 2483.9 | 3.00 | NE | 35.00 | --- | 2 to 5 | IT-WTG-07 | 1.46 | ERT-WTG-07 | 123 |
| WTG-08 | 45.265595 | -120.705637 | 2504.9 | 3.00 | NE | 35.00 | --- | 1 to 2 | IT-WTG-08 | 2.00 | ERT-WTG-08 | 232 |
| **SOLAR PV ARRAYS** | | | | | | | | | | | | |
| PV-001 | 45.430996 | -120.713495 | 2151.2 | 8.00 | NE | 8.00 | --- | 2 to 5 | --- | --- | ERT-PV-001 | 108 |
| PV-002 | 45.428720 | -120.709512 | 2151.8 | 7.00 | NE | 7.00 | 6.00 | --- | --- | --- | --- | --- |
| PV-003 | 45.424325 | -120.715278 | 2098.1 | 3.00 | NE | 3.00 | 2.00 | 2 to 5 | --- | --- | ERT-PV-003 | 99 |
| PV-004 | 45.420839 | -120.709518 | 2192.2 | 8.00 | NE | 8.00 | 8.00 | --- | --- | --- | --- | --- |
| PV-005 | 45.422097 | -120.701641 | 2189.7 | 15.00 | NE | 15.00 | --- | --- | --- | --- | --- | --- |
| PV-006 | 45.414762 | -120.695889 | 2210.9 | 4.00 | NE | 4.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-007 | 45.415826 | -120.689944 | 2225.0 | 9.00 | NE | 9.00 | --- | --- | --- | --- | ERT-PV-007 | 91 |
| PV-008 | 45.419679 | -120.679930 | 2258.9 | 5.75 | NE | 5.75 | 5.00 | 2 to 5 | IT-PV-008 | 1.60 | ERT-PV-008 | 205 |
| PV-009 | 45.423206 | -120.674032 | 2245.7 | 9.75 | NE | 9.75 | --- | --- | --- | --- | --- | --- |
| PV-010 | 45.420072 | -120.669747 | 2313.3 | 8.00 | NE | 8.00 | --- | --- | --- | --- | --- | --- |
| PV-011 | 45.416049 | -120.679078 | 2279.1 | 9.25 | NE | 9.25 | --- | --- | --- | --- | --- | --- |
| PV-012 | 45.416833 | -120.672312 | 2310.9 | 3.60 | NE | 3.60 | 3.00 | 2 to 5 | --- | --- | ERT-PV-012 | 168 |
| PV-013 | 45.413006 | -120.684450 | 2261.5 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-014 | 45.412067 | -120.676840 | 2274.7 | 3.75 | NE | 3.75 | 3.50 | --- | --- | --- | ERT-PV-014 | 241 |
| PV-015 | 45.407983 | -120.692374 | 2229.9 | 7.10 | NE | 7.10 | 7.50 | 2 to 5 | --- | --- | ERT-PV-015 | 138 |
| PV-016 | 45.409351 | -120.680115 | 2270.4 | 5.75 | NE | 5.75 | 5.00 | 2 to 5 | --- | --- | ERT-PV-016 | 196 |
| PV-017 | 45.407696 | -120.675105 | 2306.0 | 13.90 | NE | 13.90 | --- | --- | --- | --- | --- | --- |
| PV-018 | 45.403427 | -120.690515 | 2239.0 | 5.75 | NE | 5.75 | 6.00 | --- | --- | --- | --- | --- |
| PV-019 | 45.404400 | -120.682816 | 2271.2 | 9.00 | NE | 9.00 | --- | --- | --- | --- | ERT-PV-019 | 148 |
| PV-020 | 45.405306 | -120.669678 | 2347.4 | 7.33 | NE | 7.33 | 7.75 | --- | --- | --- | --- | --- |
| PV-021 | 45.407941 | -120.665229 | 2349.9 | 5.25 | NE | 5.25 | 5.00 | 2 to 5 | IT-PV-021 | 0.89 | ERT-PV-021 | 86 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-022 | 45.407223 | -120.658786 | 2405.0 | 6.83 | NE | 6.83 | 7.00 | --- | --- | --- | --- | --- |
| PV-023 | 45.400294 | -120.685407 | 2227.9 | 2.50 | NE | 2.50 | 4.00 | --- | --- | --- | --- | --- |
| PV-024 | 45.399173 | -120.678868 | 2330.8 | 3.75 | NE | 3.75 | 4.00 | 2 to 5 | IT-PV-024 | 1.90 | ERT-PV-024 | 174 |
| PV-025 | 45.401106 | -120.673740 | 2317.8 | 5.10 | NE | 5.10 | 7.25 | --- | --- | --- | ERT-PV-025 | 145 |
| PV-026 | 45.400770 | -120.664627 | 2382.3 | 6.25 | NE | 6.25 | 6.42 | 2 to 5 | --- | --- | ERT-PV-026 | 93 |
| PV-027 | 45.397174 | -120.668704 | 2361.4 | 4.00 | NE | 4.00 | 4.00 | --- | --- | --- | --- | --- |
| PV-028 | 45.396944 | -120.659867 | 2425.0 | 8.00 | NE | 8.00 | --- | --- | --- | --- | --- | --- |
| PV-029 | 45.393858 | -120.680976 | 2280.2 | 8.10 | NE | 8.10 | --- | 2 to 5 | --- | --- | ERT-PV-029 | 118 |
| PV-030 | 45.391864 | -120.671600 | 2348.1 | 7.00 | NE | 7.00 | 6.75 | --- | --- | --- | ERT-PV-030 | 112 |
| PV-031 | 45.389563 | -120.679796 | 2290.3 | 8.00 | NE | 8.00 | --- | --- | --- | --- | --- | --- |
| PV-032 | 45.389329 | -120.659548 | 2424.4 | 4.67 | NE | 4.67 | 3.00 | --- | --- | --- | --- | --- |
| PV-033 | 45.387155 | -120.693501 | 2270.2 | 5.50 | NE | 5.50 | 5.00 | --- | --- | --- | --- | --- |
| PV-034 | 45.386547 | -120.684859 | 2293.4 | 7.00 | NE | 7.00 | 7.00 | 2 to 5 | IT-PV-034 | 2.02 | ERT-PV-034 | 182 |
| PV-035 | 45.382487 | -120.679554 | 2248.6 | 1.50 | NE | 1.50 | 1.50 | --- | --- | --- | ERT-PV-035 | 259 |
| PV-036 | 45.386289 | -120.675007 | 2303.2 | 1.00 | NE | 1.00 | 1.00 | 0.5 to 1 | --- | --- | ERT-PV-036 | 374 |
| PV-037 | 45.382203 | -120.674224 | 2326.3 | 1.50 | NE | 1.50 | 1.75 | --- | --- | --- | --- | --- |
| PV-038 | 45.386351 | -120.669264 | 2370.6 | 2.40 | NE | 2.40 | 2.00 | --- | --- | --- | --- | --- |
| PV-039 | 45.385494 | -120.659427 | 2446.2 | 5.75 | NE | 5.75 | 5.75 | --- | --- | --- | --- | --- |
| PV-040 | 45.383248 | -120.664349 | 2414.8 | 3.25 | NE | 3.25 | 3.50 | 2 to 5 | --- | --- | ERT-PV-040 | 109 |
| PV-041 | 45.381825 | -120.658264 | 2447.6 | 3.67 | NE | 3.67 | 3.00 | --- | --- | --- | --- | --- |
| PV-042 | 45.380388 | -120.664443 | 2389.8 | 2.25 | NE | 2.25 | 2.00 | --- | --- | --- | --- | --- |
| PV-043 | 45.375297 | -120.692235 | 2165.5 | 3.00 | NE | 3.00 | 3.00 | 2 to 5 | --- | --- | ERT-PV-043 | 254 |
| PV-044 | 45.377898 | -120.679077 | 2235.6 | 4.50 | NE | 4.50 | 4.00 | --- | --- | --- | --- | --- |
| PV-045 | 45.376100 | -120.675146 | 2309.2 | 18.80 | NE | 18.80 | --- | 2 to 5 | IT-PV-045 | 2.08 | ERT-PV-045 | 143 |
| PV-046 | 45.377642 | -120.669282 | 2349.5 | 3.75 | NE | 3.75 | 3.00 | --- | --- | --- | --- | --- |
| PV-047 | 45.376097 | -120.662612 | 2353.8 | 3.00 | NE | 3.00 | 2.50 | 2 to 5 | --- | --- | ERT-PV-047 | 77 |
| PV-048 | 45.370783 | -120.674986 | 2289.6 | 6.00 | NE | 6.00 | 7.00 | --- | --- | --- | --- | --- |
| PV-049 | 45.372377 | -120.667336 | 2320.3 | 3.60 | NE | 3.60 | 3.60 | 2 to 5 | --- | --- | ERT-PV-049 | 45 |
| PV-050 | 45.372267 | -120.660649 | 2411.9 | 3.50 | NE | 3.50 | 3.50 | --- | --- | --- | --- | --- |
| PV-051 | 45.369009 | -120.658921 | 2385.4 | 1.75 | NE | 1.75 | 1.50 | --- | --- | --- | ERT-PV-051 | 47 |
| PV-052 | 45.364188 | -120.672013 | 2219.1 | 2.00 | NE | 2.00 | 1.50 | 2 to 5 | --- | --- | ERT-PV-052 | 15 |
| PV-053 | 45.362278 | -120.660123 | 2395.9 | 4.00 | NE | 4.00 | 4.00 | --- | --- | --- | --- | --- |
| PV-054 | 45.358397 | -120.672586 | 2272.3 | 2.00 | NE | 2.00 | 2.00 | --- | --- | --- | --- | --- |
| PV-055 | 45.353136 | -120.659129 | 2391.1 | 2.00 | NE | 2.00 | 2.20 | --- | --- | --- | --- | --- |
| PV-056 | 45.349582 | -120.664011 | 2302.5 | 2.20 | NE | 2.20 | 2.00 | --- | --- | --- | ERT-PV-056 | 15 |
| PV-057 | 45.346077 | -120.661456 | 2345.5 | 2.25 | NE | 2.25 | 2.00 | --- | --- | --- | --- | --- |
| PV-058 | 45.342232 | -120.660105 | 2365.2 | 2.40 | NE | 2.40 | 2.00 | 2 to 5 | IT-PV-058 | 1.14 | ERT-PV-058 | 46 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-059 | 45.340436 | -120.665394 | 2356.0 | 2.00 | NE | 2.00 | 1.80 | --- | --- | --- | --- | --- |
| PV-060 | 45.367861 | -120.683041 | 2237.4 | 7.00 | NE | 7.00 | 7.50 | --- | --- | --- | ERT-PV-060 | 17 |
| PV-061 | 45.362391 | -120.679794 | 2221.7 | 3.60 | NE | 3.60 | 3.20 | --- | --- | --- | --- | --- |
| PV-062 | 45.360461 | -120.685734 | 2341.9 | 4.00 | NE | 4.00 | 4.00 | --- | --- | --- | ERT-PV-062 | 69 |
| PV-063 | 45.361463 | -120.694296 | 2304.4 | 2.60 | NE | 2.60 | 3.50 | --- | --- | --- | --- | --- |
| PV-064 | 45.365887 | -120.689399 | 2287.6 | 4.00 | NE | 4.00 | 4.00 | 2 to 5 | --- | --- | ERT-PV-064 | 176 |
| PV-065 | 45.370370 | -120.694643 | 2240.5 | 6.10 | NE | 6.10 | 5.00 | --- | --- | --- | --- | --- |
| PV-066 | 45.370823 | -120.703087 | 2243.8 | 2.75 | NE | 2.75 | 3.50 | --- | --- | --- | --- | --- |
| PV-067 | 45.361033 | -120.702900 | 2259.0 | 3.60 | NE | 3.60 | 3.50 | --- | --- | --- | --- | --- |
| PV-068 | 45.371777 | -120.710333 | 2162.4 | 1.40 | NE | 1.40 | 1.50 | 2 to 5 | --- | --- | ERT-PV-068 | 71 |
| PV-069 | 45.371610 | -120.721370 | 2219.9 | 2.00 | NE | 2.00 | 2.00 | --- | --- | --- | --- | --- |
| PV-070 | 45.365894 | -120.714369 | 2138.3 | 1.50 | NE | 1.50 | 1.00 | --- | --- | --- | --- | --- |
| PV-071 | 45.366826 | -120.725439 | 2241.9 | 1.00 | NE | 1.00 | 1.00 | 2 to 5 | --- | --- | ERT-PV-071 | 272 |
| PV-072 | 45.360977 | -120.716950 | 2209.5 | 5.00 | NE | 5.00 | 5.00 | --- | --- | --- | ERT-PV-072 | 29 |
| PV-073 | 45.362599 | -120.726006 | 2185.7 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-074 | 45.357056 | -120.722846 | 2242.3 | 1.75 | NE | 1.75 | 3.00 | 2 to 5 | --- | --- | ERT-PV-074 | 23 |
| PV-075 | 45.351872 | -120.711026 | 2223.0 | 0.60 | NE | 0.60 | 1.00 | --- | --- | --- | --- | --- |
| PV-076 | 45.353656 | -120.717110 | 2245.4 | 4.00 | NE | 4.08 | 4.00 | --- | --- | --- | ERT-PV-076 | 30 |
| PV-077 | 45.351940 | -120.726878 | 2282.8 | 8.50 | NE | 8.75 | --- | --- | --- | --- | --- | --- |
| PV-078 | 45.346405 | -120.711835 | 2265.7 | 1.25 | NE | 1.25 | 1.00 | --- | --- | --- | --- | --- |
| PV-079 | 45.349202 | -120.721550 | 2268.2 | 3.00 | NE | 3.00 | 3.00 | 2 to 5 | IT-PV-079 | 0.65 | ERT-PV-079 | 32 |
| PV-080 | 45.345470 | -120.720368 | 2267.6 | 4.50 | NE | 4.50 | 5.00 | --- | --- | --- | --- | --- |
| PV-081 | 45.346568 | -120.729788 | 2321.2 | 4.50 | NE | 4.60 | 4.00 | 2 to 5 | --- | --- | ERT-PV-081 | 19 |
| PV-082 | 45.357015 | -120.733148 | 2278.2 | 2.90 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-083 | 45.357065 | -120.744120 | 2335.2 | 3.30 | NE | 3.50 | 3.50 | --- | --- | --- | --- | --- |
| PV-084 | 45.353323 | -120.736833 | 2271.1 | 9.25 | NE | 9.25 | --- | 2 to 5 | --- | --- | ERT-PV-084 | 11 |
| PV-085 | 45.352260 | -120.746017 | 2364.8 | 1.50 | NE | 1.92 | 1.50 | --- | --- | --- | --- | --- |
| PV-086 | 45.346465 | -120.745630 | 2340.6 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | ERT-PV-086 | 16 |
| PV-087 | 45.357323 | -120.752607 | 2362.9 | 5.00 | NE | 5.45 | 5.00 | --- | --- | --- | --- | --- |
| PV-088 | 45.356902 | -120.764844 | 2384.4 | 6.00 | NE | 6.00 | 6.00 | --- | --- | --- | --- | --- |
| PV-089 | 45.354044 | -120.758168 | 2388.0 | 5.50 | NE | 5.50 | 6.00 | 2 to 5 | IT-PV-089 | 1.02 | ERT-PV-089 | 42 |
| PV-090 | 45.349844 | -120.757778 | 2405.5 | 3.50 | NE | 3.90 | 4.00 | 2 to 5 | --- | --- | ERT-PV-090 | 49 |
| PV-091 | 45.346235 | -120.752779 | 2403.8 | 3.58 | NE | 3.58 | 3.50 | --- | --- | --- | --- | --- |
| PV-092 | 45.347501 | -120.765754 | 2408.8 | 4.50 | NE | 4.50 | 4.50 | --- | --- | --- | --- | --- |
| PV-093 | 45.343656 | -120.759300 | 2424.3 | 7.00 | NE | 7.17 | 7.00 | --- | --- | --- | ERT-PV-093 | 78 |
| PV-094 | 45.338762 | -120.759517 | 2421.7 | 2.00 | NE | 2.08 | 2.00 | --- | --- | --- | --- | --- |
| PV-095 | 45.338661 | -120.765074 | 2423.4 | 3.00 | NE | 3.58 | 3.00 | 2 to 5 | --- | --- | ERT-PV-095 | 23 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-096 | 45.342045 | -120.769069 | 2400.6 | 5.00 | NE | 5.42 | 5.00 | --- | --- | --- | --- | --- |
| PV-097 | 45.341541 | -120.779301 | 2366.2 | 9.50 | NE | 9.83 | --- | 2 to 5 | --- | --- | ERT-PV-097 | 26 |
| PV-098 | 45.337746 | -120.783116 | 2415.5 | 6.60 | NE | 6.60 | 7.00 | --- | --- | --- | --- | --- |
| PV-099 | 45.335162 | -120.778716 | 2423.4 | 3.00 | NE | 3.50 | 3.00 | --- | --- | --- | --- | --- |
| PV-100 | 45.332891 | -120.772135 | 2412.0 | 2.50 | NE | 3.08 | 3.00 | 2 to 5 | IT-PV-100 | 0.35 | ERT-PV-100 | 31 |
| PV-101 | 45.331686 | -120.786735 | 2403.2 | 6.50 | NE | 6.92 | 6.50 | --- | --- | --- | ERT-PV-101 | 24 |
| PV-102 | 45.343028 | -120.796636 | 2350.1 | 2.00 | NE | 2.00 | 1.50 | --- | --- | --- | ERT-PV-102 | 80 |
| PV-103 | 45.337367 | -120.806481 | 2399.1 | 3.00 | NE | 3.16 | 3.00 | --- | --- | --- | --- | --- |
| PV-104 | 45.333107 | -120.805605 | 2403.5 | 3.00 | NE | 3.50 | 3.00 | --- | --- | --- | --- | --- |
| PV-105 | 45.331579 | -120.795103 | 2384.4 | 1.50 | NE | 1.50 | 1.50 | 1 to 2 | --- | --- | ERT-PV-105 | 44 |
| PV-106 | 45.328157 | -120.798352 | 2377.5 | 8.00 | NE | 8.00 | --- | --- | --- | --- | --- | --- |
| PV-107 | 45.322924 | -120.797828 | 2420.2 | 3.00 | NE | 3.08 | 3.00 | --- | --- | --- | ERT-PV-107 | 28 |
| PV-108 | 45.318112 | -120.796875 | 2405.1 | 2.00 | NE | 2.00 | 2.00 | --- | --- | --- | --- | --- |
| PV-109 | 45.318586 | -120.791629 | 2415.0 | 4.00 | NE | 4.00 | 4.00 | 2 to 5 | --- | --- | ERT-PV-109 | 27 |
| PV-110 | 45.326438 | -120.771472 | 2434.4 | 2.50 | NE | 2.50 | 3.00 | --- | --- | --- | --- | --- |
| PV-111 | 45.322125 | -120.778610 | 2444.0 | 6.50 | NE | 7.30 | 7.00 | 2 to 5 | --- | --- | ERT-PV-111 | 52 |
| PV-112 | 45.319290 | -120.772293 | 2443.5 | 5.50 | NE | 5.92 | 5.50 | --- | --- | --- | ERT-PV-112 | 43 |
| PV-113 | 45.317283 | -120.784543 | 2420.0 | 1.00 | NE | 1.00 | 1.00 | --- | --- | --- | --- | --- |
| PV-114 | 45.313522 | -120.779685 | 2434.0 | 3.00 | NE | 3.00 | 3.00 | 2 to 5 | IT-PV-114 | 2.14 | ERT-PV-114 | 38 |
| PV-115 | 45.314589 | -120.771719 | 2443.4 | 4.00 | NE | 4.00 | 4.00 | --- | --- | --- | --- | --- |
| PV-116 | 45.310184 | -120.784595 | 2402.5 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-117 | 45.310371 | -120.773159 | 2452.2 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | ERT-PV-117 | 38 |
| PV-118 | 45.306812 | -120.786050 | 2384.9 | 1.50 | NE | 1.50 | 1.50 | --- | --- | --- | ERT-PV-118 | 33 |
| PV-119 | 45.302907 | -120.781960 | 2383.8 | 3.00 | NE | 3.00 | 3.00 | 1 to 2 | --- | --- | --- | --- |
| PV-120 | 45.307539 | -120.776402 | 2443.3 | 1.50 | NE | 1.75 | 1.50 | --- | --- | --- | --- | --- |
| PV-121 | 45.303377 | -120.771122 | 2456.7 | 3.00 | NE | 3.08 | 3.00 | 2 to 5 | --- | --- | ERT-PV-121 | 138 |
| PV-122 | 45.314309 | -120.816595 | 2378.3 | 2.50 | NE | 2.50 | 3.00 | --- | --- | --- | ERT-PV-122 | 196 |
| PV-123 | 45.312213 | -120.824796 | 2389.1 | 3.50 | NE | 3.50 | 4.00 | 2 to 5 | IT-PV-123 | 1.33 | ERT-PV-123 | 201 |
| PV-124 | 45.307843 | -120.823884 | 2365.5 | 2.50 | NE | 2.50 | 4.00 | --- | --- | --- | --- | --- |
| PV-125 | 45.305178 | -120.827783 | 2362.1 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-126 | 45.302392 | -120.823547 | 2347.5 | 1.00 | NE | 1.08 | 1.00 | 1 to 2 | --- | --- | ERT-PV-126 | 232 |
| PV-127 | 45.299620 | -120.827618 | 2346.9 | 6.00 | NE | 6.00 | 6.00 | 2 to 5 | --- | --- | ERT-PV-127 | 28 |
| PV-128 | 45.300441 | -120.834951 | 2349.3 | 1.50 | NE | 1.50 | 1.50 | --- | --- | --- | ERT-PV-128 | 309 |
| PV-129 | 45.296421 | -120.827417 | 2344.4 | 4.10 | NE | 4.10 | 4.00 | --- | --- | --- | --- | --- |
| PV-130 | 45.296667 | -120.833486 | 2343.3 | 3.50 | NE | 3.75 | 3.50 | --- | --- | --- | ERT-PV-130 | 87 |
| PV-131 | 45.295054 | -120.839372 | 2343.9 | 3.50 | NE | 3.75 | 3.50 | --- | --- | --- | --- | --- |
| PV-132 | 45.292655 | -120.827389 | 2337.7 | 3.00 | NE | 3.00 | 2.50 | 2 to 5 | IT-PV-132 | 1.61 | ERT-PV-132 | 179 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-133 | 45.292166 | -120.834137 | 2327.0 | 3.00 | NE | 3.08 | 3.00 | --- | --- | --- | --- | --- |
| PV-134 | 45.292447 | -120.842915 | 2384.8 | 3.50 | NE | 3.58 | 3.50 | --- | --- | --- | ERT-PV-134 | 291 |
| PV-135 | 45.288188 | -120.827353 | 2348.3 | 1.55 | NE | 1.55 | 2.00 | --- | --- | --- | --- | --- |
| PV-136 | 45.288198 | -120.834567 | 2326.9 | 5.00 | NE | 5.00 | 4.50 | --- | --- | --- | ERT-PV-136 | 175 |
| PV-137 | 45.289049 | -120.840523 | 2333.7 | 2.00 | NE | 2.00 | 2.50 | 2 to 5 | --- | --- | ERT-PV-137 | 167 |
| PV-138 | 45.287758 | -120.847456 | 2372.6 | 2.50 | NE | 2.58 | 2.50 | --- | --- | --- | --- | --- |
| PV-139 | 45.284080 | -120.827500 | 2330.6 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-140 | 45.282793 | -120.837898 | 2321.8 | 5.00 | NE | 5.00 | 5.00 | --- | --- | --- | --- | --- |
| PV-141 | 45.283850 | -120.848023 | 2371.7 | 6.50 | NE | 6.58 | 6.00 | --- | --- | --- | ERT-PV-141 | 145 |
| PV-142 | 45.279921 | -120.827569 | 2325.3 | 2.00 | NE | 2.08 | 2.00 | 1 to 2 | --- | --- | ERT-PV-142 | 188 |
| PV-143 | 45.278579 | -120.835291 | 2339.1 | 5.00 | NE | 5.08 | 5.00 | --- | --- | --- | --- | --- |
| PV-144 | 45.278184 | -120.844195 | 2322.4 | 4.50 | NE | 4.50 | 4.00 | 2 to 5 | IT-PV-144 | 2.57 | ERT-PV-144 | 46 |
| PV-145 | 45.279419 | -120.857346 | 2323.4 | 5.00 | NE | 5.08 | 5.00 | 2 to 5 | --- | --- | ERT-PV-145 | 25 |
| PV-146 | 45.275597 | -120.825741 | 2316.0 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-147 | 45.274988 | -120.831404 | 2328.8 | 4.50 | NE | 4.50 | 4.00 | --- | --- | --- | ERT-PV-147 | 45 |
| PV-148 | 45.274557 | -120.843923 | 2306.5 | 2.50 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-149 | 45.269985 | -120.829097 | 2332.7 | 3.50 | NE | 3.50 | 3.00 | --- | --- | --- | --- | --- |
| PV-150 | 45.269247 | -120.837059 | 2325.6 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-151 | 45.266046 | -120.831485 | 2333.2 | 2.00 | NE | 2.42 | 1.50 | 1 to 2 | IT-PV-151 | 2.07 | ERT-PV-151 | 128 |
| PV-152 | 45.261800 | -120.826831 | 2268.0 | 4.00 | NE | 4.00 | 3.50 | --- | --- | --- | --- | --- |
| PV-153 | 45.260801 | -120.835780 | 2320.9 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-154 | 45.259293 | -120.826213 | 2240.8 | 2.00 | NE | 2.00 | 2.00 | 2 to 5 | --- | --- | ERT-PV-154 | 145 |
| PV-155 | 45.258306 | -120.831830 | 2251.5 | 2.00 | NE | 2.08 | 2.00 | --- | --- | --- | --- | --- |
| PV-156 | 45.255929 | -120.837114 | 2289.6 | 2.00 | NE | 2.00 | 2.00 | --- | --- | --- | ERT-PV-156 | 186 |
| PV-157 | 45.292489 | -120.859321 | 2344.4 | 6.50 | NE | 6.50 | 6.00 | --- | --- | --- | --- | --- |
| PV-158 | 45.292196 | -120.866441 | 2319.7 | 2.00 | NE | 2.08 | 2.00 | 2 to 5 | --- | --- | ERT-PV-158 | 144 |
| PV-159 | 45.289029 | -120.853115 | 2376.6 | 6.00 | NE | 6.08 | 6.00 | --- | --- | --- | --- | --- |
| PV-160 | 45.285630 | -120.858193 | 2339.5 | 4.50 | NE | 4.50 | 4.50 | 2 to 5 | --- | --- | ERT-PV-160 | 35 |
| PV-161 | 45.287407 | -120.866218 | 2329.3 | 4.50 | NE | 4.50 | 6.00 | --- | --- | --- | --- | --- |
| PV-162 | 45.281751 | -120.864249 | 2322.5 | 3.00 | NE | 3.50 | 3.50 | --- | --- | --- | ERT-PV-162 | 39 |
| PV-163 | 45.284343 | -120.870450 | 2324.9 | 3.50 | NE | 3.50 | 3.00 | --- | --- | --- | ERT-PV-163 | 185 |
| PV-164 | 45.283000 | -120.874751 | 2278.1 | 6.50 | NE | 6.58 | 6.00 | 2 to 5 | IT-PV-164 | 2.03 | ERT-PV-164 | 98 |
| PV-165 | 45.281676 | -120.878032 | 2318.5 | 1.50 | NE | 2.00 | 2.00 | --- | --- | --- | --- | --- |
| PV-166 | 45.299326 | -120.811926 | 2360.4 | 1.08 | NE | 1.08 | 0.67 | --- | --- | --- | --- | --- |
| PV-167 | 45.296054 | -120.811413 | 2358.6 | 3.25 | NE | 3.25 | 3.00 | --- | --- | --- | ERT-PV-167 | 184 |
| PV-168 | 45.292236 | -120.812506 | 2374.4 | 5.25 | NE | 5.25 | 4.00 | --- | --- | --- | --- | --- |
| PV-169 | 45.287237 | -120.811550 | 2379.7 | 3.50 | NE | 3.50 | 3.00 | 2 to 5 | --- | --- | ERT-PV-169 | 153 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-170 | 45.281763 | -120.811192 | 2364.1 | 2.00 | NE | 2.16 | 2.00 | --- | --- | --- | --- | --- |
| PV-171 | 45.276720 | -120.810739 | 2349.8 | 3.50 | NE | 3.50 | 3.00 | --- | --- | --- | --- | --- |
| PV-172 | 45.275553 | -120.815279 | 2340.1 | 3.00 | NE | 3.00 | 2.50 | 2 to 5 | --- | --- | ERT-PV-172 | 379 |
| PV-173 | 45.273689 | -120.811340 | 2342.1 | 2.00 | NE | 2.00 | 1.50 | --- | --- | --- | ERT-PV-173 | 191 |
| PV-174 | 45.266485 | -120.811967 | 2290.5 | 3.00 | NE | 3.17 | 3.00 | --- | --- | --- | --- | --- |
| PV-175 | 45.261846 | -120.815794 | 2246.4 | 3.00 | NE | 3.25 | 3.00 | --- | --- | --- | --- | --- |
| PV-176 | 45.259468 | -120.815929 | 2248.8 | 1.50 | NE | 2.00 | 1.50 | --- | --- | --- | --- | --- |
| PV-177 | 45.296694 | -120.802154 | 2403.3 | 4.00 | NE | 4.00 | 3.50 | --- | --- | --- | ERT-PV-177 | 203 |
| PV-178 | 45.290516 | -120.806742 | 2385.3 | 2.75 | NE | 2.75 | 2.50 | 2 to 5 | IT-PV-178 | 1.46 | ERT-PV-178 | 164 |
| PV-179 | 45.299013 | -120.795018 | 2405.4 | 2.75 | NE | 2.75 | 3.00 | 2 to 5 | --- | --- | ERT-PV-179 | 170 |
| PV-180 | 45.293836 | -120.793238 | 2353.6 | 2.00 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-181 | 45.289022 | -120.790704 | 2346.9 | 2.00 | NE | 2.58 | 2.00 | 2 to 5 | --- | --- | ERT-PV-181 | 137 |
| PV-182 | 45.299744 | -120.786743 | 2389.7 | 2.50 | NE | 3.08 | 3.00 | --- | --- | --- | --- | --- |
| PV-183 | 45.298706 | -120.779958 | 2420.5 | 1.50 | NE | 1.50 | 1.50 | 2 to 5 | IT-PV-183 | 1.46 | ERT-PV-183 | 343 |
| PV-184 | 45.299047 | -120.772060 | 2464.5 | 2.00 | NE | 2.00 | 2.00 | --- | --- | --- | ERT-PV-184 | 238 |
| PV-185 | 45.294709 | -120.778188 | 2400.8 | 2.00 | NE | 2.75 | 2.00 | --- | --- | --- | --- | --- |
| PV-186 | 45.291115 | -120.785525 | 2372.1 | 3.00 | NE | 3.50 | 3.50 | --- | --- | --- | --- | --- |
| PV-187 | 45.289269 | -120.778015 | 2372.8 | 2.50 | NE | 3.00 | 3.00 | --- | --- | --- | --- | --- |
| PV-188 | 45.291893 | -120.772356 | 2405.0 | 3.00 | NE | 3.00 | 3.50 | 2 to 5 | --- | --- | ERT-PV-188 | 202 |
| PV-189 | 45.287790 | -120.784148 | 2381.8 | 1.50 | NE | 2.00 | 2.00 | 2 to 5 | --- | --- | ERT-PV-189 | 455 |
| PV-190 | 45.300079 | -120.765710 | 2486.1 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-191 | 45.295712 | -120.765766 | 2485.0 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | ERT-PV-191 | 77 |
| PV-192 | 45.293000 | -120.759564 | 2472.5 | 4.00 | NE | 4.00 | 4.00 | --- | --- | --- | --- | --- |
| PV-193 | 45.288372 | -120.762464 | 2488.9 | 3.00 | NE | 4.00 | 3.00 | 2 to 5 | --- | --- | ERT-PV-193 | 97 |
| PV-194 | 45.285695 | -120.782051 | 2384.8 | 1.50 | NE | 1.90 | 1.50 | --- | --- | --- | --- | --- |
| PV-195 | 45.281935 | -120.781752 | 2338.5 | 3.50 | NE | 3.50 | 3.50 | 2 to 5 | --- | --- | ERT-PV-195 | 163 |
| PV-196 | 45.280867 | -120.787690 | 2311.6 | 4.00 | NE | 4.00 | 4.00 | --- | --- | --- | --- | --- |
| PV-197 | 45.278160 | -120.787409 | 2318.6 | 3.00 | NE | 3.00 | 3.00 | --- | --- | --- | ERT-PV-197 | 60 |
| PV-198 | 45.280878 | -120.775670 | 2404.8 | 3.50 | NE | 3.50 | 2.00 | 2 to 5 | IT-PV-198 | 1.46 | ERT-PV-198 | 77 |
| PV-199 | 45.277350 | -120.771128 | 2416.8 | 1.50 | NE | 2.25 | 1.50 | --- | --- | --- | --- | --- |
| PV-200 | 45.285736 | -120.770945 | 2434.8 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-201 | 45.285441 | -120.765446 | 2462.7 | 4.00 | NE | 4.00 | 3.50 | --- | --- | --- | --- | --- |
| PV-202 | 45.285636 | -120.755358 | 2466.2 | 2.00 | NE | 3.00 | 2.00 | --- | --- | --- | --- | --- |
| PV-203 | 45.285251 | -120.748768 | 2463.7 | 1.50 | NE | 1.50 | 1.50 | --- | --- | --- | ERT-PV-203 | 127 |
| PV-204 | 45.283339 | -120.759452 | 2458.1 | 2.00 | NE | 3.20 | 2.00 | 2 to 5 | --- | --- | ERT-PV-204 | 95 |
| PV-205 | 45.279094 | -120.765669 | 2446.5 | 1.00 | NE | 2.90 | 2.50 | --- | --- | --- | ERT-PV-205 | 130 |
| PV-206 | 45.278142 | -120.749533 | 2469.3 | 2.50 | NE | 2.50 | 2.50 | --- | --- | --- | ERT-PV-206 | 121 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Depth to Bedrock (feet) | Groundwater Depth (feet)[2] | Primary SPT Boring Depth (feet)[3] | Offset Unsampled Boring Depth (feet) | Bulk Soil Sampling Depth (feet) | Percolation Location ID | Design Infiltration Rate (inch/hour) | Electrical Resistivity ID | Mean Electrical Resistance (ohms-meter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-207 | 45.274612 | -120.752710 | 2462.7 | 2.50 | NE | 2.90 | 2.50 | 2 to 5 | IT-PV-207 | 1.86 | ERT-PV-207 | 95 |
| PV-208 | 45.274465 | -120.749030 | 2475.9 | 3.00 | NE | 3.90 | 3.00 | --- | --- | --- | --- | --- |
| PV-209 | 45.269981 | -120.743706 | 2429.2 | 3.00 | NE | 3.40 | 3.00 | --- | --- | --- | --- | --- |
| PV-210 | 45.270377 | -120.732619 | 2434.0 | 4.50 | NE | 4.50 | 4.50 | 2 to 5 | --- | --- | ERT-PV-210 | 161 |
| PV-211 | 45.266577 | -120.736872 | 2415.1 | 2.50 | NE | 2.90 | 2.50 | --- | --- | --- | ERT-PV-211 | 62 |
| PV-212 | 45.260992 | -120.745079 | 2364.9 | 2.50 | NE | 2.50 | 2.50 | 1 to 2 | --- | --- | ERT-PV-212 | 268 |
| PV-213 | 45.258360 | -120.742206 | 2369.1 | 2.33 | NE | 2.83 | 2.50 | --- | --- | --- | --- | --- |
| PV-214 | 45.259423 | -120.733856 | 2411.0 | 4.00 | NE | 4.50 | 4.50 | 1 to 2 | IT-PV-214 | 2.49 | ERT-PV-214 | 101 |
| PV-215 | 45.261524 | -120.730783 | 2403.4 | 2.00 | NE | 2.00 | 1.50 | --- | --- | --- | --- | --- |
| PV-216 | 45.270502 | -120.725628 | 2437.4 | 1.80 | NE | 1.90 | 1.80 | --- | --- | --- | --- | --- |
| PV-217 | 45.270121 | -120.717783 | 2456.4 | 2.50 | NE | 2.90 | 2.50 | 1 to 3 | --- | --- | ERT-PV-217 | 97 |
| PV-218 | 45.270562 | -120.711260 | 2461.9 | 1.50 | NE | 1.90 | 1.80 | --- | --- | --- | --- | --- |
| PV-219 | 45.267005 | -120.711125 | 2459.6 | 2.50 | NE | 3.50 | 2.50 | --- | --- | --- | --- | --- |
| PV-220 | 45.261190 | -120.724182 | 2419.1 | 2.00 | NE | 3.00 | 2.00 | --- | --- | | --- | --- |
| PV-221 | 45.262231 | -120.715480 | 2433.7 | 2.50 | NE | 3.00 | 2.50 | --- | --- | --- | ERT-PV-221 | 111 |
| PV-222 | 45.258564 | -120.725301 | 2443.3 | 2.00 | NE | 2.50 | 2.00 | --- | --- | --- | --- | --- |
| PV-223 | 45.258685 | -120.718626 | 2436.5 | 2.83 | NE | 3.00 | 2.83 | 1 to 2 | --- | --- | ERT-PV-223 | 127 |
| PV-224 | 45.259324 | -120.710395 | 2481.0 | 2.50 | NE | 3.00 | 2.50 | --- | --- | --- | --- | --- |
| PV-225 | 45.270373 | -120.698687 | 2553.2 | 2.00 | NE | 2.70 | 2.67 | --- | --- | --- | --- | --- |
| PV-226 | 45.269667 | -120.691810 | 2597.2 | 2.00 | NE | 2.00 | 2.00 | 1 to 2 | --- | --- | ERT-PV-226 | 208 |
| PV-227 | 45.267153 | -120.694158 | 2586.5 | 0.75 | NE | 1.00 | 2.50 | --- | --- | --- | --- | --- |
| PV-228 | 45.262739 | -120.699209 | 2544.9 | 1.50 | NE | 1.50 | 1.50 | --- | --- | --- | --- | --- |
| PV-229 | 45.262676 | -120.689989 | 2593.2 | 3.50 | NE | 4.00 | 4.00 | --- | --- | --- | --- | --- |
| PV-230 | 45.259278 | -120.689915 | 2585.4 | 2.50 | NE | 2.50 | 2.00 | 1 to 2 | --- | --- | ERT-PV-230 | 175 |

[1] North American Vertical Datum of 1988 (NAVD 88).
[2] NE – Groundwater not Encountered during drilling.
[3] Standard Penetration Test (SPT) Boring.

**Table 2. Summary of Pile Load Testing**

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Top of Rock Depths (feet) | Final SPT Boring Depths (feet) | Test Piles ID | Pile Pre-Drilling Diameter (inch) | Pile Pre-Drilling Depths (feet) | Pile Final Driven Depths (feet) | Uplift Load at Max. 1" Deflection (lbs) | Lateral Load at Max. 1" Deflection (lbs) | Compression Load at Max. 1" Deflection (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUBSTATION (POINT OF INTERCONNECTION)** | | | | | | | | | | | | |
| SB-01 | 45.366511 | -120.706214 | 2162.8 | 6.00 | 38.0 | PT-SB-01A | 5.875 | 7 | 7 | 8,340 | 6,000 | --- |
| | | | | | | PT-SB-01B | --- | --- | 7 | 9,880 | 4,000 | >15,000 |
| SB-02 | 45.364915 | -120.707647 | 2205.9 | 5.00 | 35.0 | PT-SB-02 | 5.875 | 12 | 10.5 | >15,000 | 4,000 | >15,000 |
| **WIND TURBINE GENERATORS** | | | | | | | | | | | | |
| WTG-01 | 45.418328 | -120.701084 | 2217.3 | 7.00 | 40.0 | PT-WTG-01A | 5.875 | 9 | 9 | 12,640 | 4,230 | --- |
| | | | | | | PT-WTG-01B | --- | --- | 9 | >15,000 | 3,780 | >15,000 |
| WTG-02 | 45.392519 | -120.664970 | 2361.6 | 4.00 | 35.0 | PT-WTG-02 | 5.875 | 10 | 10 | >15,000 | 3,500 | --- |
| WTG-03 | 45.354610 | -120.672454 | 2328.7 | 3.00 | 35.0 | PT-WTG-03 | 5.875 | 8 | 8 | >15,000 | 4,890 | --- |
| WTG-04 | 45.342446 | -120.805997 | 2404.7 | 4.50 | 34.0 | PT-WTG-04 | 5.875 | 10 | 10 | >15,000 | 4,240 | --- |
| WTG-05 | 45.299634 | -120.843742 | 2343.1 | 4.00 | 35.0 | PT-WTG-05 | 5.875 | 8 | 7 | >15,000 | 5,000 | --- |
| WTG-06 | 45.264318 | -120.814433 | 2253.2 | 3.50 | 35.0 | PT-WTG-06 | 5.875 | 10 | 10 | >15,000 | 5,780 | --- |
| WTG-07 | 45.298202 | -120.760601 | 2483.9 | 3.00 | 35.0 | PT-WTG-07 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| WTG-08 | 45.265595 | -120.705637 | 2504.9 | 3.00 | 35.0 | PT-WTG-08 | 5.875 | 10 | 10 | >15,000 | 5,340 | --- |
| **SOLAR PV ARRAYS** | | | | | | | | | | | | |
| PV-001 | 45.430996 | -120.713495 | 2151.2 | 8.00 | 8.00 | PT-PV-001A | 5.875 | 8 | 8 | 6,420 | 3,920 | --- |
| | | | | | | PT-PV-001B | --- | --- | 8 | 12,480 | 3,500 | >15,000 |
| PV-002 | 45.428720 | -120.709512 | 2151.8 | 7.00 | 7.00 | PT-PV-002 | --- | --- | 7 | >15,000 | 3,640 | --- |
| PV-004 | 45.420839 | -120.709518 | 2192.2 | 8.00 | 8.00 | PT-PV-004 | --- | --- | 8 | >15,000 | 3,500 | --- |
| PV-005 | 45.422097 | -120.701641 | 2189.7 | 15.00 | 15.00 | PT-PV-005A | --- | --- | 8 | >15,000 | 4,500 | >15,000 |
| | | | | | | PT-PV-005B | --- | --- | 12 | >15,000 | 3,320 | >15,000 |
| PV-007 | 45.415826 | -120.689944 | 2225.0 | 9.00 | 9.00 | PT-PV-007A | 5.875 | 8 | 8 | 5,640 | 3,500 | --- |
| | | | | | | PT-PV-007B | --- | --- | 8 | >15,000 | 4,340 | >15,000 |
| PV-009 | 45.423206 | -120.674032 | 2245.7 | 9.75 | 9.75 | PT-PV-009 | --- | --- | 9 | 13,480 | 3,720 | >15,000 |
| PV-010 | 45.420072 | -120.669747 | 2313.3 | 8.00 | 8.00 | PT-PV-010 | --- | --- | 8 | 14,000 | 4,500 | >15,000 |
| PV-011 | 45.416049 | -120.679078 | 2279.1 | 9.25 | 9.25 | PT-PV-011A | 5.875 | 8 | 8 | 9,680 | 4,300 | --- |
| | | | | | | PT-PV-011B | --- | --- | 8 | >15,000 | 4,000 | --- |
| PV-015 | 45.407983 | -120.692374 | 2229.9 | 7.10 | 7.10 | PT-PV-015A | 5.875 | 7 | 7 | 5,430 | 6,000 | --- |
| | | | | | | PT-PV-015B | --- | --- | 7 | >15,000 | 5,350 | --- |
| PV-017 | 45.407696 | -120.675105 | 2306.0 | 13.90 | 13.90 | PT-PV-017A | --- | --- | 8 | >15,000 | 5,230 | >15,000 |
| | | | | | | PT-PV-017B | --- | --- | 12 | >15,000 | 5,000 | >15,000 |
| PV-019 | 45.404400 | -120.682816 | 2271.2 | 9.00 | 9.00 | PT-PV-019 | --- | --- | 8 | >15,000 | 4,280 | --- |
| PV-021 | 45.407941 | -120.665229 | 2349.9 | 5.25 | 5.25 | PT-PV-021 | 5.875 | 8 | 8 | >15,000 | 3,500 | --- |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Top of Rock Depths (feet) | Final SPT Boring Depths (feet) | Test Piles ID | Pile Pre-Drilling Diameter (inch) | Pile Pre-Drilling Depths (feet) | Pile Final Driven Depths (feet) | Uplift Load at Max. 1" Deflection (lbs) | Lateral Load at Max. 1" Deflection (lbs) | Compression Load at Max. 1" Deflection (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-022 | 45.407223 | -120.658786 | 2405.0 | 6.83 | 6.83 | PT-PV-022 | --- | --- | 7 | >15,000 | 3,000 | >15,000 |
| PV-025 | 45.401106 | -120.673740 | 2317.8 | 5.10 | 5.10 | PT-PV-025 | --- | --- | 6.5 | >15,000 | 5,880 | >15,000 |
| PV-028 | 45.396944 | -120.659867 | 2425.0 | 8.00 | 8.00 | PT-PV-028A | 5.875 | 8 | 8 | 7,840 | 3,780 | --- |
| PV-028 | 45.396944 | -120.659867 | 2425.0 | 8.00 | 8.00 | PT-PV-028B | --- | --- | 8 | >15,000 | 3,000 | --- |
| PV-029 | 45.393858 | -120.680976 | 2280.2 | 8.10 | 8.10 | PT-PV-029 | --- | --- | 8 | 5,380 | 4,000 | --- |
| PV-030 | 45.391864 | -120.671600 | 2348.1 | 7.00 | 7.00 | PT-PV-030A | 5.875 | 7 | 7 | 7,490 | 4,380 | --- |
| | | | | | | PT-PV-030B | --- | --- | 7 | >15,000 | >6,000 | --- |
| PV-031 | 45.389563 | -120.679796 | 2290.3 | 8.00 | 8.00 | PT-PV-031A | 5.875 | 7 | 7 | 10,480 | >6,000 | --- |
| | | | | | | PT-PV-031B | --- | --- | 7 | >15,000 | >6,000 | >15,000 |
| PV-034 | 45.386547 | -120.684859 | 2293.4 | 7.00 | 7.00 | PT-PV-034 | --- | --- | 7 | 13,000 | 4,500 | --- |
| PV-035 | 45.382487 | -120.679554 | 2248.6 | 1.50 | 1.50 | PT-PV-035 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-036 | 45.386289 | -120.675007 | 2303.2 | 1.00 | 1.00 | PT-PV-036 | 5.875 | 10 | 9 | >15,000 | >6,000 | --- |
| PV-040 | 45.383248 | -120.664349 | 2414.8 | 3.25 | 3.25 | PT-PV-040 | 5.875 | 8 | 8 | >15,000 | 5,350 | --- |
| PV-043 | 45.375297 | -120.692235 | 2165.5 | 3.00 | 3.00 | PT-PV-043 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-045 | 45.376100 | -120.675146 | 2309.2 | 18.80 | 18.80 | PT-PV-045A | --- | --- | 8 | 4,320 | 5,690 | >15,000 |
| | | | | | | PT-PV-045B | --- | --- | 12 | >15,000 | 5,280 | >15,000 |
| PV-047 | 45.376097 | -120.662612 | 2353.8 | 3.00 | 3.00 | PT-PV-047 | 5.875 | 10 | 9 | >15,000 | >6,000 | --- |
| PV-048 | 45.370783 | -120.674986 | 2289.6 | 6.00 | 6.00 | PT-PV-048 | --- | --- | 7 | >15,000 | 6,000 | |
| PV-051 | 45.369009 | -120.658921 | 2385.4 | 1.75 | 1.75 | PT-PV-051 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-052 | 45.364188 | -120.672013 | 2219.1 | 2.00 | 2.00 | PT-PV-052 | 5.875 | 10 | 10 | >15,000 | >6,000 | --- |
| PV-056 | 45.349582 | -120.664011 | 2302.5 | 2.20 | 2.20 | PT-PV-056 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-058 | 45.342232 | -120.660105 | 2365.2 | 2.40 | 2.40 | PT-PV-058 | 5.875 | 10 | 10 | >15,000 | 4,280 | >15,000 |
| PV-060 | 45.367861 | -120.683041 | 2237.4 | 7.00 | 7.00 | PT-PV-060A | 5.875 | 7 | 7 | >15,000 | 5,230 | --- |
| | | | | | | PT-PV-060B | --- | 7 | 7 | >15,000 | 4,500 | >15,000 |
| PV-062 | 45.360461 | -120.685734 | 2341.9 | 4.00 | 4.00 | PT-PV-062 | 5.875 | 8 | 8 | >15,000 | 4,880 | --- |
| PV-064 | 45.365887 | -120.689399 | 2287.6 | 4.00 | 4.00 | PT-PV-064 | 5.875 | 10 | 10 | >15,000 | 3,620 | --- |
| PV-065 | 45.370370 | -120.694643 | 2240.5 | 6.10 | 6.10 | PT-PV-065 | --- | --- | 6 | >15,000 | 4,270 | --- |
| PV-068 | 45.371777 | -120.710333 | 2162.4 | 1.40 | 1.40 | PT-PV-068 | 5.875 | 8 | 8 | >15,000 | >6,000 | >15,000 |
| PV-071 | 45.366826 | -120.725439 | 2241.9 | 1.00 | 1.00 | PT-PV-071 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-072 | 45.360977 | -120.716950 | 2209.5 | 5.00 | 5.00 | PT-PV-072 | 5.875 | 10 | 10 | >15,000 | 5,040 | --- |
| PV-074 | 45.357056 | -120.722846 | 2242.3 | 1.75 | 1.75 | PT-PV-074 | 5.875 | 8 | 8 | >15,000 | 5,220 | --- |
| PV-077 | 45.351940 | -120.726878 | 2282.8 | 8.50 | 8.75 | PT-PV-077A | 5.875 | 8 | 8 | 6,500 | 4,000 | --- |
| | | | | | | PT-PV-077B | --- | --- | 8 | 7,000 | 4,000 | >15,000 |
| PV-079 | 45.349202 | -120.721550 | 2268.2 | 3.00 | 3.00 | PT-PV-079 | 5.875 | 10 | 10 | >15,000 | 5,340 | --- |
| PV-081 | 45.346568 | -120.729788 | 2321.2 | 4.50 | 4.60 | PT-PV-081 | 5.875 | 8 | 8 | >15,000 | 4,380 | --- |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Top of Rock Depths (feet) | Final SPT Boring Depths (feet) | Test Piles ID | Pile Pre-Drilling Diameter (inch) | Pile Pre-Drilling Depths (feet) | Pile Final Driven Depths (feet) | Uplift Load at Max. 1" Deflection (lbs) | Lateral Load at Max. 1" Deflection (lbs) | Compression Load at Max. 1" Deflection (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-084 | 45.353323 | -120.736833 | 2271.1 | 9.25 | 9.25 | PT-PV-084A | 5.875 | 8 | 8 | >15,000 | 4,500 | --- |
| | | | | | | PT-PV-084B | --- | --- | 5 | >15,000 | 4,750 | >15,000 |
| PV-086 | 45.346465 | -120.745630 | 2340.6 | 3.00 | 3.00 | PT-PV-086 | 5.875 | 10 | 10 | >15,000 | >6,000 | --- |
| PV-089 | 45.354044 | -120.758168 | 2388.0 | 5.50 | 5.50 | PT-PV-089 | 5.875 | 8 | 8 | >15,000 | 5,500 | --- |
| PV-090 | 45.349844 | -120.757778 | 2405.5 | 3.50 | 3.90 | PT-PV-090 | 5.875 | 10 | 10 | >15,000 | 5,000 | --- |
| PV-093 | 45.343656 | -120.759300 | 2424.3 | 7.00 | 7.17 | PT-PV-093A | 5.875 | 7 | 7 | 2,780 | 3,180 | --- |
| | | | | | | PT-PV-093B | --- | --- | 7 | >15,000 | 5,780 | --- |
| PV-095 | 45.338661 | -120.765074 | 2423.4 | 3.00 | 3.58 | PT-PV-095 | 5.875 | 10 | 6 | >15,000 | 4,840 | --- |
| PV-097 | 45.341541 | -120.779301 | 2366.2 | 9.50 | 9.83 | PT-PV-097A | 5.875 | 8 | 8 | 3,680 | 3,240 | --- |
| | | | | | | PT-PV-097B | --- | --- | 8 | 4,680 | 3,500 | 10,000 |
| PV-098 | 45.337746 | -120.783116 | 2415.5 | 6.60 | 6.60 | PT-PV-098 | --- | --- | 7 | >15,000 | 3,000 | --- |
| PV-100 | 45.332891 | -120.772135 | 2412.0 | 2.50 | 3.08 | PT-PV-100 | 5.875 | 8 | 8 | >15,000 | 5,680 | >15,000 |
| PV-101 | 45.331686 | -120.786735 | 2403.2 | 6.50 | 6.92 | PT-PV-101A | 5.875 | 6 | 6 | 4,890 | 2,840 | --- |
| | | | | | | PT-PV-101B | --- | --- | 6 | 4,380 | 2,280 | --- |
| PV-102 | 45.343028 | -120.796636 | 2350.1 | 2.00 | 2.00 | PT-PV-102 | 5.875 | 12 | 12 | >15,000 | >6,000 | --- |
| PV-106 | 45.328157 | -120.798352 | 2377.5 | 8.00 | 8.00 | PT-PV-106A | 5.875 | 8 | 8 | 6,480 | 3,890 | --- |
| | | | | | | PT-PV-106A | --- | 8 | 8 | >15,000 | 3,840 | >15,000 |
| PV-107 | 45.322924 | -120.797828 | 2420.2 | 3.00 | 3.08 | PT-PV-107 | 5.875 | 10 | 10 | >15,000 | 5,500 | --- |
| PV-109 | 45.318586 | -120.791629 | 2415.0 | 4.00 | 4.00 | PT-PV-109 | 5.875 | 8 | 8 | >15,000 | 4,780 | --- |
| PV-111 | 45.322125 | -120.778610 | 2444.0 | 6.50 | 7.30 | PT-PV-111A | 5.875 | 7 | 7 | 1,580 | 4,320 | --- |
| | | | | | | PT-PV-111B | --- | --- | 7 | 9,740 | 5,500 | >15,000 |
| PV-112 | 45.319290 | -120.772293 | 2443.5 | 5.50 | 5.92 | PT-PV-112 | 5.875 | 10 | 10 | >15,000 | 4,890 | --- |
| PV-114 | 45.313522 | -120.779685 | 2434.0 | 3.00 | 3.00 | PT-PV-114 | 5.875 | 12 | 12 | >15,000 | >6,000 | >15,000 |
| PV-117 | 45.310371 | -120.773159 | 2452.2 | 3.00 | 3.00 | PT-PV-117 | 5.875 | 8 | 8 | >15,000 | 5,000 | --- |
| PV-118 | 45.306812 | -120.786050 | 2384.9 | 1.50 | 1.50 | PT-PV-118 | 5.875 | 10 | 9 | >15,000 | >6,000 | --- |
| PV-121 | 45.303377 | -120.771122 | 2456.7 | 3.00 | 3.08 | PT-PV-121 | 5.875 | 8 | 8 | >15,000 | 4,350 | --- |
| PV-122 | 45.314309 | -120.816595 | 2378.3 | 2.50 | 2.50 | PT-PV-122A | 5.875 | 10 | 9.5 | >15,000 | >6,000 | --- |
| | | | | | | PT-PV-122B | 6.500 | 10 | 10 | >15,000 | >6,000 | --- |
| PV-123 | 45.312213 | -120.824796 | 2389.1 | 3.50 | 3.50 | PT-PV-123A | 5.875 | 12 | 11 | >15,000 | >6,000 | >15,000 |
| | | | | | | PT-PV-123B | 6.500 | 12 | 12 | >15,000 | 6,000 | --- |
| PV-126 | 45.302392 | -120.823547 | 2347.5 | 1.00 | 1.08 | PT-PV-126A | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| | | | | | | PT-PV-126B | 6.500 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-127 | 45.299620 | -120.827618 | 2346.9 | 6.00 | 6.00 | PT-PV-127A | 5.875 | 6 | 6 | 13,850 | 4,000 | --- |
| | | | | | | PT-PV-127B | --- | --- | 6 | >15,000 | 4,500 | --- |
| | | | | | | PT-PV-127C | 6.500 | 6 | 6 | 5,200 | 3,780 | 15,000 |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Top of Rock Depths (feet) | Final SPT Boring Depths (feet) | Test Piles ID | Pile Pre-Drilling Diameter (inch) | Pile Pre-Drilling Depths (feet) | Pile Final Driven Depths (feet) | Uplift Load at Max. 1" Deflection (lbs) | Lateral Load at Max. 1" Deflection (lbs) | Compression Load at Max. 1" Deflection (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-128 | 45.300441 | -120.834951 | 2349.3 | 1.50 | 1.50 | PT-PV-128A | 5.875 | 10 | 10 | >15,000 | >6,000 | --- |
| | | | | | | PT-PV-128B | 6.500 | 10 | 10 | >15,000 | >6,000 | --- |
| PV-130 | 45.296667 | -120.833486 | 2343.3 | 3.50 | 3.75 | PT-PV-130A | 5.875 | 8 | 5.5 | >15,000 | >6,000 | --- |
| | | | | | | PT-PV-130B | 6.500 | 8 | 6.5 | >15,000 | 6,000 | --- |
| PV-132 | 45.292655 | -120.827389 | 2337.7 | 3.00 | 3.00 | PT-PV-132 | 5.875 | 8 | 8 | >15,000 | 6,000 | >15,000 |
| PV-134 | 45.292447 | -120.842915 | 2384.8 | 3.50 | 3.58 | PT-PV-134 | 5.875 | 10 | 10 | >15,000 | 4,450 | --- |
| PV-136 | 45.288198 | -120.834567 | 2326.9 | 5.00 | 5.00 | PT-PV-136 | 5.875 | 8 | 8 | >15,000 | 4,500 | --- |
| PV-137 | 45.289049 | -120.840523 | 2333.7 | 2.00 | 2.00 | PT-PV-137 | 5.875 | 10 | 10 | >15,000 | 3,500 | --- |
| PV-141 | 45.283850 | -120.848023 | 2371.7 | 6.50 | 6.58 | PT-PV-141 | 5.875 | 8 | 8 | >15,000 | 4,380 | --- |
| PV-142 | 45.279921 | -120.827569 | 2325.3 | 2.00 | 2.08 | PT-PV-142 | 5.875 | 10 | 9.5 | >15,000 | >6,000 | --- |
| PV-144 | 45.278184 | -120.844195 | 2322.4 | 4.50 | 4.50 | PT-PV-144 | 5.875 | 8 | 8 | >15,000 | 2,420 | >15,000 |
| PV-145 | 45.279419 | -120.857346 | 2323.4 | 5.00 | 5.08 | PT-PV-145 | 5.875 | 10 | 6 | >15,000 | 4,500 | --- |
| PV-147 | 45.274988 | -120.831404 | 2328.8 | 4.50 | 4.50 | PT-PV-147 | 5.875 | 12 | 12 | >15,000 | 4,420 | --- |
| PV-151 | 45.266046 | -120.831485 | 2333.2 | 2.00 | 2.42 | PT-PV-151 | 5.875 | 8 | 8 | >15,000 | >6,000 | >15,000 |
| PV-154 | 45.259293 | -120.826213 | 2240.8 | 2.00 | 2.00 | PT-PV-154 | 5.875 | 10 | 8.5 | >15,000 | >6,000 | --- |
| PV-156 | 45.255929 | -120.837114 | 2289.6 | 2.00 | 2.00 | PT-PV-156 | 5.875 | 12 | 12 | >15,000 | 4,880 | --- |
| PV-157 | 45.292489 | -120.859321 | 2344.4 | 6.50 | 6.50 | PT-PV-157A | 5.875 | 6 | 6 | 4,000 | 3,670 | --- |
| | | | | | | PT-PV-157B | --- | --- | 6 | 5,470 | 3,500 | 15,000 |
| PV-160 | 45.285630 | -120.858193 | 2339.5 | 4.50 | 4.50 | PT-PV-160 | 5.875 | 10 | 10 | >15,000 | 5,000 | --- |
| PV-162 | 45.281751 | -120.864249 | 2322.5 | 3.00 | 3.50 | PT-PV-162 | 5.875 | 8 | 7 | >15,000 | 5,380 | --- |
| PV-163 | 45.284343 | -120.870450 | 2324.9 | 3.50 | 3.50 | PT-PV-163 | 5.875 | 10 | 10 | >15,000 | 6,000 | --- |
| PV-164 | 45.283000 | -120.874751 | 2278.1 | 6.50 | 6.58 | PT-PV-164A | 5.875 | 6 | 6 | 6,380 | 3,460 | --- |
| | | | | | | PT-PV-164B | --- | --- | 6 | 15,000 | >6,000 | 15,000 |
| PV-167 | 45.296054 | -120.811413 | 2358.6 | 3.25 | 3.25 | PT-PV-167 | 5.875 | 8 | 8 | >15,000 | 4,500 | --- |
| PV-169 | 45.287237 | -120.811550 | 2379.7 | 3.50 | 3.50 | PT-PV-169 | 5.875 | 10 | 10 | >15,000 | 3,940 | --- |
| PV-172 | 45.275553 | -120.815279 | 2340.1 | 3.00 | 3.00 | PT-PV-172 | 5.875 | 8 | 8 | >15,000 | 5,270 | --- |
| PV-173 | 45.273689 | -120.811340 | 2342.1 | 2.00 | 2.00 | PT-PV-173 | 5.875 | 10 | 10 | >15,000 | 3,240 | --- |
| PV-177 | 45.296694 | -120.802154 | 2403.3 | 4.00 | 4.00 | PT-PV-177 | 5.875 | 8 | 8 | >15,000 | 5,000 | --- |
| PV-178 | 45.290516 | -120.806742 | 2385.3 | 2.75 | 2.75 | PT-PV-178 | 5.875 | 10 | 10 | >15,000 | 6,000 | >15,000 |
| PV-179 | 45.299013 | -120.795018 | 2405.4 | 2.75 | 2.75 | PT-PV-179 | 5.875 | 12 | 11 | >15,000 | 4,500 | --- |
| PV-181 | 45.289022 | -120.790704 | 2346.9 | 2.00 | 2.58 | PT-PV-181 | 5.875 | 8 | 8 | >15,000 | 5,380 | --- |
| PV-183 | 45.298706 | -120.779958 | 2420.5 | 1.50 | 1.50 | PT-PV-183 | 5.875 | 10 | 8.5 | >15,000 | >6,000 | >15,000 |
| PV-184 | 45.299047 | -120.772060 | 2464.5 | 2.00 | 2.00 | PT-PV-184 | 5.875 | 8 | 8 | >15,000 | 6,000 | --- |
| PV-188 | 45.291893 | -120.772356 | 2405.0 | 3.00 | 3.00 | PT-PV-188 | 5.875 | 8 | 8 | >15,000 | 5,000 | --- |
| PV-189 | 45.287790 | -120.784148 | 2381.8 | 1.50 | 2.00 | PT-PV-189 | 5.875 | 10 | 10 | >15,000 | 4,340 | --- |

| Boring Location ID | Latitude[1] | Longitude[1] | Ground Surface Elevation (feet)[1] | Estimated Top of Rock Depths (feet) | Final SPT Boring Depths (feet) | Test Piles ID | Pile Pre-Drilling Diameter (inch) | Pile Pre-Drilling Depths (feet) | Pile Final Driven Depths (feet) | Uplift Load at Max. 1" Deflection (lbs) | Lateral Load at Max. 1" Deflection (lbs) | Compression Load at Max. 1" Deflection (lbs) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-191 | 45.295712 | -120.765766 | 2485.0 | 3.00 | 3.00 | PT-PV-191 | 5.875 | 8 | 8 | >15,000 | >6,000 | --- |
| PV-193 | 45.288372 | -120.762464 | 2488.9 | 3.00 | 4.00 | PT-PV-193 | 5.875 | 10 | 10 | >15,000 | 4,280 | --- |
| PV-195 | 45.281935 | -120.781752 | 2338.5 | 3.50 | 3.50 | PT-PV-195 | 5.875 | 8 | 8 | >15,000 | 5,880 | --- |
| PV-197 | 45.278160 | -120.787409 | 2318.6 | 3.00 | 3.00 | PT-PV-197 | 5.875 | 8 | 6.5 | >15,000 | >6,000 | --- |
| PV-198 | 45.280878 | -120.775670 | 2404.8 | 3.50 | 3.50 | PT-PV-198 | 5.875 | 10 | 10 | >15,000 | 4,880 | >15,000 |
| PV-203 | 45.285251 | -120.748768 | 2463.7 | 1.50 | 1.50 | PT-PV-203 | 5.875 | 8 | 8 | >15,000 | 5,840 | >15,000 |
| PV-204 | 45.283339 | -120.759452 | 2458.1 | 2.00 | 3.20 | PT-PV-204 | 5.875 | 10 | 10 | >15,000 | 5,330 | --- |
| PV-205 | 45.279094 | -120.765669 | 2446.5 | 1.00 | 2.90 | PT-PV-205 | 5.875 | 12 | 10.75 | >15,000 | 6,000 | --- |
| PV-206 | 45.278142 | -120.749533 | 2469.3 | 2.50 | 2.50 | PT-PV-206 | 5.875 | 8 | 8 | >15,000 | 5,920 | --- |
| PV-207 | 45.274612 | -120.752710 | 2462.7 | 2.50 | 2.90 | PT-PV-207 | 5.875 | 10 | 10 | >15,000 | 5,280 | >15,000 |
| PV-210 | 45.270377 | -120.732619 | 2434.0 | 4.50 | 4.50 | PT-PV-210 | 5.875 | 8 | 8 | >15,000 | 4,270 | --- |
| PV-211 | 45.266577 | -120.736872 | 2415.1 | 2.50 | 2.90 | PT-PV-211 | 5.875 | 8 | 8 | >15,000 | 4,720 | --- |
| PV-212 | 45.260992 | -120.745079 | 2364.9 | 2.50 | 2.50 | PT-PV-212 | 5.875 | 10 | 9.5 | >15,000 | >6,000 | --- |
| PV-214 | 45.259423 | -120.733856 | 2411.0 | 4.00 | 4.50 | PT-PV-214 | 5.875 | 8 | 8 | >15,000 | 4,820 | >15,000 |
| PV-217 | 45.270121 | -120.717783 | 2456.4 | 2.50 | 2.90 | PT-PV-217 | 5.875 | 10 | 10 | >15,000 | >6,000 | --- |
| PV-221 | 45.262231 | -120.715480 | 2433.7 | 2.50 | 3.00 | PT-PV-221 | 5.875 | 8 | 8 | >15,000 | 5,740 | --- |
| PV-223 | 45.258685 | -120.718626 | 2436.5 | 2.83 | 3.00 | PT-PV-223 | 5.875 | 10 | 10 | >15,000 | 5,340 | >15,000 |
| PV-226 | 45.269667 | -120.691810 | 2597.2 | 2.00 | 2.00 | PT-PV-226 | 5.875 | 12 | 12 | >15,000 | >6,000 | --- |
| PV-230 | 45.259278 | -120.689915 | 2585.4 | 2.50 | 2.50 | PT-PV-230 | 5.875 | 10 | 10 | >15,000 | 6,000 | >15,000 |

[1] North American Vertical Datum of 1988 (NAVD 88).

[2] Red text denotes pile location that encountered early refusal then the planned driving depth.

[3] Red and highlighted text denotes pile location met the early failure criteria.

**Table 3. Summary of Proposed Laboratory Testing**

| Test Conducted | Standard | Attributes Obtained |
|---|---|---|
| Natural Moisture Content | ASTM D2216 | Moisture content representative of field conditions at the time samples were taken. |
| Grain-size Distribution | ASTM D6913 | Size and distribution of soil particles (i.e., clay, silt, sand, and gravel). |
| Hydrometer Analysis | ASTM D7928 | Size and distribution of fine-grained soil particles. |
| Atterberg Limits | ASTM D4318 | The effect of varying water content on the consistency of fine-grained soils. |
| Moisture-Density Relationship | ASTM D698 | The optimum moisture content for compacting soil and the maximum dry unit weight (density) for a given compaction effort. |
| California Bearing Ratio | ASTM D1883 | Load-bearing capacity or strength of the subgrade of a road. |
| Soil Resistivity | ASTM G187 | Electrical resistance of soils. |
| pH of Soils | ASTM G51 | Evaluation of material properties tendency to corrode or deteriorate concrete and steel. |
| Water-Soluble Sulfate Ion Content | ASTM C1580 | Influence of corrosion for concrete structures. |
| Water-Soluble Chloride Ion Content | AASHTO T291 | Influence of corrosion for concrete structures. |
| Sulfides | ASTM D4658 | Influence of corrosion due to sulfide in soil. |
| Oxidation Reduction Potential (ORP) | ASTM G200 | Influence of corrosion to determine if oxidizing or reducing conditions in soil. |
| Thermal Conductivity | ASTM D5334 | Analyze thermal properties of soils using a transient heat method. |
| Unconfined Compressive Strength of Rock | ASTM D7012 | Strength and unit weight of intact rock core specimens. |

**Table 4. Summary of Soils Laboratory Testing**

| Boring Location ID | Sample Number | Sampling Depth (feet) | USCS Soil Classification | USCS Soil Group | Water Content (%) | Liquid Limit | Plasticity Index | Percent Finer than #200 Sieve | Max. Dry Density (pcf) | Optimum Moisture Content (%) | CBR @95% MDD (%) | CBR Rating | Resistivity (Ohm-cm) | pH | Sulfate (ppm) | Chloride (ppm) | Sulfides (ppm) | Redox Potential (mV) | Thermal Conductivity at OMC (W/m-K) | Thermal Resistivity at OMC ($m^2K/W$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SUBSTATION (POINT OF INTERCONNECTION)** | | | | | | | | | | | | | | | | | | | | |
| SB-01 | Bulk | 2.0 – 5.0 | Silty Sand | SM | 18.0 | NP | NP | 42.0 | 110.8 | 16.2 | 6.5 | Poor-Fair | 7,360 | 9.3 | <15 | 111 | <0.1 | 115 | 1.24 | 0.81 |
| SB-02 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 12.0 | 32 | 10 | 60.3 | 110.1 | 14.7 | 4.5 | Poor-Fair | 8,140 | 7.9 | <15 | 66 | <0.1 | 125 | 1.39 | 0.72 |
| **WIND TURBINE GENERATORS** | | | | | | | | | | | | | | | | | | | | |
| WTG-01 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 17.7 | 24 | 5 | 46.8 | 102 | 19.5 | 8.2 | Fair | 8,120 | 9.5 | <15 | 24 | <0.1 | 119 | 1.29 | 0.78 |
| WTG-02 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 15.1 | 22 | 5 | 42.4 | 109.3 | 16.7 | 8.2 | Fair | 8,500 | 9.6 | <15 | 69 | <0.1 | 121 | 1.30 | 0.77 |
| WTG-03 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 6.9 | 27 | 6 | 45.9 | 106.4 | 17.4 | 8.6 | Fair | 5,200 | 8.8 | <15 | 27 | <0.1 | 147 | 1.25 | 0.80 |
| WTG-04 | Bulk | 2.0 – 5.0 | Sandy Lean Clay with Gravel | CL | 13.6 | 28 | 9 | 51.2 | 113.4 | 12.0 | 5.1 | Poor-Fair | 7,300 | 8.3 | 90 | 42 | <0.1 | 256 | 1.14 | 0.88 |
| WTG-05 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 6.6 | 32 | 11 | 42.0 | 113.3 | 11.2 | 8.0 | Fair | 2,600 | 7.8 | <15 | <10 | <0.1 | 264 | 1.26 | 0.80 |
| WTG-06 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 6.3 | 33 | 10 | 54.1 | 115.8 | 13.5 | 5.0 | Poor-Fair | 4,200 | 7.7 | 60 | 12 | <0.1 | 266 | 1.30 | 0.77 |
| WTG-07 | Bulk | 2.0 – 5.0 | Sandy Lean Clay with Gravel | CL | 18.9 | 28 | 9 | 55.4 | 117.4 | 11.8 | 5.2 | Poor-Fair | 5,040 | 8.0 | <15 | 36 | <0.1 | 262 | 1.01 | 0.99 |
| WTG-08 | Bulk | 1.0 – 2.0 | Clayey Gravel with Sand | GC | 13.9 | 36 | 14 | 47.3 | 116.6 | 12.9 | 9.3 | Fair | 5,560 | 7.8 | 90 | 33 | <0.1 | 276 | 1.21 | 0.82 |
| **SOLAR PV ARRAYS** | | | | | | | | | | | | | | | | | | | | |
| PV-001 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 11.2 | 21 | 5 | 60.4 | 107.1 | 17.2 | --- | --- | 13,100 | 9.0 | <15 | 93 | <0.1 | 103 | 1.07 | 0.93 |
| PV-003 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay with Gravel | CL-ML | 7.2 | 28 | 6 | 59 | 110.5 | 17.1 | --- | --- | 4,400 | 8.0 | <15 | 75 | <0.1 | 154 | 1.34 | 0.74 |
| PV-004 | SS-1 to SS-3 | 0 to 6 | Sandy Lean Clay | CL | 14.7 | 28 | 11 | 58.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-005 | SS-1 to SS-4 | 0 to 8 | Silty Clay with Sand | CL-ML | 15.1 | 28 | 7 | 77.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-005 | SS-5 to SS-6 | 8 to 15 | Sandy Silty Clay | CL-ML | 18.7 | 28 | 7 | 53.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-008 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 1.8 | 26 | 5 | 63.5 | 101 | 20.3 | 5.7 | Poor-Fair | 4,400 | 8.9 | 30 | 2.8 | <0.1 | 133 | 1.08 | 0.92 |
| PV-012 | Bulk | 2.0 – 5.0 | Silty, Clayey Gravel with Sand | GC-GM | 2.5 | 26 | 6 | 47.4 | 109.9 | 15.2 | --- | --- | 6,800 | 8.0 | <15 | 24 | <0.1 | 157 | 1.29 | 0.77 |
| PV-015 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 17.1 | 22 | 5 | 72.2 | 103.3 | 20.6 | --- | --- | 5,810 | 9.6 | <15 | 243 | <0.1 | 120 | 1.18 | 0.85 |
| PV-016 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 10.8 | 22 | 6 | 61.2 | 101.4 | 21.2 | --- | --- | 6,100 | 9.5 | <15 | 24 | <0.1 | 126 | 1.04 | 0.96 |
| PV-017 | SS-1 to SS-3 | 0 to 6 | Silty, Clayey Sand | SC-SM | 10.7 | 28 | 7 | 48.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-017 | SS-4 to SS-6 | 6 to 13.9 | Silty Sand | SM | 13.4 | 32 | 8 | 21.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-019 | SS-3 to SS-5 | 4 to 8.4 | Silty Sand | SM | 17.1 | 32 | 8 | 31.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-020 | SS-2 to SS-4 | 2 to 7.3 | Silty, Clayey Sand with Gravel | SC-SM | 7.7 | 28 | 7 | 47.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-021 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 16.4 | 22 | 5 | 54.1 | 108.9 | 15.4 | 6.8 | Poor-Fair | 7,810 | 9.4 | <15 | 153 | <0.1 | 123 | 1.20 | 0.83 |

| Boring Location ID | Sample Number | Sampling Depth (feet) | USCS Soil Classification | USCS Soil Group | Water Content (%) | Liquid Limit | Plasticity Index | Percent Finer than #200 Sieve | Max. Dry Density (pcf) | Optimum Moisture Content (%) | CBR @95% MDD (%) | CBR Rating | Resistivity (Ohm-cm) | pH | Sulfate (ppm) | Chloride (ppm) | Sulfides (ppm) | Redox Potential (mV) | Thermal Conductivity at OMC (W/m-K) | Thermal Resistivity at OMC ($m^2K/W$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-024 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 11.4 | 27 | 6 | 48.8 | 106.4 | 16.2 | 9.2 | Fair | 2,800 | 9.6 | <15 | 18 | <0.1 | 122 | 1.32 | 0.76 |
| PV-026 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 16.8 | 23 | 5 | 73.2 | 107.1 | 16.9 | --- | --- | 8,890 | 8.9 | <15 | 42 | <0.1 | 142 | 1.13 | 0.89 |
| PV-028 | SS-3 to SS-4 | 4 to 8 | Silty, Clayey Sand with Gravel | SC-SM | 14.6 | 27 | 7 | 36.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-029 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 11.3 | 28 | 6 | 72.5 | 107.1 | 17.2 | --- | --- | 2,290 | 8.7 | 210 | 153 | <0.1 | 125 | 1.10 | 0.91 |
| PV-030 | SS-1 to SS-3 | 0 to 6 | Sandy Silty Clay | CL-ML | 11.0 | 27 | 6 | 52.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-031 | SS-1 to SS-3 | 0 to 6 | Sandy Silt | ML | 14.4 | 31 | 7 | 62.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-034 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 7.7 | 24 | 5 | 61.6 | 101.6 | 17.7 | 5.3 | Poor-Fair | 3,900 | 9.6 | 30 | 153 | <0.1 | 125 | 1.05 | 0.95 |
| PV-036 | Bulk | 0.5 – 1.0 | Silty, Clayey Sand with Gravel | SC-SM | 6.5 | 28 | 6 | 39.4 | 108.7 | 17.8 | --- | --- | 3,900 | 8.6 | <15 | <10 | <0.1 | 155 | 1.31 | 0.76 |
| PV-040 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 16.6 | 28 | 6 | 33.9 | 105.4 | 18.9 | --- | --- | 3,740 | 8.7 | 120 | 60 | <0.1 | 152 | 1.08 | 0.93 |
| PV-043 | Bulk | 2.0 – 5.0 | Clayey Sand | SC | 10.3 | 31 | 10 | 40.6 | 108.6 | 16.6 | --- | --- | 3,000 | 8.1 | 30 | 21 | <0.1 | 216 | 1.18 | 0.85 |
| PV-045 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 8.0 | 26 | 6 | 73.5 | 105.8 | 16.6 | 6.2 | Poor-Fair | 4,100 | 8.4 | <15 | 36 | <0.1 | 214 | 1.14 | 0.88 |
| PV-045 | SS-5 to SS-7 | 8 to 18.8 | Silty, Clayey Sand | SC-SM | 15.7 | 27 | 6 | 35.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-047 | Bulk | 2.0 – 5.0 | Poorly Graded Sand with Silty Clay and Gravel | SP-SC | 7.8 | 24 | 5 | 5.8 | 112 | 17.3 | --- | --- | 4,900 | 8.0 | <15 | <10 | <0.1 | 168 | 1.31 | 0.76 |
| PV-049 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 8.9 | 26 | 5 | 20.7 | 109.2 | 15.9 | --- | --- | 13,800 | 8.1 | <15 | <10 | <0.1 | 168 | 1.32 | 0.76 |
| PV-052 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 30.3 | 27 | 6 | 38.7 | 100 | 22.1 | --- | --- | 4,390 | 8.5 | <15 | <10 | <0.1 | 163 | 1.17 | 0.86 |
| PV-058 | Bulk | 2.0 – 5.0 | Sandy Silt with Gravel | ML | 8.8 | 36 | 10 | 53.6 | 104.5 | 19.6 | 5.5 | Poor-Fair | 6,400 | 8.6 | <15 | 87 | <0.1 | 174 | 1.32 | 0.76 |
| PV-064 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 10.5 | 24 | 6 | 72.8 | 100.9 | 18.5 | --- | --- | 5,580 | 9.7 | 180 | 144 | <0.1 | 148 | 1.40 | 0.71 |
| PV-068 | Bulk | 2.0 – 5.0 | Silty Sand with Gravel | SM | 9.9 | 42 | 15 | 18.5 | 112.4 | 15.4 | --- | --- | 8,100 | 7.6 | 60 | 114 | <0.1 | 188 | 1.45 | 0.69 |
| PV-071 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 9.2 | 26 | 6 | 80.0 | 103.7 | 17.3 | --- | --- | 15,900 | 7.5 | 60 | 75 | <0.1 | 175 | 1.29 | 0.77 |
| PV-074 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 8.4 | 37 | 15 | 15.2 | 103.1 | 17.2 | --- | --- | 12,900 | 8.7 | 150 | 60 | <0.1 | 143 | 1.62 | 0.62 |
| PV-077 | SS-2 to SS-5 | 4.0 – 8.5 | Sandy Silt | ML | 22.9 | 36 | 10 | 59.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-079 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 15.4 | 32 | 13 | 71.6 | 108.0 | 16.7 | 4.9 | Poor-Fair | 6,870 | 8.1 | <15 | 105 | <0.1 | 222 | 1.17 | 0.86 |
| PV-081 | Bulk | 2.0 – 5.0 | Lean Clay | CL | 15.9 | 30 | 9 | 85.6 | 101.8 | 17.9 | --- | --- | 8,550 | 8.3 | 30 | 114 | <0.1 | 219 | 1.41 | 0.71 |
| PV-084 | Bulk | 2.0 – 5.0 | Fat Clay with Sand | CH | 28.2 | 68 | 38 | 77.3 | 100.1 | 19.7 | --- | --- | 2,880 | 9.2 | <15 | 33 | <0.1 | 213 | 0.87 | 1.15 |
| PV-084 | SS-3 to SS-5 | 4 to 9.3 | Silty Sand | SM | 28.3 | 75 | 39 | 49.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-089 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 13.0 | 24 | 5 | 58.7 | 103.4 | 16.9 | 5.5 | Poor-Fair | 9,320 | 9.5 | <15 | 39 | <0.1 | 195 | 1.06 | 0.94 |
| PV-090 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 12.3 | 19 | 5 | 52.0 | 101.2 | 20.1 | --- | --- | 6,460 | 9.2 | <15 | 12 | <0.1 | 166 | 1.05 | 0.95 |
| PV-093 | SS-1 to SS-3 | 0 to 6 | Sandy, Silty Clay | CL-ML | 15.7 | 28 | 7 | 60.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-095 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 13.6 | 25 | 5 | 61.3 | 109.5 | 16.9 | --- | --- | 6,560 | 8.9 | <15 | 45 | <0.1 | 204 | 1.05 | 0.96 |

| Boring Location ID | Sample Number | Sampling Depth (feet) | USCS Soil Classification | USCS Soil Group | Water Content (%) | Liquid Limit | Plasticity Index | Percent Finer than #200 Sieve | Max. Dry Density (pcf) | Optimum Moisture Content (%) | CBR @95% MDD (%) | CBR Rating | Resistivity (Ohm-cm) | pH | Sulfate (ppm) | Chloride (ppm) | Sulfides (ppm) | Redox Potential (mV) | Thermal Conductivity at OMC (W/m-K) | Thermal Resistivity at OMC ($m^2K/W$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-097 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 20.4 | 27 | 7 | 75.6 | 108.6 | 16.1 | --- | --- | 4,050 | 9.5 | <15 | 69 | <0.1 | 182 | 1.02 | 0.98 |
| PV-098 | SS-1 to SS-3 | 0 to 6 | Silty, Clayey Sand | SC-SM | 15.7 | 26 | 7 | 46.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-100 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 20.4 | 32 | 11 | 84.6 | 104.7 | 18.6 | 5.5 | Poor-Fair | 3,820 | 8.7 | <15 | 48 | <0.1 | 205 | 1.06 | 0.94 |
| PV-101 | SS-1 to SS-3 | 0 to 6 | Sandy Silt | ML | 14.0 | 32 | 7 | 68.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-105 | Bulk | 1.0 – 2.0 | Silty Sand with Gravel | SM | 8.5 | 27 | 4 | 29.4 | 108.9 | 16.4 | --- | --- | 8,490 | 8.4 | <15 | 45 | <0.1 | 236 | 1.03 | 0.97 |
| PV-109 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 16.0 | 25 | 4 | 30.7 | 116.5 | 12.0 | --- | --- | 6,540 | 9.2 | <15 | 60 | <0.1 | 224 | 0.96 | 1.04 |
| PV-111 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 9.1 | 23 | 5 | 53.0 | 108.4 | 17.1 | --- | --- | 10,400 | 8.6 | <15 | 39 | <0.1 | 236 | 1.03 | 0.97 |
| PV-111 | SS-3 to SS-4 | 4 to 7.1 | Silty Sand | SM | 15.6 | 31 | 6 | 47.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-114 | Bulk | 2.0 – 5.0 | Silty Sand | SM | 8.3 | 31 | 6 | 29.9 | 107.8 | 16.4 | 8.3 | Fair | 2,500 | 8.3 | 90 | <10 | <0.1 | 238 | 1.12 | 0.89 |
| PV-119 | Bulk | 1.0 – 2.0 | Silty Clay with Sand | CL-ML | 6.4 | 27 | 7 | 70.9 | 110.3 | 14.1 | --- | --- | 3,100 | 8.3 | <15 | <10 | <0.1 | 243 | 1.11 | 0.90 |
| PV-121 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 6.9 | 33 | 11 | 34.1 | 113.6 | 15.3 | --- | --- | 2,700 | 8.8 | <15 | 21 | <0.1 | 222 | 1.08 | 0.93 |
| PV-123 | Bulk | 2.0 – 5.0 | Sandy Silt | ML | 7.6 | NP | NP | 58.7 | 111.3 | 13.0 | 8.5 | Fair | 3,100 | 9.1 | <15 | 15 | <0.1 | 187 | 1.09 | 0.92 |
| PV-126 | Bulk | 1.0 – 2.0 | Sandy Silt | ML | 7.2 | 34 | 9 | 54.7 | 111.0 | 14.4 | --- | --- | 2,400 | 8.2 | <15 | <10 | <0.1 | 230 | 1.26 | 0.79 |
| PV-127 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 15.2 | 20 | 5 | 58.4 | 110.4 | 16.0 | --- | --- | 7,430 | 9.6 | <15 | 66 | <0.1 | 199 | 1.15 | 0.87 |
| PV-132 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 5.4 | 27 | 7 | 36.4 | 122.6 | 11.8 | 10.6 | Fair | 3,500 | 8.5 | 30 | <10 | <0.1 | 216 | 1.37 | 0.73 |
| PV-137 | Bulk | 2.0 – 5.0 | Silty Sand with Gravel | SM | 7.4 | 29 | 5 | 43.4 | 110.7 | 12.4 | --- | --- | 2,000 | 8.3 | <15 | 15 | <0.1 | 168 | 1.11 | 0.90 |
| PV-140 | SS-1 to SS-2 | 0 to 4 | Sandy, Silty Clay | CL-ML | 6.9 | 26 | 6 | 64.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PV-142 | Bulk | 1.0 – 2.0 | Sandy Silt with Gravel | ML | 6.7 | 29 | 6 | 60.0 | 116.5 | 13.2 | --- | --- | 1,600 | 9.8 | <15 | 12 | <0.1 | 204 | 1.25 | 0.80 |
| PV-144 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 15.8 | 24 | 5 | 65.0 | 103.6 | 19.1 | 5.2 | Poor-Fair | 7,860 | 8.5 | <15 | 33 | <0.1 | 174 | 1.18 | 0.85 |
| PV-145 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 12.1 | 20 | 6 | 57.9 | 109.6 | 17.5 | --- | --- | 10,500 | 9.7 | <15 | 42 | <0.1 | 150 | 1.15 | 0.87 |
| PV-151 | Bulk | 1.0 – 2.0 | Gravelly Lean Clay with Sand | CL | 8.9 | 31 | 12 | 57.5 | 106.0 | 17.8 | 2.6 | Very Poor | 2,300 | 9.8 | 120 | 18 | <0.1 | 169 | 1.06 | 0.94 |
| PV-154 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 8.1 | 31 | 12 | 68.8 | 102.9 | 17.8 | --- | --- | 3,200 | 8.6 | 30 | 15 | <0.1 | 189 | 1.08 | 0.93 |
| PV-158 | Bulk | 2.0 – 5.0 | Sandy Silty Clay | CL-ML | 5.8 | 25 | 5 | 52.5 | 113.4 | 13.5 | --- | --- | 4,400 | 8.6 | 120 | 18 | <0.1 | 212 | 1.19 | 0.84 |
| PV-160 | Bulk | 2.0 – 5.0 | Clayey Sand | SC | 10.3 | 25 | 8 | 48.0 | 98.0 | 18.2 | --- | --- | 13,800 | 9.7 | <15 | 39 | <0.1 | 180 | 1.11 | 0.91 |
| PV-164 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 10.1 | 32 | 13 | 82.2 | 99.7 | 19.4 | 1.8 | Very Poor | 2,900 | 8.4 | <15 | 12 | <0.1 | 225 | 1.12 | 0.89 |
| PV-169 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 6.8 | 28 | 8 | 75.1 | 101.6 | 20.5 | --- | --- | 3,500 | 8.5 | <15 | 12 | <0.1 | 216 | 1.13 | 0.88 |
| PV-172 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 8.3 | 25 | 5 | 74.9 | 105.0 | 17.8 | --- | --- | 3,500 | 9.2 | <15 | 15 | <0.1 | 198 | 1.08 | 0.93 |
| PV-178 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 7.0 | 27 | 6 | 46.2 | 106.8 | 16.7 | 2.0 | Very Poor | 3,300 | 9.2 | <15 | 15 | <0.1 | 193 | 1.14 | 0.88 |
| PV-179 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 6.8 | 30 | 10 | 69.1 | 107.1 | 19.2 | --- | --- | 2,900 | 8.4 | <15 | 12 | <0.1 | 218 | 1.13 | 0.88 |

| Boring Location ID | Sample Number | Sampling Depth (feet) | USCS Soil Classification | USCS Soil Group | Water Content (%) | Liquid Limit | Plasticity Index | Percent Finer than #200 Sieve | Max. Dry Density (pcf) | Optimum Moisture Content (%) | CBR @95% MDD (%) | CBR Rating | Resistivity (Ohm-cm) | pH | Sulfate (ppm) | Chloride (ppm) | Sulfides (ppm) | Redox Potential (mV) | Thermal Conductivity at OMC (W/m-K) | Thermal Resistivity at OMC ($m^2K/W$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PV-181 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 6.5 | 29 | 9 | 79.0 | 102.7 | 18.7 | --- | --- | 3,000 | 8.4 | 30 | <10 | <0.1 | 210 | 1.10 | 0.91 |
| PV-183 | Bulk | 2.0 – 5.0 | Lean Clay | CL | 6.9 | 31 | 12 | 88.1 | 102.6 | 18.3 | 1.8 | Very Poor | 1,800 | 8.0 | 30 | <10 | <0.1 | 234 | 1.14 | 0.88 |
| PV-188 | Bulk | 2.0 – 5.0 | Sandy Silty Clay | CL-ML | 7.4 | 27 | 6 | 60.4 | 103.5 | 18.7 | --- | --- | 4,700 | 9.2 | <15 | 24 | <0.1 | 216 | 1.17 | 0.86 |
| PV-189 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 6.8 | 33 | 14 | 77.6 | 102.6 | 18.1 | --- | --- | 4,400 | 8.6 | <15 | 27 | <0.1 | 233 | 1.12 | 0.89 |
| PV-193 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 17.7 | 26 | 8 | 78.9 | 101.0 | 20.7 | --- | --- | 6,250 | 8.4 | 30 | 42 | <0.1 | 232 | 1.09 | 0.92 |
| PV-195 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 7.8 | 31 | 12 | 69.7 | 105.2 | 16.5 | 2.2 | Very Poor | 3,200 | 8.0 | 30 | <10 | <0.1 | 244 | 1.15 | 0.87 |
| PV-198 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 18.6 | 30 | 11 | 68.5 | 105.1 | 19.4 | --- | --- | 8,760 | 8.8 | <15 | 42 | <0.1 | 234 | 1.16 | 0.86 |
| PV-204 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 14.1 | 27 | 8 | 49.5 | 113.2 | 16.6 | --- | --- | 12,300 | 8.3 | 30 | 45 | <0.1 | 226 | 1.17 | 0.86 |
| PV-207 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 16.8 | 34 | 15 | 77.0 | 103.1 | 19.8 | 2.3 | Very Poor | 6,040 | 7.6 | 30 | 84 | <0.1 | 243 | 1.09 | 0.92 |
| PV-210 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 15.9 | 22 | 6 | 46.4 | 110.1 | 16.7 | --- | --- | 9,590 | 8.5 | <15 | 90 | <0.1 | 226 | 1.36 | 0.74 |
| PV-212 | Bulk | 1.0 – 2.0 | Gravelly Lean Clay | CL | 10.9 | 32 | 13 | 63.5 | 113.6 | 14.7 | --- | --- | 14,400 | 7.8 | <15 | 39 | <0.1 | 247 | 1.23 | 0.81 |
| PV-214 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 9.7 | 31 | 11 | 28.7 | 118.1 | 12.3 | 8.1 | Fair | 9,190 | 8.5 | <15 | 24 | <0.1 | 222 | 1.25 | 0.80 |
| PV-217 | Bulk | 1.0 – 3.0 | Clayey Sand with Gravel | SC | 11.7 | 40 | 16 | 30.1 | 118.9 | 13.2 | --- | --- | 9,440 | 8.4 | 30 | 42 | <0.1 | 242 | 1.49 | 0.67 |
| PV-223 | Bulk | 1.0 – 2.0 | Lean Clay with Sand | CL | 13.4 | 33 | 13 | 80.8 | 111.9 | 15.0 | --- | --- | 4,760 | 7.9 | 30 | 39 | <0.1 | 256 | 1.09 | 0.92 |
| PV-226 | Bulk | 1.0 – 2.0 | Lean Clay with Sand | CL | 6.3 | 32 | 10 | 79.4 | 110.7 | 16.8 | --- | --- | 2,300 | 8.1 | <15 | <10 | <0.1 | 262 | 1.42 | 0.70 |
| PV-230 | Bulk | 1.0 – 2.0 | Lean Clay with Sand | CL | 17.3 | 30 | 9 | 81.0 | 108.1 | 18.3 | --- | --- | 6,550 | 8.3 | <15 | 60 | <0.1 | 259 | 1.27 | 0.79 |

NP – Non-Plastic; CBR - California Bearing Ratio; MDD – Maximum Dry Density; and OMC – Optimum Moisture Content.
ppm – particles per million; mV – millivolts; W/m-K – watts per meter Kelvin; and $m^2K/W$ – square meter-Kelvin per watts.

**Table 5. Summary of Rock Strength Laboratory Testing**

| Boring ID | Sample/Core No. | Sample Depth (feet) | Rock Type | Dry Unit Weight (pcf) | Wet Unit Weight (pcf) | Unconfined Compressive Strength (psi) | Undrained Shear Strength (psi) |
|---|---|---|---|---|---|---|---|
| SB-01 | R-3 | 19.3 – 20.0 | Basalt | 160.2 | 165.1 | 12,360.9 | 6,180.5 |
| SB-02 | R-2 | 12.6 – 13.0 | Basalt | 160.0 | 165.0 | 6,257.1 | 3,128.6 |
| WTG-01 | R-4 | 23.8 – 24.5 | Basalt | 122.3 | 127.6 | 3,671.6 | 1,835.8 |
| WTG-01 | R-7 | 35.5 – 36.0 | Basalt | 154.6 | 155.1 | 6,806.4 | 3,403.2 |
| WTG-02 | R-5 | 22.5 – 23.0 | Basalt | 144.4 | 153.2 | 4,294.1 | 2,147.1 |
| WTG-02 | R-7 | 31.4 – 31.9 | Basalt | 154.6 | 154.9 | 1,589.7 | 794.9 |
| WTG-03 | R-3 | 12.5 – 12.9 | Basalt | 101.4 | 115.6 | 2,935.7 | 1,467.9 |
| WTG-03 | R-4 | 15.8 – 16.2 | Basalt | 137.0 | 137.6 | 2,143.7 | 1,071.8 |
| WTG-04 | R-6 | 30.2 – 30.6 | Basalt | 153.1 | 159.5 | 9,418.9 | 4,709.5 |
| WTG-05 | R-4 | 15.0 – 15.6 | Basalt | 165.6 | 167.6 | 10,822.4 | 5,411.2 |
| WTG-06 | R-3 | 12.7 – 13.0 | Basalt | 163.6 | 165.4 | 3,672.9 | 1,836.5 |
| WTG-07 | R-6 | 27.2 – 27.7 | Basalt | 162.5 | 166.7 | 8,814.6 | 4,407.3 |
| WTG-08 | R-7 | 30.0 – 30.7 | Basalt | 165.3 | 168.6 | 12,063.0 | 6,031.5 |
| | | | **Overall Averages =** | **150** | **154** | **6,528** | **3,264** |

**Table 6. Summary of Drilled Pier Design Parameters for Substation**

| Soil Layer Depths (feet)[2] | Soil Type/ USCS Class | Average SPT, $N_{60}$ (bpf) | Effective Unit Weight, γ' (pcf) | Undrained Cohesion, C (psf) | Effective Friction Angle, φ' (deg) | Soil Modulus, k (pci) | Allowable Unit Skin Friction Capacity, $Q_s$ (psf)[3] | Allowable Unit End Bearing Capacity, $Q_t$ (psf) |
|---|---|---|---|---|---|---|---|---|
| 0 to 5 | Lean Clay (CL) / Silty Clay (CL-ML) | ~30 | 120 | 3,000 | N/A | Default | Ignore[4] | Ignore[5] |
| 5 and below | Basalt Bedrock | — | 165 | N/A | N/A | N/A | 5,000 | Ignore[5] |

[1] Parameters are based on presumptive values and developed from empirical charts (Das, 2022), (Bowles, 1995) and (NAVFAC, 1986).
[2] For final foundation design, verify the soil layer depths using the data provided on the substation boring logs (SB-01 and SB-02).
[3] Allowable unit skin friction capacities were developed using a FOS of 2.0.
[4] Ignore the shaft soil resistance through skin friction in at least the top 5 feet per Section 10.8.3.5.1b-1 (AASHTO, 2017).
[5] Assume axial compression load on a shaft socketed into rock is carried solely by shaft side resistance.

**Table 7. Summary of Pile Design Parameters for Solar PV Arrays**

| Pile Zone ID | Soil Layer Depths (feet)[1,2] | LPile Soil Type | USCS Soil Class | Effective Unit Weight, γ' (pcf) | Undrained Cohesion, C (psf) | Effective Friction Angle, ϕ' (deg) | Uniaxial Compressive Strength (psi) | Soil Modulus, k (pci) | Soil Strain, $\varepsilon_{50}$ (dim) | p-multiplier[3] | Ultimate Unit Skin Friction Capacity, $Q_s$ (psf)[4] | Ultimate Unit End Bearing Capacity, $Q_t$ (psf)[4,5] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Piles with Direct Driving Condition** | | | | | | | | | | | | |
| 1 | 0 – 2 | Soft Clay (Matlock) | CL-ML | 115 | 500 | -- | -- | Default | Default | 1.0 | Ignore[6] | N/A |
| | 2 – 6 | Sand (Reese) | SC | 120 | -- | 34 | -- | Default | Default | 1.0 | 600 | 1,500 |
| | 6 and below | Sand (Reese) | Weathered Rock | 130 | -- | 38 | -- | Default | Default | 1.0 | 750 | 3,000 |
| 2 | 0 – 2 | Soft Clay (Matlock) | CL-ML | 115 | 500 | -- | -- | Default | Default | 1.0 | Ignore[6] | N/A |
| | 2 – 6 | Sand (Reese) | SC | 120 | -- | 34 | -- | Default | Default | 1.0 | 200 | 1,500 |
| | 6 – 8 | Sand (Reese) | Weathered Rock | 130 | -- | 38 | -- | Default | Default | 1.0 | 250 | 1,500 |
| | 8 and below | Strong Rock (Basalt) | Bedrock | 150 | -- | -- | 4,000 | -- | -- | 1.0 | 750 | 3,000 |
| **Piles with Pre-Drilling Condition (5.875-inch predrilled hole)** | | | | | | | | | | | | |
| 3 | 0 – 2 | Soft Clay (Matlock) | CL-ML | 115 | 500 | -- | -- | Default | Default | 1.4 | Ignore[6] | N/A |
| | 2 – 4 | Sand (Reese) | SM | 120 | -- | 34 | -- | Default | Default | 1.4 | 600 | N/A |
| | 4 – 7 | Sand (Reese) | Weathered Rock | 130 | -- | 38 | -- | Default | Default | 1.4 | 600 | 1,500 |
| | 7 and below | Strong Rock (Basalt) | Bedrock | 150 | -- | -- | 4,000 | -- | -- | 1.4 | 750 | 2,000 |
| 4 | 0 – 2 | Soft Clay (Matlock) | CL-ML | 115 | 500 | -- | -- | Default | Default | 1.4 | Ignore[6] | N/A |
| | 2 – 4 | Sand (Reese) | SM | 120 | -- | 34 | -- | Default | Default | 1.4 | 100 | N/A |
| | 4 – 7 | Sand (Reese) | Weathered Rock | 130 | -- | 38 | -- | Default | Default | 1.4 | 100 | 500 |
| | 7 and below | Strong Rock (Basalt) | Bedrock | 150 | -- | -- | 4,000 | -- | -- | 1.4 | 400 | 2,000 |

[1] Parameters are based on presumptive values and developed from empirical charts (Das, 2022), (Bowles, 1995) and (NAVFAC, 1986).
[2] For final foundation design, verify the soil layer depths using the data provided on the solar PV array boring logs (PV-001 through PV-230).
[3] The p-multiplier value should be applied from the ground surface to the pile tip. The p-multipliers for each zone can be used for piles installed deeper than 12 feet.
[4] We recommend using an allowable factor of safety of 1.5 for skin friction and end bearing values from ground surface to 12 feet bgs. For piles installed deeper than 12 feet, we recommend using a factor of safety of 2.0.
[5] The end bearing capacity is only applicable to piles installed a minimum of 6 feet bgs.
[6] The skin friction capacity within the upper 24 inches of soil should be neglected due to seasonal moisture changes and disturbances during construction.

# Appendix A: Subsurface Exploration Plans

**Subsurface Exploration Plan**

**Piles Zoning Plan**

Project Boundary
Electrical Resistivity
Percolation Testing
Pile Testing
Soil Array Borings
Soil/Rock WTG/POI Borings

6A
6B
6C
6D
6E
6F
6G
6H
6I

Portland
Project Location

0
3 Miles

TETRA TECH

**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 6**

Project Boundary
Electrical Resistivity
Percolation Testing
Pile Testing
Soil/Rock WTG/POI Borings
Soil Array Borings

PT-PV-001
ERT-PV-001
PV-001
PT-PV-002
PV-002
PV-003
ERT-PV-003
WILLOW CREEK
PV-005
PT-PV-005
PV-004
PT-PV-004
WTG-01
PT-WTG-01
IT-WTG-01
ERT-WTG-01
PV-007
PT-PV-007
ERT-PV-007
PV-006
PV-009
PT-PV-009
IT-PV-008
ERT-PV-008
PV-008
PT-PV-010
PV-010
PT-PV-011
PV-011
ERT-PV-012
PV-012
PV-013
PV-014
ERT-PV-014
PV-016
ERT-PV-016
PV-015
ERT-PV-015
PT-PV-015
PV-017
PT-PV-017
PV-021
ERT-PV-021
PT-PV-022
PT-PV-021
IT-PV-021
PV-022
PV-020
PV-019
PT-PV-019
ERT-PV-019
PV-018

Portland
Project Location

0
0.5 Miles

TETRA TECH

# SUBSURFACE EXPLORATION PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 6A

Project Boundary
Electrical Resistivity
Percolation Testing
Pile Testing
Soil/Rock WTG/POI Borings
Soil Array Borings

PV-023
PV-025
ERT-PV-025
PT-PV-025
PV-026
ERT-PV-026
PV-024
IT-PV-024
ERT-PV-024
PV-027
PT-PV-028
PV-028
PV-029
ERT-PV-029
PT-PV-029
ERT-WTG-02
WTG-02
IT-WTG-02
PV-030
ERT-PV-030
PT-PV-030
WTG-02
PV-031
PT-PV-031
PV-032
PV-033
PV-034
ERT-PV-034
IT-PV-034
PT-PV-034
PV-036
ERT-PV-036
PT-PV-036
PV-038
PV-039
PV-040
PT-PV-040
ERT-PV-040
PV-041
PV-042
PV-035
PT-PV-035
ERT-PV-035
PV-037
PV-044
PV-046
PV-045
IT-PV-045
PT-PV-045
ERT-PV-045
PV-047
PT-PV-047
ERT-PV-047
PV-043
ERT-PV-043
PT-PV-043
PV-049
ERT-PV-049
PV-050
PT-PV-068
ERT-PV-068
PV-068
PV-066
PV-065
PT-PV-065
PV-048
PT-PV-048
PV-051
ERT-PV-051
PT-PV-051
PT-PV-060
ERT-PV-060
PV-060

Portland
Project Location

0
0.5 Miles

TETRA TECH

**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
**FIGURE 6B**

Project Boundary
Electrical Resistivity
Percolation Testing
Pile Testing
Soil/Rock WTG/POI Borings
Soil Array Borings

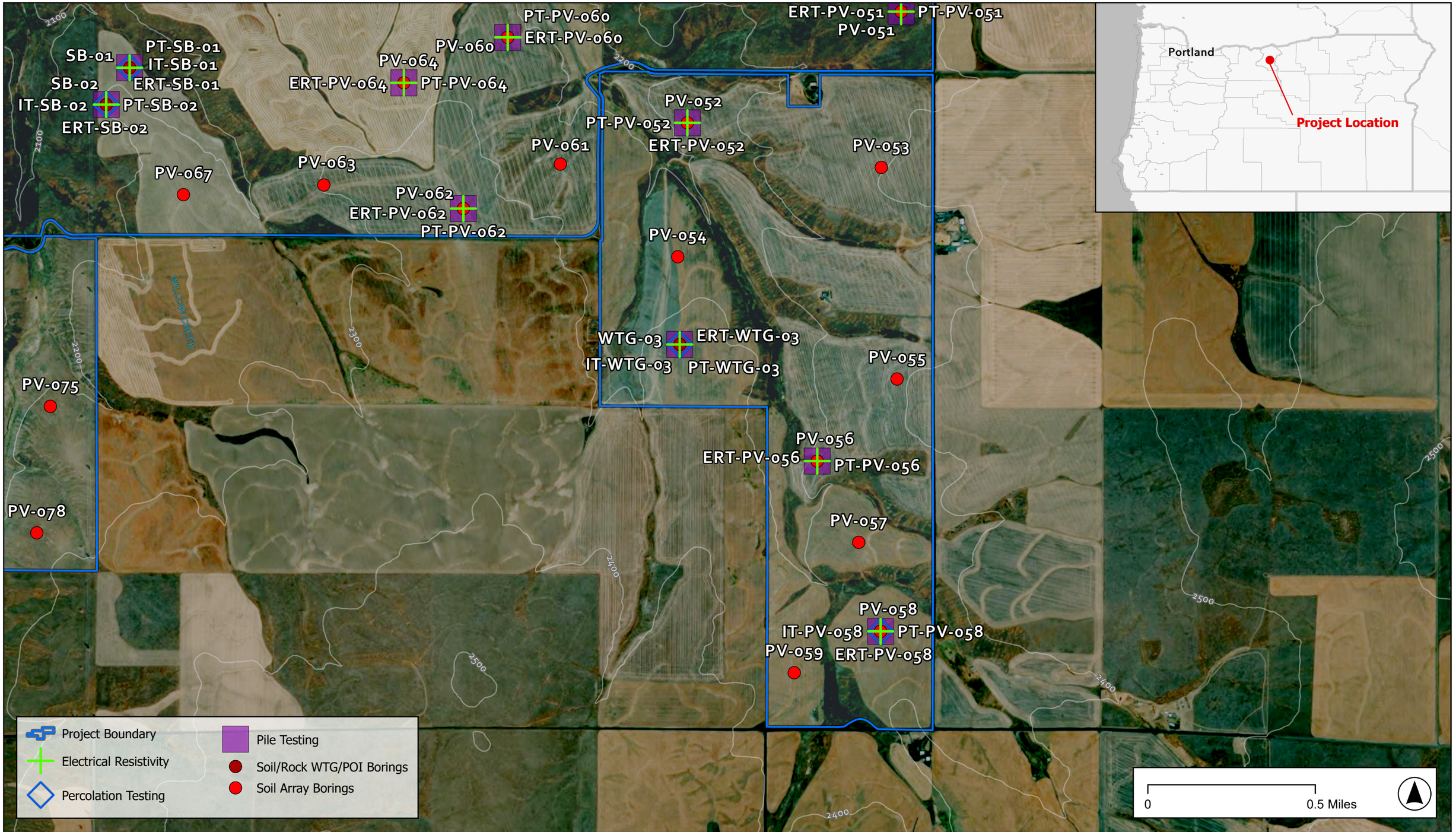
Portland
Project Location

PV-069
PT-PV-068
ERT-PV-068
PV-068
PV-071
ERT-PV-071
PT-PV-071
PV-070
SB-01
PT-SB-01
IT-SB-01
ERT-SB-01
SB-02
IT-SB-02
PT-SB-02
ERT-SB-02
PT-PV-060
PV-064
ERT-PV-060
ERT-PV-064
PT-PV-064
PV-073
PV-072
ERT-PV-072
PT-PV-072
PV-067
PV-063
PT-PV-062
ERT-PV-062
PV-062
PV-088
PV-087
PV-083
PV-082
PV-074
PT-PV-074
ERT-PV-074
PV-089
IT-PV-089
PT-PV-089
ERT-PV-089
PV-084
PV-085
ERT-PV-084
PT-PV-084
PV-076
ERT-PV-076
PV-077
PT-PV-077
PV-075
PV-090
ERT-PV-090
PT-PV-090
PV-079
IT-PV-079
PT-PV-079
ERT-PV-079
PV-092
PT-PV-086
PV-091
ERT-PV-086
PV-086
PT-PV-081
ERT-PV-081
PV-081
PV-080
PV-078
PV-093
ERT-PV-093
PT-PV-093
PV-096
WILLOW CREEK
2100
2400
2300
2200

0
0.5 Miles

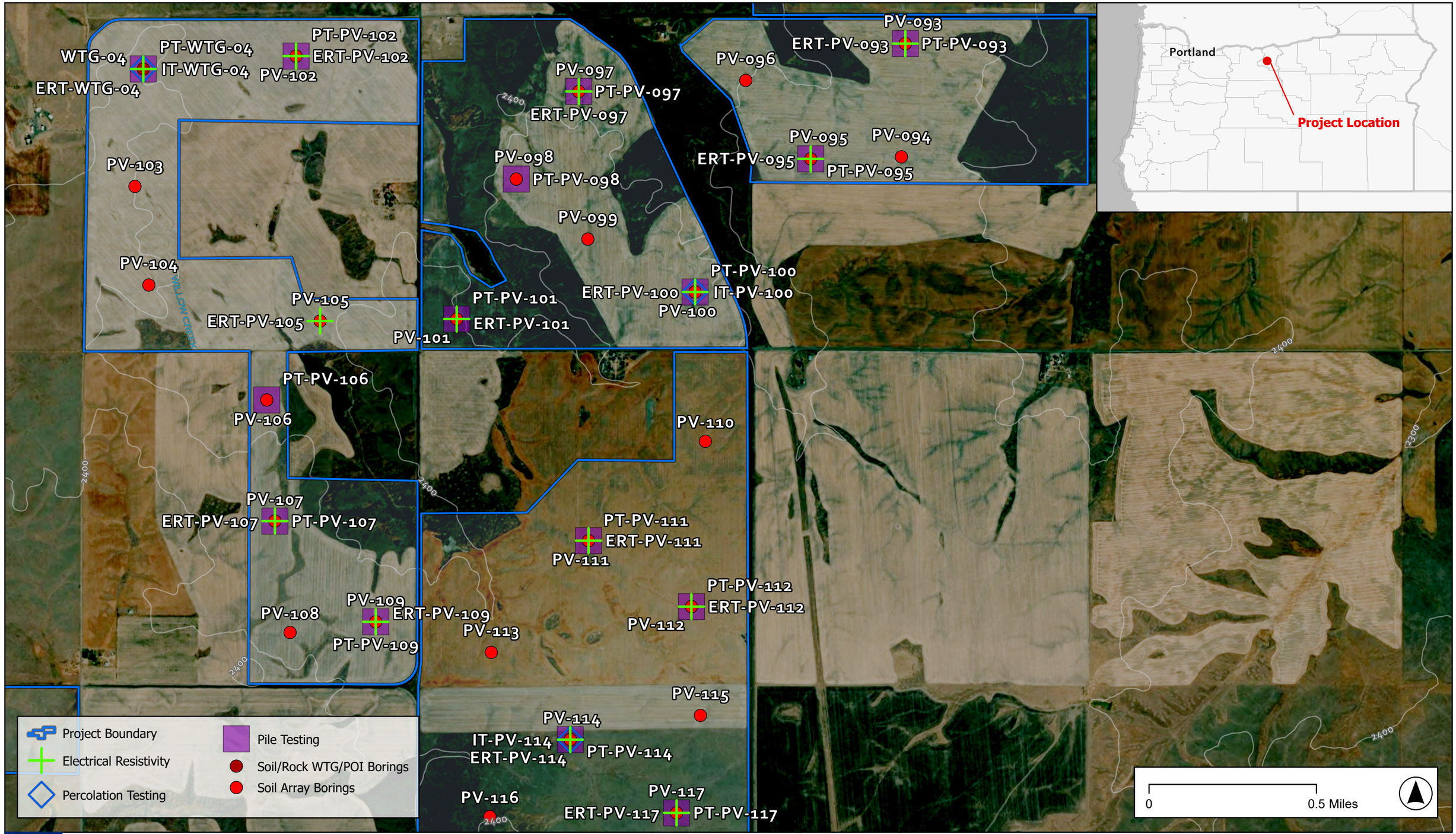
TETRA TECH

SUBSURFACE EXPLORATION PLAN
SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 6C




TETRA TECH

**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 6D**

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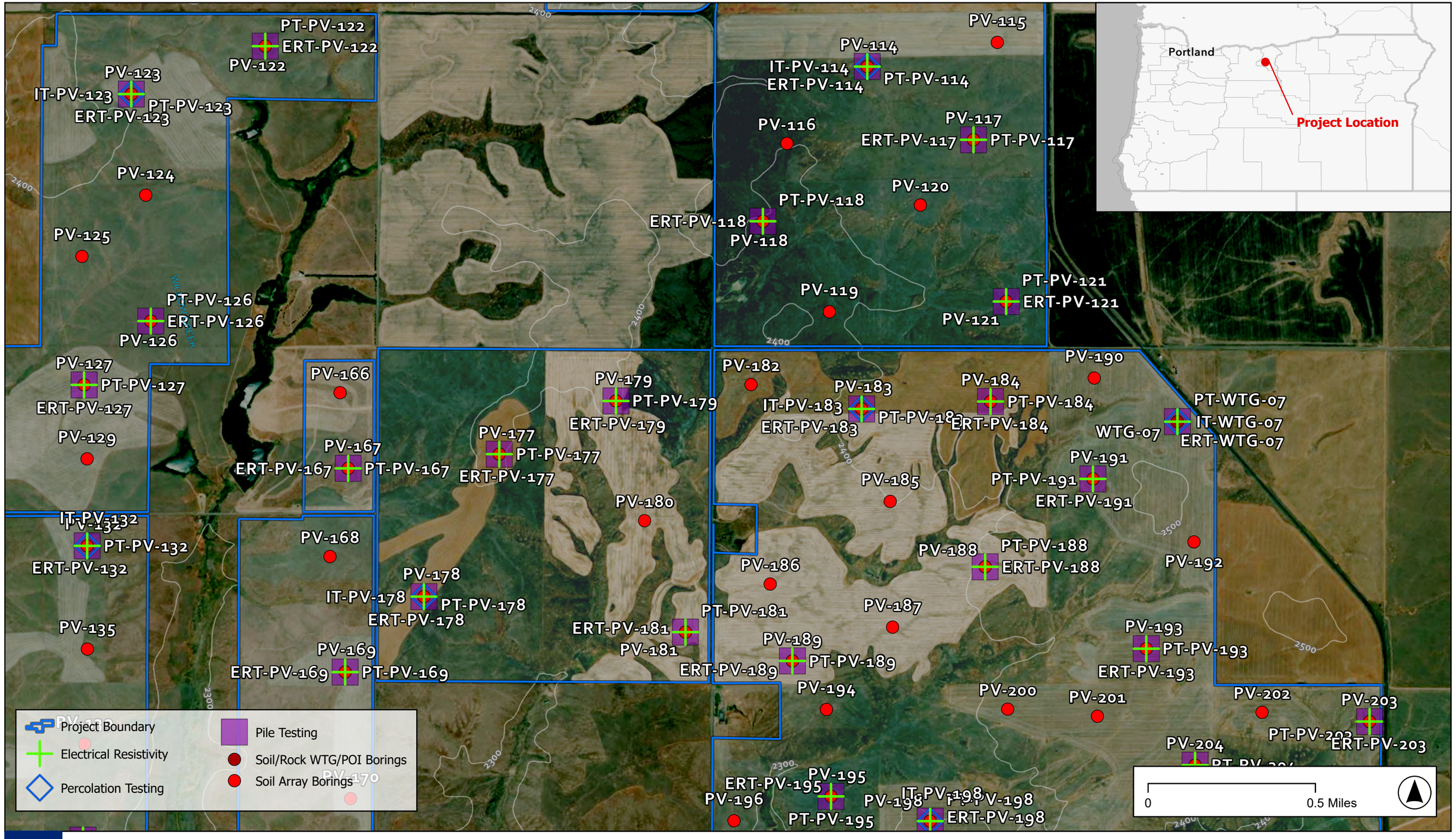
**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 6E**

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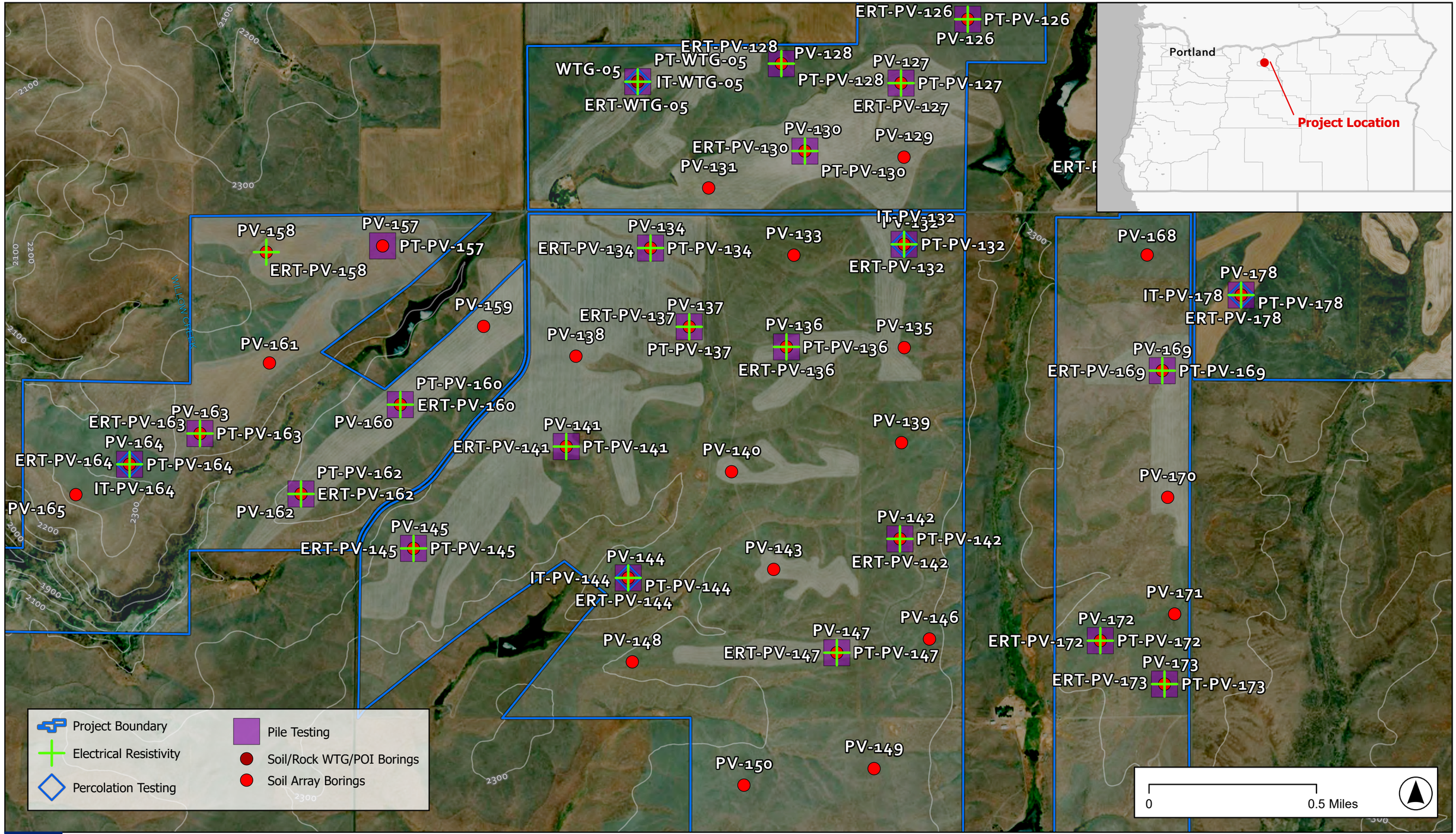
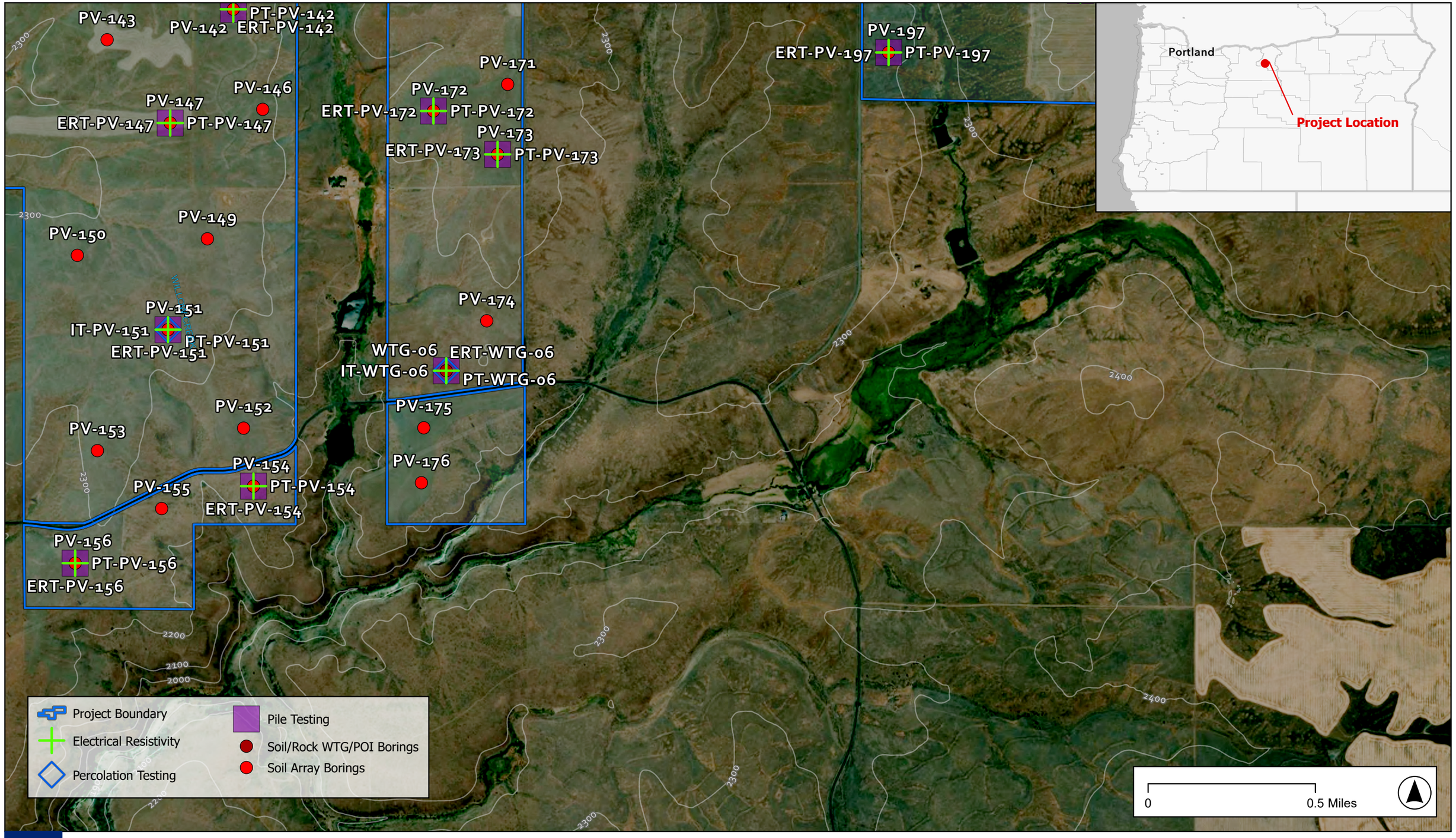
**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
**FIGURE 6F**



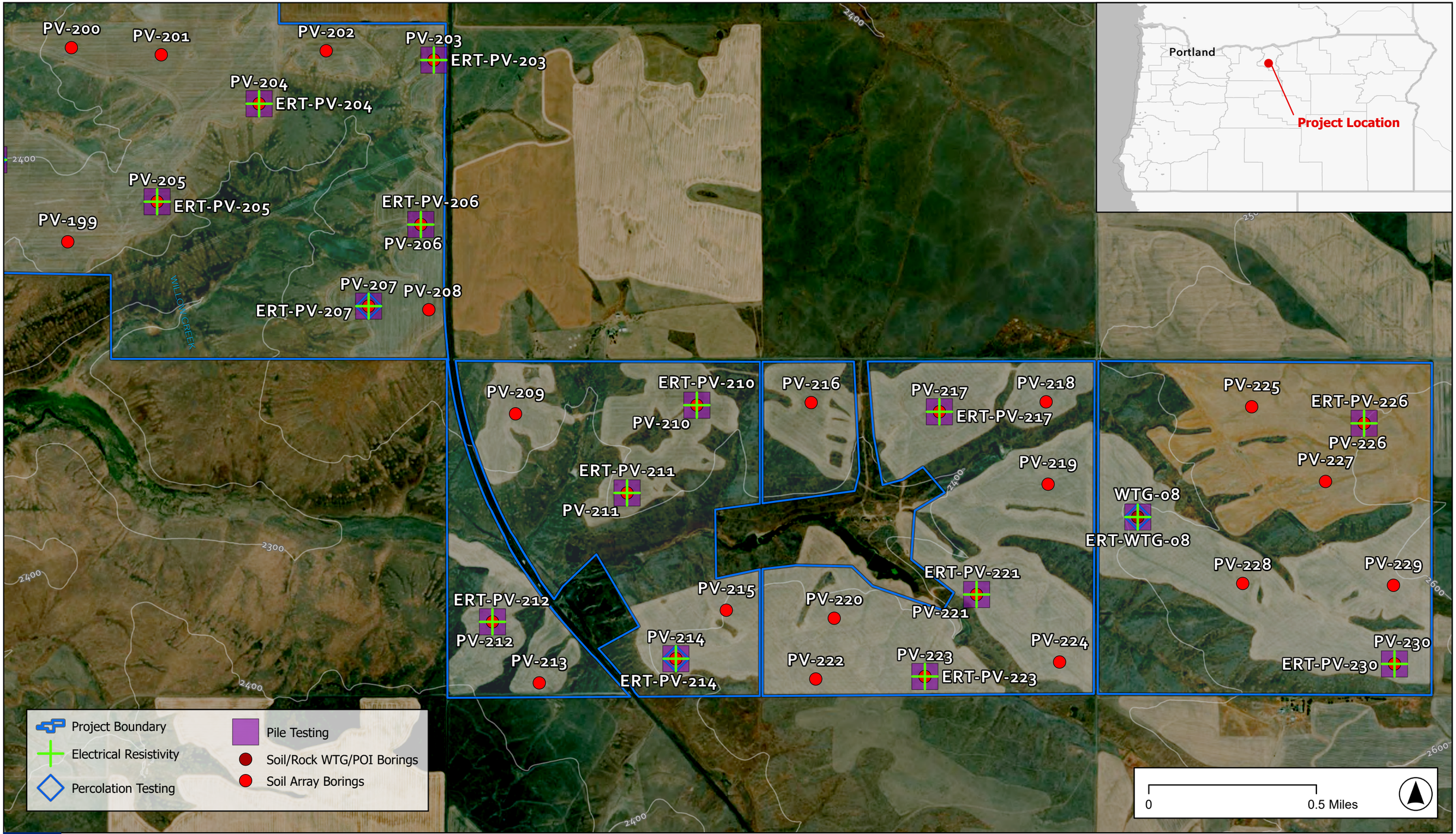

TETRA TECH

**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 6G**




TETRA TECH

# SUBSURFACE EXPLORATION PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 6H




TETRA TECH

**SUBSURFACE EXPLORATION PLAN**
**SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION**
***CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON***
**FIGURE 6I**

Project Boundary

Pile Zone 1
Pile Zones 1 and 4
Pile Zones 2 and 4
Pile Zone 3
Pile Zone 4

Borehole - Depth to Rock
<2 ft
2-4 ft
4-5 ft
5-6 ft
6-8 ft
>8 ft

7A
7B
7C
7D
7E
7F
7G
7H
7I

WILLOW CREEK

0
3 Miles

TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7

Pile Zone 1
Pile Zones 1 and 4
Pile Zones 2 and 4
Pile Zone 3
Pile Zone 4

Borehole - Depth to Rock
<2 ft
2-4 ft
4-5 ft
5-6 ft
6-8 ft
>8 ft
Project Boundary

PT-PV-001
PT-PV-002
PV-003
PT-PV-004
PT-PV-005
PT-WTG-01
PT-PV-007
PV-006
PT-PV-009
PV-008
PT-PV-010
PT-PV-011
PV-012
PV-013
PV-014
PV-016
PT-PV-015
PT-PV-017
PV-018
PT-PV-019
PV-020
PT-PV-021
PT-PV-022

WILLOW CREEK

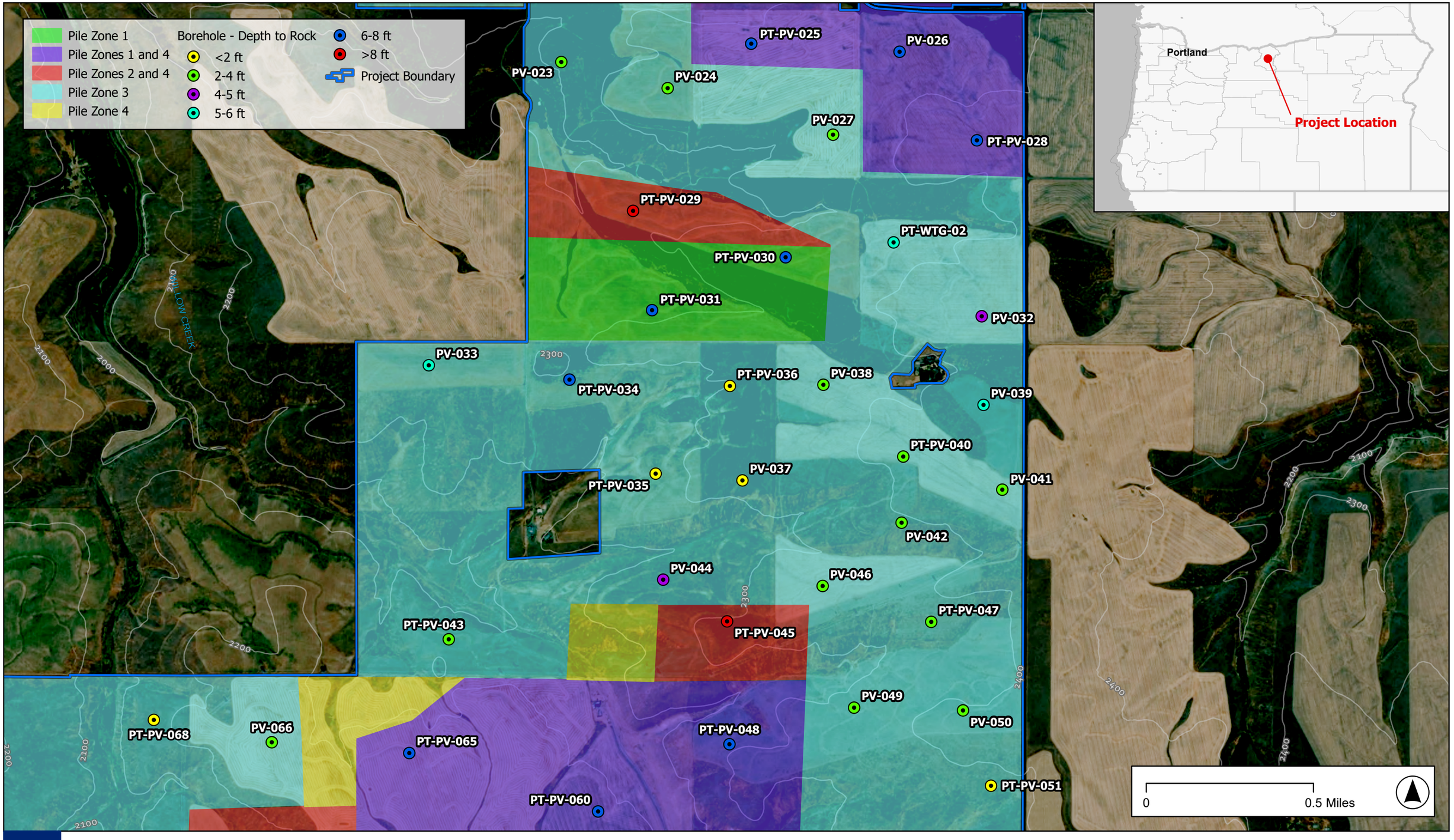
Portland
Project Location

0
0.5 Miles

TETRA TECH

PILES ZONING PLAN
SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7A

Path: E:\Speedway Solar\Speedway Solar.aprx - Map By: BRS - Date: 1/13/2026




TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7B

Pile Zone 1
Pile Zones 1 and 4
Pile Zones 2 and 4
Pile Zone 3
Pile Zone 4

Borehole - Depth to Rock
<2 ft
2-4 ft
4-5 ft
5-6 ft
6-8 ft
>8 ft
Project Boundary

Portland
Project Location

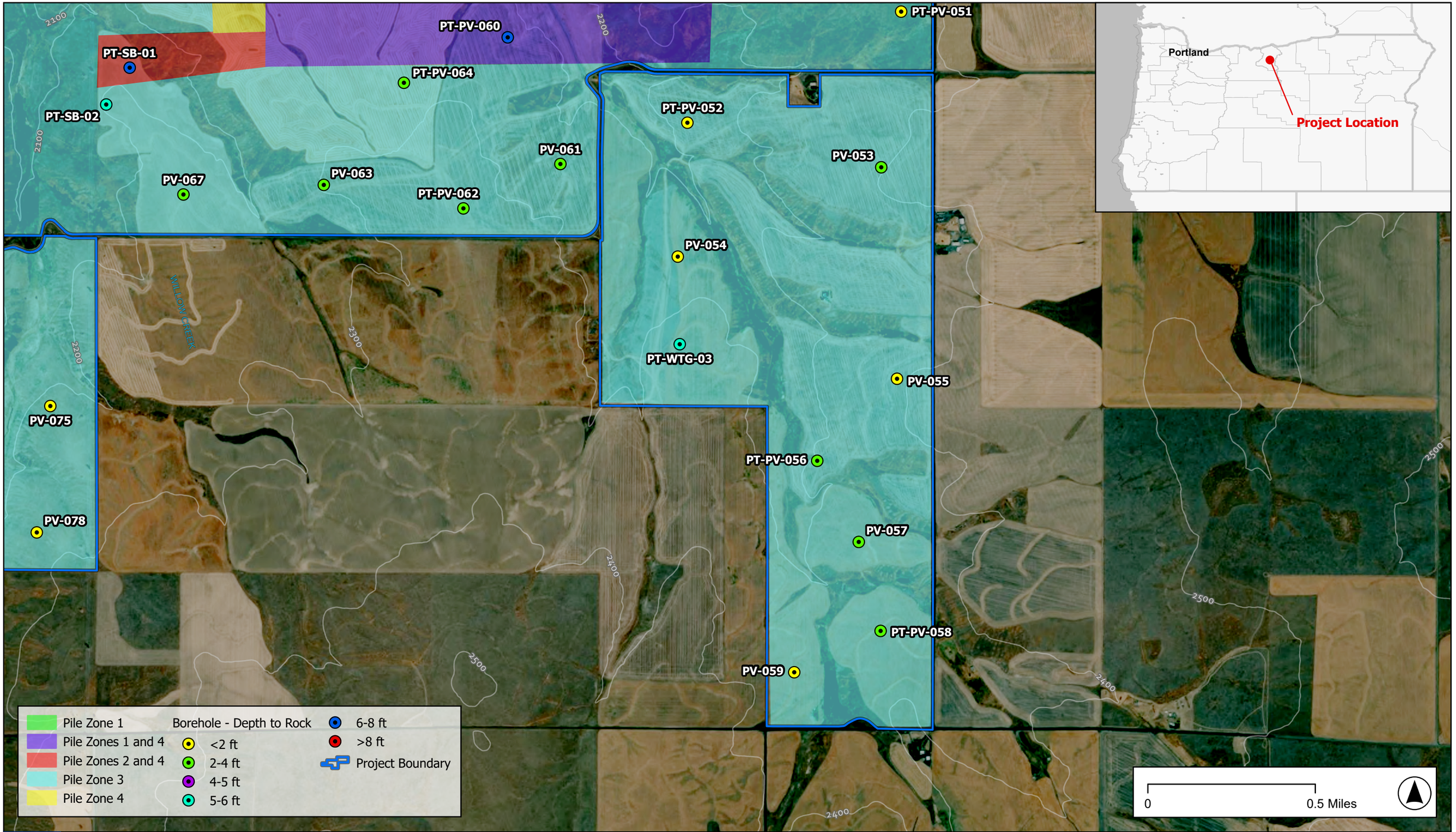
PV-069
PT-PV-068
PV-06
PT-PV-060
PT-PV-071
PT-SB-01
PV-070
PT-PV-064
PT-SB-02
PV-073
PV-067
PV-063
PT-PV-072
PT-PV-062
PV-088
PV-087
PV-083
PV-082
PT-PV-074
PT-PV-089
PT-PV-084
PV-076
PV-085
PT-PV-077
PV-075
PT-PV-090
PT-PV-079
PV-092
PT-PV-086
PV-091
PT-PV-081
PV-078
PV-080
PT-PV-093
PV-096

2100
2200
2300
2400
WILLOW CREEK

0
0.5 Miles

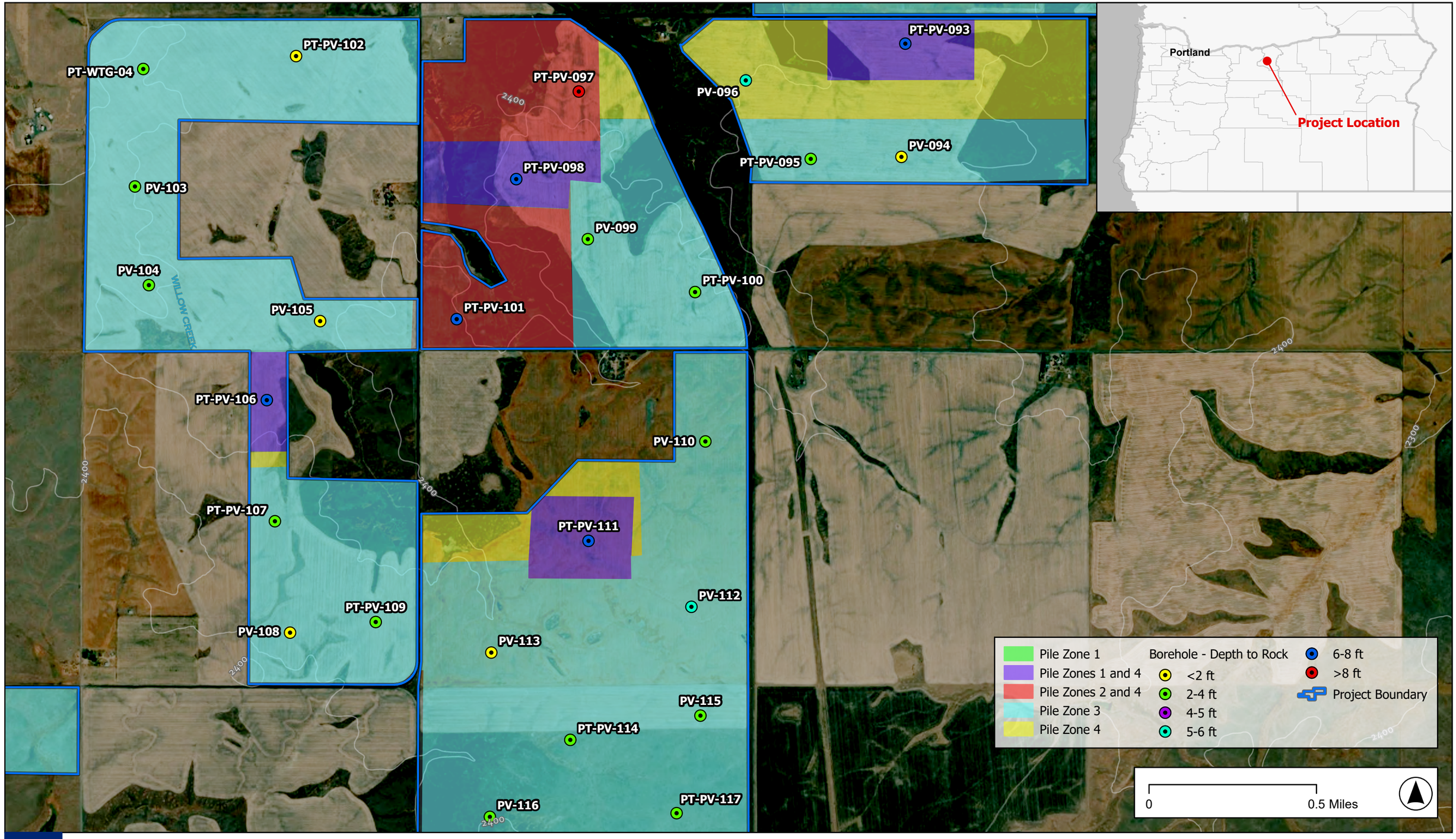
TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7C




TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7D




TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7E

Pile Zone 1
Pile Zones 1 and 4
Pile Zones 2 and 4
Pile Zone 3
Pile Zone 4

Borehole - Depth to Rock
<2 ft
2-4 ft
4-5 ft
5-6 ft
6-8 ft
>8 ft
Project Boundary

PV-115
PT-PV-114
PV-116
PT-PV-117
PV-124
PV-120
PT-PV-118
PV-125
PV-119
PT-PV-121
PT-PV-126
PT-PV-127
PV-182
PV-190
PV-166
PT-PV-179
PT-PV-183
PT-PV-184
PT-WTG-07
PV-129
PT-PV-167
PT-PV-177
PT-PV-191
PV-180
PV-185
PT-PV-132
PV-168
PV-192
PT-PV-188
PV-186
PT-PV-178
PT-PV-181
PV-187
PV-135
PT-PV-193
PT-PV-189
PT-PV-169
PV-194
PV-200
PV-201
PV-202
PT-PV-203
PV-139
PT-PV-204
PT-PV-195
PV-170
PV-196
PT-PV-198

2400
2500
2300
WILLOW CREEK

Portland
Project Location

0
0.5 Miles

TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7F

Pile Zone 1
Pile Zones 1 and 4
Pile Zones 2 and 4
Pile Zone 3
Pile Zone 4

Borehole - Depth to Rock
<2 ft
2-4 ft
4-5 ft
5-6 ft
6-8 ft
>8 ft
Project Boundary

PT-PV-126
PT-PV-128
PT-WTG-05
PT-PV-127
PT-PV-130
PV-129
PV-131
PV-158
PT-PV-157
PT-PV-134
PV-133
PT-PV-132
PV-159
PT-PV-137
PV-161
PV-138
PT-PV-136
PV-135
PT-PV-163
PT-PV-160
PT-PV-141
PV-139
PT-PV-164
PV-140
PT-PV-162
PV-165
PV-170
PT-PV-142
PT-PV-145
PV-143
PT-PV-144
PV-171
PT-PV-147
PV-146
PV-148
PT-PV-172
PT-PV-173
PV-149
PV-150
PV-168
PT-PV-178
PT-PV-169

WILLOW CREEK

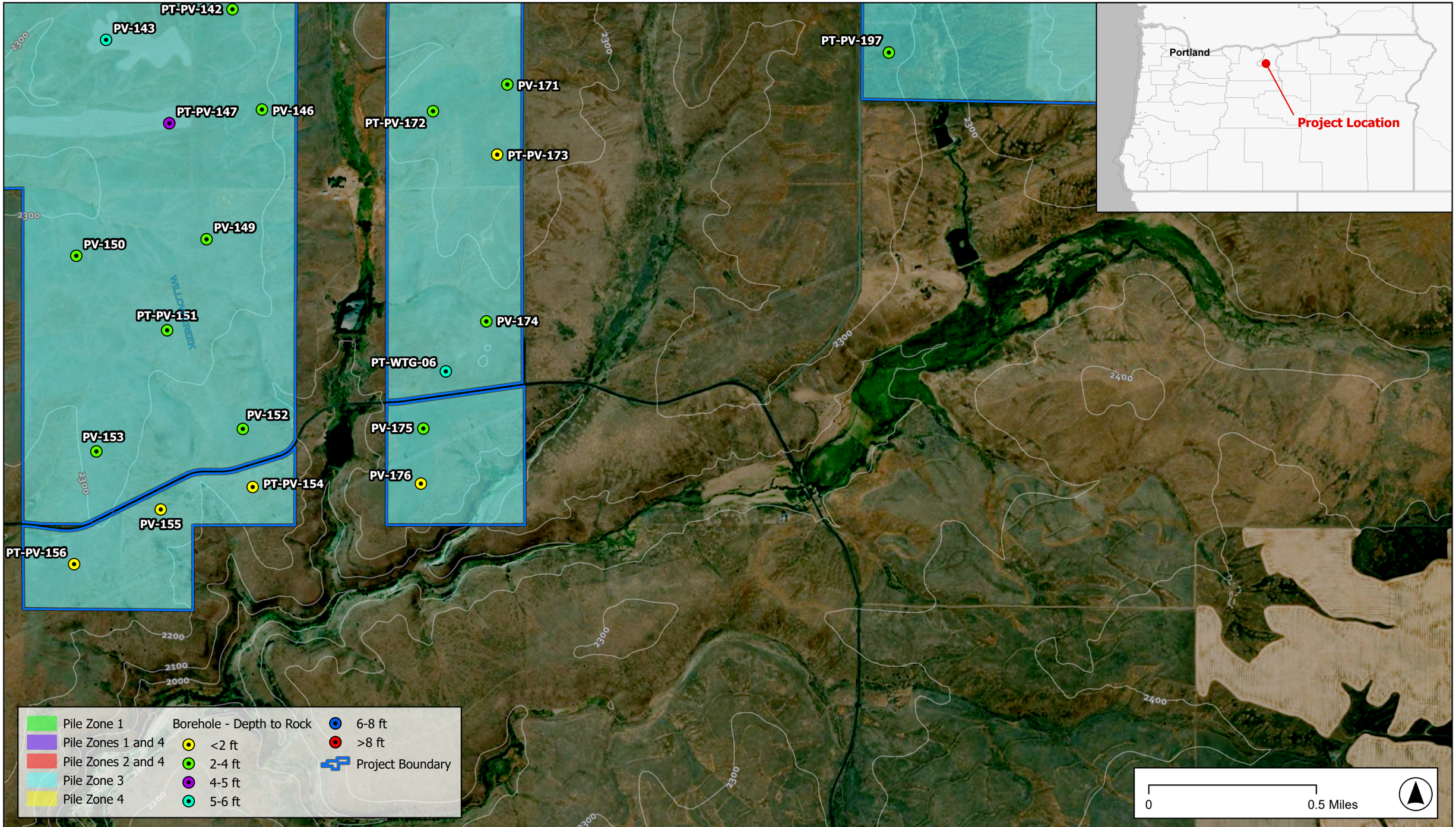
2300
2200
2100
2000
1900

Portland
Project Location

0
0.5 Miles

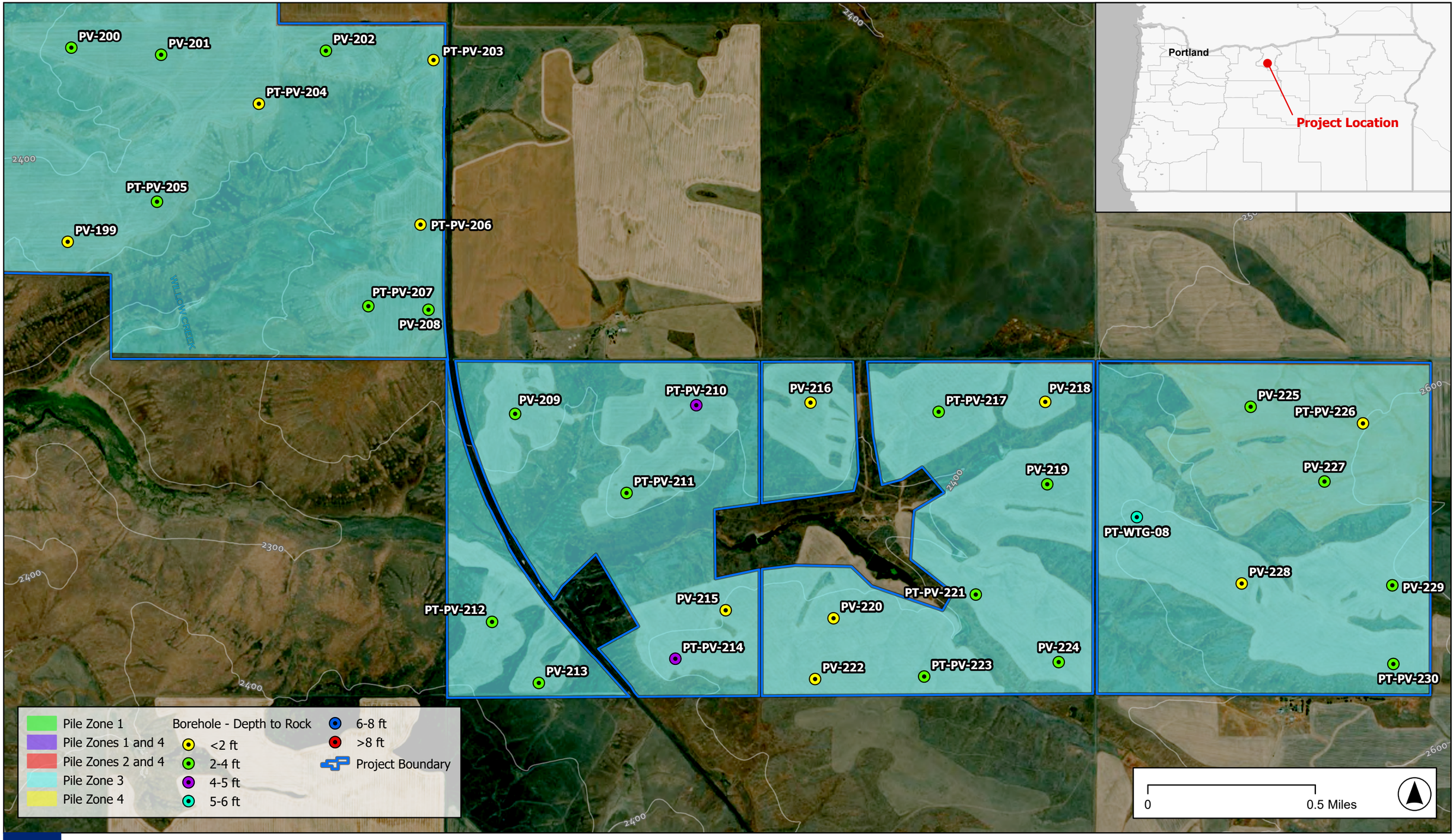
TETRA TECH

PILES ZONING PLAN
SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7G




TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7H




TETRA TECH

# PILES ZONING PLAN
## SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION
*CITY OF GRASS VALLEY, SHERMAN COUNTY, OREGON*
FIGURE 7I

# Appendix B: Subsurface Exploration Reports

**Typed Boring Logs**

**Core Box Photo Logs**

**Site Photographs**

Tetra Tech, Inc
6 Century Dr, Suite 300
Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER SB-01



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2162.83 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36651 **LONGITUDE** -120.70621
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** 17.00 ft / Elev 2145.83 ft

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | SPT N VALUE / PL MC LL / FINES CONTENT (%) | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (SM), medium dense to dense, non plastic, brown, moist. | SS 1 | 83 | 2-2-6-12 (8) | | | |
| | | | SS 2 | 92 | 11-14-16-12 (30) | | | |
| 5 | | | SS 3 | 100 | 6-9-12-50/3" | | >> | |
| | | | AU | | | | | |
| | | BASALT, dark gray, highly weathered, iron oxide staining, fine grained, medium strong, very close to extremely close joint spacing, nontronite alternation throughout run | RC 1 | 42 (0) | | | | Auger refusal is at 6ft bgs, started rock coring at 6ft bgs. at 6 ft |
| 10 | | | RC 2 | 57 (0) | | | | |
| 15 | | BASALT, dark gray, moderately weathered, iron oxide staining, fine grained, medium strong, close to extremely close joint spacing, nontronite alternation throughout run, vesicular texture from 19-20 ft BGS | RC 3 | 80 (12) | | | | |
| 20 | | | | | | | | |

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Tetra Tech, Inc
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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER SB-01



**CLIENT** Brookfield Renewable U.S. **PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097 **PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray, slightly weathered, iron oxide staining, fine grained, medium strong, wide to moderate joint spacing, vesicular texture throughout run, iron oxide staining from 24.6-24.9 ft BGS | RC 4 | 100 (100) | | | | |
| 25 | | BASALT, dark gray, slightly weathered, fine grained, medium strong, wide to close joint spacing | RC 5 | 100 (95) | | | | |
| 30 | | | RC 6 | 87 (58) | | | | |
| 35 | | | RC 7 | 100 (94) | | | | |

Refusal at 6.0 feet.
Bottom of borehole at 38.0 feet.

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# BORING NUMBER SB-02



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2205.96 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36492 **LONGITUDE** -120.70765
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** 16.00 ft / Elev 2189.96 ft

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL), medium stiff to hard, low plasticity, brown, moist. | SS 1 | 83 | 2-2-2-3 (4) | 1 | ▲ | |
| | | | SS 2 | 75 | 2-50 | 1.5 | | |
| | | | AU | | | | | |
| | | | SS 3 | 0 | 50/3" | | >>▲ | |
| 5 | | | AU | | | | | |
| | | BASALT, dark gray, highly weathered, iron oxide staining, fine grained, medium strong, very close to extremely close joint spacing, nontronite alternation throughout run | RC 1 | 53 (0) | | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs, started coring at 5 ft |
| 10 | | | RC 2 | 100 (7) | | | | |
| 15 | | BASALT, dark gray to yellow, highly weathered, iron oxide staining, fine grained, medium strong, close to extremely close joint spacing, nontronite alternation throughout run, vesicular texture from 17.6-20 ft BGS | RC 3 | 100 (15) | | | | |
| 20 | | | | | | | | |

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# BORING NUMBER SB-02



**CLIENT** Brookfield Renewable U.S. **PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097 **PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray, moderately weathered, fine grained, medium strong, moderate to very close close joint spacing, nontronite alternation throughout run, vesicular texture | RC 4 | 100 (75) | | | | |
| 25 | | BASALT, dark gray, slightly weathered, fine grained, medium strong, close to very close joint spacing, nontronite alternation throughout run, vesicular texture from 25-27.6 ft BGS | RC 5 | 90 (30) | | | | |
| 30 | | BASALT, dark gray, moderately weathered, iron oxide staining, fine grained, medium strong, close to extremely close joint spacing, nontronite alternation throughout run, vesicular texture from 34.6-35 ft BGS | RC 6 | 88 (7) | | | | |
| 35 | | | | | | | | |

Refusal at 5.0 feet.
Bottom of borehole at 35.0 feet.

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# BORING NUMBER WTG-01



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2217.29 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.41833 **LONGITUDE** -120.70108
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no 24hr water reading was taken

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | SPT N VALUE / PL MC LL / FINES CONTENT (%) | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), loose to medium dense, low plasticity, brown, moist. | SS 1 | 50 | 2-3-2-2 (5) | | | |
| | | | SS 2 | 100 | 3-4-5-5 (9) | | | |
| 5 | | | SS 3 | 88 | 2-2-7-8 (9) | | | |
| | | | SS 4 | 86 | 5-11-50/2" | | >> | |
| | | BASALT, light gray to dark gray, highly weathered, fine grained, medium strong, extremely close discontinuity joint spacings, silt and carbonate infilling | RC 1 | 17 (0) | | | | Auger refusal is at 7ft bgs, started rock coring at 7ft bgs. at 7 ft |
| 10 | | BASALT, light gray to dark gray, highly weathered, fine grained, medium strong, very close to extremely close discontinuity joint spacings, silt infilling, trace carbonates | RC 2 | 53 (0) | | | | |
| 15 | | BASALT, light gray to dark gray, moderately weathered, fine grained, medium strong, very close discontinuity joint spacings, apertures contain iron staining | RC 3 | 100 (0) | | | | |
| 20 | | | | | | | | |

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Parsippany, NJ 07054
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# BORING NUMBER WTG-01



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, light gray to dark gray, moderately weathered, fine grained, medium strong, close to very close discontinuity joint spacings, SCORIA, nontronite infillings & alternation invesicles | RC 4 | 63 (20) | | | | |
| 25 | | BASALT, light gray, moderately weathered, fine grained, medium strong, close to very close discontinuity joint spacings, nontronite alternation, lost water return during run | RC 5 | 72 (16) | | | | |
| 30 | | BASALT, light gray, moderately weathered, fine grained, medium strong, close to very close discontinuity joint spacings, upper 8" has nontronite alternation, water return resumed | RC 6 | 60 (8) | | | | |
| 35 | | BASALT, light gray to gray, slightly weathered, fine grained, medium strong, close discontinuity joint spacings, contains iron staining in vesicles and apertures | RC 7 | 100 (47) | | | | Borehole back-filled immediately after drilling, no 24hr water reading was taken at 35 ft |
| 40 | | | | | | | | |

Refusal at 7.0 feet.
Bottom of borehole at 40.0 feet.

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# BORING NUMBER WTG-02



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2361.6 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.39252 **LONGITUDE** -120.66497
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no GW reading

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), very loose to medium dense, low plasticity, brown, moist. | SS 1 | 50 | 2-1-1-2 (2) | | | |
| | | | SS 2 | 100 | 5-9-8-12 (17) | | | |
| 5 | | BASALT, gray, highly weathered, fine grained, medium strong, extremely close discontinuity joint spacings | RC 1 | 25 (0) | | | | 1st hole auger refusal is at 4ft bgs, moved rig and 2nd hole refusal is at 4ft bgs, started coring at 4 ft<br>Borehole left open over the night to monitor water levels, cave in at 5ft bgs at 5 ft |
| | | BASALT, light gray, highly weathered, fine grained, medium strong, very close to extremely close discontinuity joint spacings | RC 2 | 45 (0) | | | | |
| 10 | | BASALT, light gray, highly weathered, fine grained, medium strong, very close to extremely close discontinuity joint spacings | RC 3 | 75 (0) | | | | |
| 15 | | BASALT, light gray to gray, moderately weathered, medium strong, close to extremely close discontinuity joint spacings, iron staining in apertures | RC 4 | 87 (0) | | | | |
| 20 | | | | | | | | |

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# BORING NUMBER WTG-02



**CLIENT** Brookfield Renewable U.S.

**PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097

**PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, light gray to gray, moderately weathered, medium strong, close to very close discontinuity joint spacings, iron staining in vesicles and apertures | RC 5 | 92 (38) | | | | |
| 25 | | BASALT, light gray to gray, slightly weathered, medium strong, moderate to close discontinuity joint spacings, vesicular texture throughout the run, nontronite alteration along joints | RC 6 | 100 (28) | | | | |
| 30 | | BASALT, light gray to gray, slightly weathered, medium strong, close to very close discontinuity joint spacings | RC 7 | 100 (13) | | | | |
| 35 | | | | | | | | |

Refusal at 4.0 feet.
Bottom of borehole at 35.0 feet.

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# BORING NUMBER WTG-03



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2328.66 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.35461 **LONGITUDE** -120.67245
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Gilkes **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** 35.00 ft / Elev 2293.66 ft

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | SPT N VALUE / PL MC LL / FINES CONTENT (%) | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), medium dense, low plasticity, brown, moist. | SS 1 | 75 | 3-6-7-7 (13) | | | |
| | | | SS 2 | 71 | 5-11-50/5" | | >> | |
| | | BASALT, dark gray to light brown, highly weathered, fine grained, medium strong, very close to extremely close joint spacings | RC 1 | 50 (0) | | | | 1st hole auger refusal is at 3ft bgs, moved rig and 2nd hole refusal is at 3ft bgs, started coring at 3 ft |
| 5 | | | | | | | | |
| | | BASALT, dark gray to yellow, highly weathered, fine grained, medium strong, close to extremely close joint spacings, nontronite alternation throughout the run | RC 2 | 37 (7) | | | | |
| 10 | | | | | | | | |
| | | | RC 3 | 100 (10) | | | | |
| 15 | | | | | | | | |
| | | BASALT, dark gray to yellow, moderately weathered, iron oxide staining, fine grained, medium strong, close to very close joint spacings, nontronite alternation + vesicular texture throughout the run | RC 4 | 100 (38) | | | | |
| 20 | | | | | | | | |

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# BORING NUMBER WTG-03



**CLIENT** Brookfield Renewable U.S. **PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097 **PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray to yellow, highly weathered, iron oxide staining, fine grained, strong, very close to extremely close joint spacings, nontronite alternation throughout the run | RC 5 | 100 (0) | | | | |
| 25 | | BASALT, dark gray, highly weathered, iron oxide staining, fine grained, medium strong, very close to extremely close discontinuity joint spacings, nontronite alternation throughout the run | RC 6 | 58 (0) | | | | |
| 30 | | BASALT, dark gray to brown, highly weathered, iron oxide staining, fine grained, strong, very close to extremely close discontinuity joint spacings, nontronite alternation throughout the run | RC 7 | 100 (0) | | | | |
| 35 | | | | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 35.0 feet.

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# BORING NUMBER WTG-04



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2404.67 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.34245 **LONGITUDE** -120.806
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no groundwater

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay With Gravel (CL), medium stiff, low plasticity, brown, moist. | SS 1 | 58 | 2-2-3-2 (5) | 1.5 | | |
| | | | SS 2 | 75 | 2-2-3-3 (5) | 2 | | |
| 5 | | BASALT, dark gray to brown, highly weathered, fine grained, medium strength, very close to extremely close joint spacing | RC 1 | 45 (0) | | | | Gravel is weathered basalt fragments at 4 ft<br>Auger refusal at 4.5ft bgs, started coring at 4ft bgs at 4.5 ft |
| 10 | | BASALT, dark gray to gray, highly weathered, fine grained to very fine grained, medium strength, very close to extremely close joint spacing | RC 2 | 50 (0) | | | | |
| 15 | | BASALT, dark gray to gray, highly weathered, iron oxide staining, fine grained to very fine grained, strong, very close to extremely close joint spacing | RC 3 | 67 (0) | | | | |
| 20 | | | | | | | | |

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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER WTG-04



**CLIENT** Brookfield Renewable U.S.

**PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097

**PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray, moderately weathered, iron oxide staining, fine grained to very fine grained, medium strong, moderate to very close joint spacing, nontronite alteration past 20.8ft, vesicular texture *(continued)* | RC 4 | 100 (43) | | | | |
| 25 | | BASALT, dark gray, slightly weathered, iron oxide staining, fine grained to very fine grained, medium strong, close to very close joint spacing, nontronite infill, vesicular texture | RC 5 | 83 (50) | | | | |
| 30 | | BASALT, dark gray to brown, moderately weathered, iron oxide staining, fine grained to very fine grained, medium strong, close to very close joint spacing, vesicular texture from 29-30.6 ft | RC 6 | 77 (8) | | | | |

Refusal at 4.5 feet.
Bottom of borehole at 34.0 feet.

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# BORING NUMBER WTG-05



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2343.08 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.29963 **LONGITUDE** -120.84374
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no groundwater

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (SC), medium dense to very dense, medium plasticity, brown, moist. | SS 1 | 67 | 3-4-4-7 (8) | | | |
| | | | SS 2 | 71 | 5-16-33-50 (49) | | | |
| 5 | | BASALT, dark gray to brown, highly weathered, fine grained, medium strong, very close to extremely close joint spacing | RC 1 | 100 (0) | | | | Auger refusal at 4ft bgs, started coring at 4ft bgs at 4 ft |
| | | BASALT, dark gray, highly weathered, iron oxide staining, fine to very fine grained, medium strong, close to extremely close joint spacing | RC 2 | 100 (0) | | | | |
| 10 | | BASALT, dark gray, moderately weathered, iron oxide staining, fine to very fine grained, medium strong, close to very close joint spacing, nontronite alteration throughout the run | RC 3 | 93 (35) | | | | |
| 15 | | BASALT, dark gray, moderately weathered, fine to very fine grained, medium strong, close to very close joint spacing, excessive washout | RC 4 | 33 (22) | | | | |
| 20 | | | | | | | | |

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# BORING NUMBER WTG-05



**CLIENT** Brookfield Renewable U.S. **PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097 **PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray, slightly weathered, iron oxide staining, fine to very fine grained, medium strong, moderate to very close joint spacing | RC 5 | 97 (47) | | | | |
| 25 | | BASALT, dark gray to yellow, slightly weathered, iron oxide staining, fine to very fine grained, medium strong, moderately to very close joint spacing, vesicular texture + nontronite alternation infill past 27.5 to 30.1 ft BGS | RC 6 | 100 (40) | | | | |
| 30 | | BASALT, dark gray to brown, moderately weathered, fine to very fine grained, medium strong, close to extremely close joint spacing, vesicular texture + nontronite alternation infill from 32 to 32.6 ft and 34 to 35 ft BGS | RC 7 | 88 (13) | | | | |
| 35 | | | | | | | | |

Refusal at 4.0 feet.
Bottom of borehole at 35.0 feet.

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# BORING NUMBER WTG-06



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/28/25 **COMPLETED** 9/28/25
**GROUND ELEVATION** 2253.18 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26432 **LONGITUDE** -120.81443
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no groundwater

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL), stiff to hard, low plasticity, brown, moist. | SS 1 | 75 | 3-5-6-9 (11) | 2.25 | | 3" topsoil at 0.25 ft |
| | | | SS 2 | 39 | 20-45-50 (95) | | | |
| | | BASALT, dark gray, highly weathered, fine to very fine grained, medium strong, very close to extremely close joint spacing | RC 1 | 100 (0) | | | | Auger refusal at 3.5ft bgs, started coring at 3ft bgs at 3.5 ft |
| 5 | | BASALT, dark gray, highly weathered, iron oxide staining, fine to very fine grained, medium strong, close to extremely close joint spacing, large agate inclusion from 9.9 to 10 ft BGS | RC 2 | 47 (0) | | | | |
| 10 | | BASALT, dark gray to brown, moderately weathered, iron oxide staining, fine to very fine grained, medium strong, close to very close joint spacing | RC 3 | 100 (8) | | | | |
| 15 | | BASALT, dark gray, fine to very fine grained, fresh, medium strong, wide joint spacing (unfractured), quartz amygdules throughout run | RC 4 | 100 (100) | | | | |
| 20 | | | | | | | | |

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# BORING NUMBER WTG-06



**CLIENT** Brookfield Renewable U.S.

**PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097

**PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray to blue, slightly weathered, fine to very fine grained, medium strong, wide to close joint spacing, quartz amygdules + copper deposits throughout run - minor chalcopyrite crystallization, BASALTIC ANDESITE | RC 5 | 100 (92) | | | | |
| 25 | | BASALT, dark gray to light gray, slightly weathered, fine to very fine grained, medium strong, wide joint spacing, BASALTIC ANDESITE | RC 6 | 80 (80) | | | | |
| 30 | | | RC 7 | 77 (77) | | | | |
| 35 | | Refusal at 3.5 feet.<br>Bottom of borehole at 35.0 feet. | | | | | | |

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# BORING NUMBER WTG-07



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/29/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2483.92 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.2982 **LONGITUDE** -120.7606
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no groundwater

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay With Gravel (CL), soft to hard, low plasticity, brown, moist. | SS 1 | 84 | 2-1-2-2 (3) | 0.75 ▲ | | 2" topsoil at 0.1 ft |
| | | | SS 2 | 58 | 11-80 | | | |
| 5 | | BASALT, dark gray, moderately weathered, iron oxide staining, fine grained, medium strong, close to very close to joint spacing, vesicular texture throughout run, non clay infill in vesicles from 3.5 to 14 ft BGS | RC 1 | | | | | Auger refusal at 3ft bgs, started coring at 2ft bgs to clearout borehole at 3 ft |
| 10 | | BASALT, dark gray, moderately weathered, iron oxide staining, fine grained, medium strong, close to very close joint spacing, vesicular texture throughout run | RC 2 | 100 (75) | | | | |
| 15 | | BASALT, dark gray, slightly weathered, iron oxide staining, fine grained, medium strong, moderate to very close joint spacing, vesicular texture throughout run | RC 3 | 83 (35) | | | | |
| 20 | | BASALT, reddish brown, slightly weathered, iron oxide staining, fine grained, strong, moderate to very close joint spacing, vesicular texture throughout run | RC 4 | 100 (75) | | | | |

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# BORING NUMBER WTG-07



**CLIENT** Brookfield Renewable U.S. **PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097 **PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | | | | | | | |
| 25 | | BASALT, reddish brown, slightly weathered, iron oxide staining, fine grained, strong, moderate to very close joint spacing, vesicular texture throughout run | RC 5 | 100 (43) | | | | |
| 30 | | BASALT, dark gray, slightly weathered, iron oxide staining, fine grained, strong, moderate to very close joint spacing, trace vesicles throughout run | RC 6 | 100 (8) | | | | |
| 35 | | BASALT, dark gray, highly weathered, fine grained, strong, very close to extremely close joint spacing, trace vesicles throughout run | RC 7 | 40 (0) | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 35.0 feet.

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# BORING NUMBER WTG-08



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2504.95 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.2656 **LONGITUDE** -120.70564
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD** Single-Tube Solid Core Barrel - NQ Size
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL 24hrs AFTER DRILLING** --- no groundwater

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Gravel With Sand (GC), very loose to loose, medium plasticity, brown, moist. | SS 1 | 63 | 2-2-1-3 (3) | 2.5 ▲ | | 2" topsoil at 0.33 ft |
| | | | SS 2 | 33 | 9-50 | | | |
| 5 | | BASALT, dark gray to brown, highly weathered, fine grained, close to extremely close to joint spacing, vesicular texture clay infill throughout run | RC 1 | 100 (17) | | | | Auger refusal at 3ft bgs, started coring at 3ft bgs. at 3 ft |
| 10 | | BASALT, dark gray, highly weathered, fine grained, medium strong, close to extremely close joint spacing, vesicular texture throughout run | RC 2 | 40 (8) | | | | |
| 15 | | BASALT, dark gray, slightly weathered, fine grained, medium strong, moderate to very close joint spacing, trace vesicles throughout run | RC 3 | 97 (87) | | | | |
| 20 | | BASALT, dark gray, slightly weathered, fine grained, medium strong, moderate to close joint spacing, little vesicles throughout run | RC 4 | 83 (77) | | | | |

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# BORING NUMBER WTG-08



**CLIENT** Brookfield Renewable U.S.

**PROJECT NAME** Speedway Solar Geotechnical Exploration

**PROJECT NUMBER** 194-1284-0097

**PROJECT LOCATION** Grass Valley, Sherman County, Oregon

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 20 | | BASALT, dark gray, fine grained, fresh, medium strong, wide to moderate joint spacing, little vesicles throughout run | RC 5 | 100 (100) | | | | |
| 25 | | | RC 6 | 100 (100) | | | | |
| 30 | | BASALT, dark gray, fine grained, fresh, medium strong, wide joint spacing, little vesicles throughout run, quartz vein from 34.2ft to 35ft BGS | RC 7 | 100 (100) | | | | |
| 35 | | | | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 35.0 feet.

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# BORING NUMBER PV-001



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2151.2 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.431 **LONGITUDE** -120.7135
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), soft to medium stiff, low plasticity, brown, moist. | SS 1 | 75 | 1-1-1-1 (2) | 1.5 | | |
| | | | SS 2 | 88 | 2-2-3-5 (5) | 1.5 | | |
| 5 | | Silty Sand (sm), medium dense, non plastic, brown, moist. | SS 3 | 88 | 6-5-7-10 (12) | | | |
| | | | SS 4 | 100 | 6-6-9-50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 8.0 feet.
Bottom of borehole at 8.0 feet.

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# BORING NUMBER PV-002



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2151.77 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.42872 **LONGITUDE** -120.70951
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-1-2-2 (3) | 1.6 | | |
| | | | SS 2 | 88 | 1-2-3-4 (5) | 1.7 | | 1st hole auger refusal is at 7ft bgs, 2nd hole refusal is at 6ft bgs. at 3 ft |
| 5 | | Silty Sand (sm), medium dense to very dense, non plastic, brown, moist. | SS 3 | 100 | 10-9-13-18 (22) | | | |
| | | | SS 4 | 60 | 50/2" | | >> | |
| | | | AU | | | | | |

Refusal at 7.0 feet.
Bottom of borehole at 7.0 feet.

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# BORING NUMBER PV-003



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2098.11 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.42432 **LONGITUDE** -120.71528
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), with gravel, medium stiff to hard, low plasticity, dark brown, moist. | SS 1 | 63 | 2-2-3-3 (5) | 2 | | 1st hole auger refusal is at 3ft bgs, 2nd hole refusal is at 2ft bgs. at 1 ft |
| | | | SS 2 | 38 | 10-50/2" | | >> | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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Telephone: 973-630-8000

# BORING NUMBER PV-004



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2192.18 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.42084 **LONGITUDE** -120.70952
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL), medium stiff to very stiff, medium plasticity, brown, moist. | SS 1 | 63 | 2-2-3-2 (5) | 2.75 | | |
| | | | SS 2 | 88 | 1-2-3-4 (5) | 1.75 | | |
| 5 | | | SS 3 | 88 | 7-12-12-10 (24) | 1.5 | | 1st hole auger refusal is at 8ft bgs, 2nd hole spoon refusal is at 8ft bgs. at 3.5 ft |
| | | Silty Sand (sm), dense, non plastic, brown, moist. | SS 4 | 50 | 3-7-24-50 (31) | | | |
| | | Refusal at 8.0 feet. Bottom of borehole at 8.0 feet. | SS 5 | 0 | 50/2" | | | |

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# BORING NUMBER PV-005



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2189.67 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.4221 **LONGITUDE** -120.70164
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), soft to hard, low plasticity, brown, moist. | SS 1 | 63 | 1-3-3-2 (6) | 1.3 | | |
| | | | SS 2 | 88 | 1-2-4 (3) | 1 | | |
| 5 | | | SS 3 | 63 | 6-7-8-13 (15) | 1.2 | | |
| | | | SS 4 | 63 | 11-15-21-27 (36) | 0.5 | | |
| | | Sandy Silty Clay (CL-ML), very stiff to hard, low plasticity, brown, moist. | SS 5 | 88 | 9-15-9-22 (24) | 0.25 | | |
| 10 | | | AU | | | | | |
| | | | SS 6 | 82 | 21-50/5" | | >> | |
| 15 | | | AU | | | 0.1 | | |

Refusal at 15.0 feet.
Bottom of borehole at 15.0 feet.

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# BORING NUMBER PV-006



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2210.89 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.41476 **LONGITUDE** -120.69589
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to hard, low plasticity, brown, moist. | SS 1 | 75 | 2-2-1-2 (3) | 1.5 | | 1st hole auger refusal is at 4ft bgs, 2nd hole refusal is at 3ft bgs. at 1.5 ft |
| | | | SS 2 | 88 | 4-6-50/5" | 2.5 | >> | |
| | | | AU | | | | | |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-007



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2225.02 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.41583 **LONGITUDE** -120.68994
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff to stiff, low plasticity, brown, moist. | SS 1 | 75 | 2-2-3-2 (5) | 2 | | |
| | | | SS 2 | 100 | 1-2-3-4 (5) | 1.5 | | |
| 5 | | | SS 3 | 88 | 3-3-4-6 (7) | 2 | | |
| | | | SS 4 | 88 | 4-5-6-10 (11) | 1.5 | | |
| | | Silty Sand With Gravel (sm), very dense, gray, moist. | SS 5 / AU | 60 | 50/5" | | >> | |

Refusal at 9.0 feet.
Bottom of borehole at 9.0 feet.

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# BORING NUMBER PV-008



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2258.86 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.41968 **LONGITUDE** -120.67993
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), stiff, low plasticity, brown, dry. | SS 1 | 71 | 3-4-3-3 (7) | 0.5 | | |
| | | | SS 2 | 88 | 5-5-5-15 (10) | 1 | | 1st hole auger refusal is at 5.75ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 2 ft |
| 5 | | Silty Sand (sm), dense, brown, dry. | SS 3 | 57 | 6-8-18-50/3" | | >> | |

Refusal at 5.8 feet.
Bottom of borehole at 5.8 feet.

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# BORING NUMBER PV-009



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2245.66 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.42321 **LONGITUDE** -120.67403
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 63 | 3-4-4-6 (8) | 0.5 | | |
| | | | SS 2 | 100 | 5-5-7-8 (12) | 0.75 | | |
| 5 | | | SS 3 | 88 | 7-7-6-10 (13) | 0.75 | | |
| | | | SS 4 | 100 | 9-10-9-10 (19) | 1.5 | | |
| | | | SS 5 | 100 | 7-7-13-50/3" | 0.75 | >> | |

Refusal at 9.8 feet.
Bottom of borehole at 9.8 feet.

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# BORING NUMBER PV-010



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2313.25 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.42007 **LONGITUDE** -120.66975
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff to very stiff, low plasticity, brown, moist. | SS 1 | 67 | 4-4-3-2 (7) | 1 | | |
| | | | SS 2 | 83 | 2-3-3-4 (6) | 0.75 | | |
| 5 | | | SS 3 | 79 | 4-6-5-5 (11) | 1.25 | | |
| | | | SS 4 | 74 | 4-7-13-50/5" | 1 | >> | |

Refusal at 8.0 feet.
Bottom of borehole at 8.0 feet.

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# BORING NUMBER PV-011



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2279.09 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.41605 **LONGITUDE** -120.67908
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff, low plasticity, brown, moist. | SS 1 | 83 | 3-4-3-3 (7) | 1 | | |
| | | | SS 2 | 92 | 4-4-3-3 (7) | 1.25 | | |
| 5 | | Silty Sand (sm), loose to very dense, non plastic, brown, moist. | SS 3 | 83 | 2-3-4-6 (7) | | | |
| | | | SS 4 | 69 | 5-9-50/4" | | >> | |
| | | | AU | | | | | 1st hole auger refusal is at 7.3ft bgs, 2nd hole offset 20' refusal is at 9.25ft bgs. at 7.3 ft Ss-5: offset 20' after 1st hole ss-4 at 8 ft |
| | | | SS 5 | 53 | 7-35-50/3" | | >> | |

Refusal at 9.3 feet.
Bottom of borehole at 9.3 feet.

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# BORING NUMBER PV-012



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/9/25 **COMPLETED** 9/9/25
**GROUND ELEVATION** 2310.91 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.41683 **LONGITUDE** -120.67231
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Gravel With Sand (GC-GM), stiff to hard, low plasticity, brown, moist. | SS 1 | 79 | 3-4-3-5 (7) | | | 1st hole auger refusal is at 3.6ft bgs, 2nd hole offset 20' refusal is at 3.0ft bgs. at 1.5 ft |
| | | | SS 2 | 63 | 3-8-26-30/1" | | >> | |

Refusal at 3.6 feet.
Bottom of borehole at 3.6 feet.

Rock fragments in tip at 3.6 ft

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# BORING NUMBER PV-013



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2261.52 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.41301 **LONGITUDE** -120.68445
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silt (ml), trace coarse gravel, trace clay, stiff, brown, dry. | SS 1 | 79 | 4-4-5-26 (9) | 1.25 | | Offset 20' after refusal, second hole encontered refusal at 3.0ft bgs at 1 ft |
| | | Silty Sand (sm), very dense, brown to gray, dry. | SS 2 | 88 | 30-50/2" | | >> | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-014



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2274.67 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.41207 **LONGITUDE** -120.67684
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 67 | 3-4-3-5 (7) | 0.75 | | Offset 20', second hole encontered refusal at 3.5ft bgs at 1.5 ft |
| | | | SS 2 | 81 | 5-16-26-50/3" | 4 | >> | |

Refusal at 3.8 feet.
Bottom of borehole at 3.8 feet.

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# BORING NUMBER PV-015



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/11/25 **COMPLETED** 9/11/25
**GROUND ELEVATION** 2229.93 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.40798 **LONGITUDE** -120.69237
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 33 | 4-7-5-6 (12) | 0.5 | | |
| | | | SS 2 | 79 | 3-5-5-7 (10) | 1.5 | | |
| 5 | | Silty Sand (sm), medium dense to very dense, non plastic, brown, moist. | SS 3 | 67 | 6-8-8-11 (16) | | | 1st hole auger refusal is at 7.1ft bgs, 2nd hole offset 20' refusal is at 7.5ft bgs. at 3.5 ft |
| | | | SS 4 | 92 | 5-11-50/1" | | >> | |

Refusal at 7.1 feet.
Bottom of borehole at 7.1 feet.

Rock fragments in spoon tip at 7.1 ft

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# BORING NUMBER PV-016



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2270.39 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.40935 **LONGITUDE** -120.68012
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 83 | 5-7-6-6 (13) | 1 | | |
| | | | SS 2 | 100 | 5-4-6-9 (10) | 1.25 | | |
| 5 | | Silty Sand (sm), very dense, brown to gray, dry. | SS 3 | 86 | 12-23-42-50/3" | | >> | 1st hole auger refusal is at 5.75ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 3.5 ft |

Refusal at 5.8 feet.
Bottom of borehole at 5.8 feet.

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# BORING NUMBER PV-017



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2305.98 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.4077 **LONGITUDE** -120.6751
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), loose to medium dense, low plasticity, brown, moist. | SS 1 | 75 | 3-3-4-3 (7) | | | |
| | | | SS 2 | 83 | 3-3-4-6 (7) | | | |
| 5 | | | SS 3 | 88 | 7-8-7-12 (15) | | | |
| | | Silty Sand (SM), dense to very dense, low plasticity, brown, moist. | SS 4 | 92 | 12-15-16-16 (31) | | | |
| | | | SS 5 | 75 | 21-23-22-12 (45) | | | |
| 10 | | | AU | | | | | |
| | | | SS 6 | 100 | 11-50/5" | | >> | |

Refusal at 13.9 feet.
Bottom of borehole at 13.9 feet.

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# BORING NUMBER PV-018



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/11/25 **COMPLETED** 9/11/25
**GROUND ELEVATION** 2238.97 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.40343 **LONGITUDE** -120.69051
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff, low plasticity, brown, moist. | SS 1 | 75 | 3-5-5-5 (10) | 1.75 | | |
| | | | SS 2 | 54 | 2-3-4-5 (7) | 0.75 | | |
| 5 | | Silty Sand (sm), loose, brown, moist. | SS 3 | 57 | 3-2-3-50/3" | | >> | 1st hole auger refusal is at 5.75ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 3.5 ft |

Refusal at 5.8 feet.
Bottom of borehole at 5.8 feet.

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# BORING NUMBER PV-019



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/11/25 **COMPLETED** 9/11/25
**GROUND ELEVATION** 2271.17 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.4044 **LONGITUDE** -120.68282
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff, low plasticity, brown, moist. | SS 1 | 58 | 3-5-5-5 (10) | 0.5 | | |
| | | | SS 2 | 50 | 4-4-3-5 (7) | 0.5 | | |
| 5 | | Silty Sand (SM), medium dense, low plasticity, brown, moist. | SS 3 | 88 | 5-7-8-11 (15) | | | |
| | | | SS 4 | 88 | 6-7-8-9 (15) | | | |
| | | | SS 5 | 60 | 50/5" | | >> | |
| | | | AU | | | | | |

Refusal at 9.0 feet.
Bottom of borehole at 9.0 feet.

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# BORING NUMBER PV-020



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2347.38 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.40531 **LONGITUDE** -120.66968
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 75 | 3-4-2-3 (6) | 0.75 | | |
| | | Silty Clayey Sand With Gravel (SC-SM), loose to very dense, low plasticity, brown, moist. | SS 2 | 75 | 2-3-4-4 (7) | | | 1st hole auger refusal is at 7.33ft bgs, 2nd hole offset 20' refusal is at 7.75ft bgs. at 3.5 ft |
| 5 | | | SS 3 | 88 | 3-5-7-7 (12) | | | |
| | | | SS 4 | 88 | 8-23-50/4" | | >> | Hydraulic line broke 9/10/25 - 9/12/25, rig paused for repair. at 5.9 ft |

Refusal at 7.3 feet.
Bottom of borehole at 7.3 feet.

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# BORING NUMBER PV-021



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2349.93 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.40794 **LONGITUDE** -120.66523
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), soft to stiff, low plasticity, brown, moist. | SS 1 | 83 | 1-2-1-1 (3) | 0.75 | | |
| | | | SS 2 | 83 | 2-2-5-6 (7) | 0.75 | | |
| 5 | | Silty Sand (sm), very dense, brown to gray, moist. | SS 3 | 87 | 4-22-50/3" | | >> | 1st hole auger refusal is at 5.25ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 3.5 ft |

Refusal at 5.3 feet.
Bottom of borehole at 5.3 feet.

Rock fragments in the spoon tip. at 5.25 ft

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# BORING NUMBER PV-022



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/10/25 **COMPLETED** 9/10/25
**GROUND ELEVATION** 2404.99 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.40722 **LONGITUDE** -120.65879
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 71 | 2-3-1-2 (4) | 1.25 | | |
| | | | SS 2 | 71 | 1-2-2-2 (4) | 1.25 | | |
| 5 | | Silty Sand (sm), medium dense to very dense, non plastic, brown, moist. | SS 3 | 92 | 3-4-10-26 (14) | | | 1st hole auger refusal is at 6.83ft bgs, 2nd hole offset 20' refusal is at 7ft bgs. at 4 ft |
| | | | SS 4 | 30 | 7-50/4" | | >> | |

Refusal at 6.8 feet.
Bottom of borehole at 6.8 feet.

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# BORING NUMBER PV-023



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/11/25 **COMPLETED** 9/11/25
**GROUND ELEVATION** 2227.92 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.40029 **LONGITUDE** -120.68541
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 75 | 3-4-5-28 (9) | 0.5 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1 ft |
| | | | SS 2 | 50 | 50/4" | | >> | |
| | | Refusal at 2.5 feet. Bottom of borehole at 2.5 feet. | AU | | | | | |

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# BORING NUMBER PV-024



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/11/25 **COMPLETED** 9/11/25
**GROUND ELEVATION** 2330.84 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.39917 **LONGITUDE** -120.67887
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), medium dense to dense, low plasticity, brown, moist. | SS 1 | 58 | 3-5-5-6 (10) | | | 1st hole auger refusal is at 3.75ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1.5 ft |
| | | | SS 2 | 45 | 7-8-21-50/2" | | >> | |
| | | Refusal at 3.8 feet.<br>Bottom of borehole at 3.8 feet. | | | | | | Grab sample, rock fragments from 4ft bgs @ 2nd hole offset 20' at 4 ft |

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# BORING NUMBER PV-025



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2317.83 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.40111 **LONGITUDE** -120.67374
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff, low plasticity, brown, moist. | SS 1 | 71 | 3-4-4-3 (8) | 0.75 | | |
| | | | SS 2 | 75 | 3-4-7-8 (11) | 2.5 | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 7.25ft bgs. at 3 ft |
| 5 | | Silty Sand (sm), very dense, light brown to gray, dry. | SS 3 | 62 | 5-26-50/1" | | >> | |

Refusal at 5.0 feet.
Bottom of borehole at 5.1 feet.

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# BORING NUMBER PV-026



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2382.34 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.40077 **LONGITUDE** -120.66463
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), soft to stiff, low plasticity, brown, moist. | SS 1 | 75 | 2-2-1-1 (3) | 0.25 | | |
| | | | SS 2 | 96 | 2-3-6-6 (9) | 0.5 | | |
| 5 | | Silty Sand (sm), medium dense to very dense, non plastic, brown, moist. | SS 3 | 67 | 2-5-14-23 (19) | | | 1st hole auger refusal is at 6.25ft bgs, 2nd hole offset 20' refusal is at 6.42ft bgs. at 4 ft |
| | | | SS 4 | 33 | 50/3" | | >> | Rock fragments in the spoon tip. at 6.25 ft |
| | | Refusal at 6.3 feet.<br>Bottom of borehole at 6.3 feet. | | | | | | |

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# BORING NUMBER PV-027



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2361.42 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.39717 **LONGITUDE** -120.6687
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 79 | 2-4-3-3 (7) | 0.5 | | |
| | | | SS 2 | 71 | 2-3-11-14 (14) | 1.75 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-028



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2424.95 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.39694 **LONGITUDE** -120.65987
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-2-2-2 (4) | 0.5 | | |
| | | | SS 2 | 88 | 1-2-1-2 (3) | 0.75 | | |
| 5 | | Silty Clayey Sand (SC-SM), loose to very dense, low plasticity, brown, moist. | SS 3 | 75 | 2-2-3-13 (5) | | | |
| | | | SS 4 | 71 | 13-17-30-50 (47) | | | Contains cakite veins at 5.9 ft |

Refusal at 8.0 feet.
Bottom of borehole at 8.0 feet.

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# BORING NUMBER PV-029



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/11/25 **COMPLETED** 9/11/25
**GROUND ELEVATION** 2280.18 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.39386 **LONGITUDE** -120.68098
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), medium stiff to stiff, low plasticity, brown, moist. | SS 1 | 63 | 2-4-4-4 (8) | 0.5 | | |
| | | | SS 2 | 67 | 2-2-2-3 (4) | 0.75 | | |
| 5 | | Silty Sand (sm), medium dense to very dense, non plastic, brown to brownish yellow, moist. | SS 3 | 67 | 2-4-7-8 (11) | | | |
| | | | SS 4 | 87 | 5-7-50/3" | | >> | |
| | | | AU | | | | | |
| | | Refusal at 8.1 feet. Bottom of borehole at 8.1 feet. | SS 5 | | 50/1" | | >> | |

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# BORING NUMBER PV-030



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2348.12 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.39186 **LONGITUDE** -120.6716
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff to very stiff, low plasticity, brown, moist. | SS 1 | 50 | 3-5-4-5 (9) | 0.2 | | |
| | | | SS 2 | 75 | 2-2-3-5 (5) | 0.6 | | |
| 5 | | | SS 3 | 100 | 5-11-9-16 (20) | 2.1 | | 1st hole auger refusal is at 7ft bgs, 2nd hole offset 20' refusal is at 6.75ft bgs. at 5 ft |
| | | Silty Sand (sm), very dense, brown, moist. | SS 4 | 67 | 10-50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 7.0 feet.
Bottom of borehole at 7.0 feet.

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# BORING NUMBER PV-031



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2290.3 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.38956 **LONGITUDE** -120.6798
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ML), very stiff to hard, low plasticity, brown, moist. | SS 1 | 83 | 5-6-6-8 (12) | 1.25 | | |
| | | | SS 2 | 71 | 5-8-13-15 (21) | 0.75 | | |
| 5 | | | SS 3 | 67 | 6-12-20-23 (32) | 1 | | |
| | | Silty Sand (sm), very dense, brown to grayish brown, moist. | SS 4 | 100 | 12-13-22-50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 8.0 feet.
Bottom of borehole at 8.0 feet.

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# BORING NUMBER PV-032



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2424.44 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.38933 **LONGITUDE** -120.65955
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to stiff, low plasticity, brown, moist. | SS 1 | 54 | 1-2-1-2 (3) | 0.75 | | |
| | | | SS 2 | 88 | 1-2-5-10 (7) | 0.75 | | 1st hole auger refusal is at 4.67ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 3 ft |
| | | Silty Sand (sm), very dense, brown to gray, moist. | SS 3 | 25 | 2-50/2" | | >> | |

Refusal at 4.7 feet.
Bottom of borehole at 4.7 feet.

rock fragments in the spoon tip. at 4.67 ft

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# BORING NUMBER PV-033



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2270.17 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.38716 **LONGITUDE** -120.6935
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Mielke **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 63 | 5-4-4-5 (8) | 0.25 | | |
| | | | SS 2 | 88 | 3-5-12-23 (17) | 0.25 | | |
| 5 | | Silty Sand (sm), little coarse gravel, trace clay, very dense, brown to gray, moist. | SS 3 | 90 | 21-50/4" | 1.5 | >> | 1st hole auger refusal is at 5.5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 4 ft |
| | | | AU | | | | | |

Refusal at 5.5 feet.
Bottom of borehole at 5.5 feet.

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# BORING NUMBER PV-034



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2293.35 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.38655 **LONGITUDE** -120.68486
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Gilkes **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), stiff to hard, low plasticity, brown, moist. | SS 1 | 75 | 3-4-4-5 (8) | 0.25 | | |
| | | | SS 2 | 63 | 5-14-19-21 (33) | 0.75 | | |
| 5 | | Silty Sand (sm), dense to very dense, non plastic, brown, moist. | SS 3 | 88 | 13-18-19-24 (37) | | | 1st hole auger refusal is at 7ft bgs, 2nd hole offset 20' refusal is at 7ft bgs. at 5 ft |
| | | | SS 4 | 43 | 15-50/1" | | >> | |
| | | | AU | | | | | |

Refusal at 7.0 feet.
Bottom of borehole at 7.0 feet.

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# BORING NUMBER PV-035



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2248.61 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.38249 **LONGITUDE** -120.67955
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Wiegand **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to very stiff, low plasticity, brown, dry. | SS 1 | 53 | 7-14-50/5" | 0.25 | >>▲ | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.4 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

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# BORING NUMBER PV-036



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2303.19 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.38629 **LONGITUDE** -120.67501
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Meeks **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Silty Clayey Sand With Gravel (SC-SM), stiff to hard, non plastic, brown, moist. | SS 1 | 90 | 11-50/4" | | >> | 1st hole auger refusal is at 1ft bgs, 2nd hole offset 20' refusal is at 1ft bgs. at 0 ft |
| | | | AU | | | | | |
| | | Refusal at 1.0 feet. Bottom of borehole at 1.0 feet. | | | | | | |

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# BORING NUMBER PV-037



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2326.27 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.3822 **LONGITUDE** -120.67422
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Mielke **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), very stiff to hard, low plasticity, brown, dry. | SS 1 | 67 | 4-50/3" | 0.25 | >> | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.75ft bgs. at 0.4 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

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# BORING NUMBER PV-038



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2370.62 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.38635 **LONGITUDE** -120.66926
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 71 | 2-2-2-5 (4) | 0.75 | | 1st hole auger refusal is at 2.4ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | Gray Rock Fragments. | SS 2 | 60 | 50/5" | | >> | |

Refusal at 2.4 feet.
Bottom of borehole at 2.4 feet.

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# BORING NUMBER PV-039



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2446.15 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.38549 **LONGITUDE** -120.65943
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 3-2-1-2 (3) | 1 | | |
| | | | SS 2 | 88 | 1-2-2-2 (4) | 0.75 | | |
| 5 | | Silty Sand (sm), medium dense, brown, moist. | SS 3 | 67 | 2-10-19-50/3" | | >> | 1st hole auger refusal is at 5.75ft bgs, 2nd hole offset 20' refusal is at 5.75ft bgs. at 4.5 ft |

Refusal at 5.8 feet.
Bottom of borehole at 5.8 feet.

Rock fragments in tip. at 5.75 ft

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TETRA TECH
Tetra Tech, Inc
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Telephone: 973-630-8000

# BORING NUMBER PV-040



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/12/25 **COMPLETED** 9/12/25
**GROUND ELEVATION** 2414.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.38325 **LONGITUDE** -120.66435
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand With Gravel (SC-SM), medium stiff to stiff, low plasticity, brown, moist. | SS 1 | 75 | 2-2-2-2 (4) | | | |
| | | | SS 2 | 73 | 2-7-50/3" | | >> | 1st hole auger refusal is at 3.25ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |

Refusal at 3.3 feet.
Bottom of borehole at 3.3 feet.

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# BORING NUMBER PV-041



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2447.59 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.38182 **LONGITUDE** -120.65826
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft, low plasticity, dark brown, moist. | SS 1 | 79 | 2-2-1-2 (3) | 0.75 | | |
| | | Silty Sand (sm), dense, dark brown to gray, moist. | SS 2 | 70 | 2-5-23-50/2" | | >> | 1st hole auger refusal is at 3.67ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |

Refusal at 3.7 feet.
Bottom of borehole at 3.7 feet.

Rock fragments in the spoon tip. at 3.67 ft

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# BORING NUMBER PV-042



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2389.78 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.38039 **LONGITUDE** -120.66444
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff, low plasticity, brown to gray, dry. | SS 1 | 88 | 3-3-7-30 (10) | 1.75 | | 1st hole auger refusal is at 2.25ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | Silty Sand (sm), very dense, brown to gray, dry. | SS 2 | 100 | 50/3" | | >> | |
| | | Refusal at 2.3 feet.<br>Bottom of borehole at 2.3 feet. | | | | | | |

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# BORING NUMBER PV-043



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/14/25 **COMPLETED** 9/14/25
**GROUND ELEVATION** 2165.48 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.3753 **LONGITUDE** -120.69224
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Wenger **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand (SC), medium dense to very dense, low plasticity, brown, moist. | SS 1 | 88 | 5-6-8-12 (14) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 40 | 50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-044



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/14/25 **COMPLETED** 9/14/25
**GROUND ELEVATION** 2235.62 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.3779 **LONGITUDE** -120.67908
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Wiegand **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), very stiff to hard, low plasticity, brown, dry. | SS 1 | 75 | 7-6-9-15 (15) | 0.75 | | |
| | | | SS 2 | 27 | 12-50/5" | | >> | |
| | | | AU | | | 0.25 | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 3 ft |
| | | | SS 3 | 0 | 50/2" | | >> | |
| | | | AU | | | | | |
| | | Refusal at 4.5 feet. Bottom of borehole at 4.5 feet. | | | | | | |

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# BORING NUMBER PV-045



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2309.24 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.3761 **LONGITUDE** -120.67515
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Gilkes **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), stiff to hard, low plasticity, brown, dry. | SS 1 | 75 | 4-6-6-5 (12) | 0.25 | | |
| | | | SS 2 | 38 | 5-6-8-6 (14) | 0.25 | | |
| 5 | | | SS 3 | 75 | 5-4-6-5 (10) | 0.25 | | |
| | | | SS 4 | 38 | 6-11-14-17 (25) | 0.25 | | |
| | | Silty Clayey Sand (SC-SM), dense to very dense, low plasticity, brown, moist. | SS 5 | 100 | 9-14-18-16 (32) | | | |
| 10 | | | AU | | | | | |
| | | | SS 6 | 63 | 14-22-25-16 (47) | | | |
| 15 | | | AU | | | | | |
| | | | SS 7 | 90 | 15-50/4" | | >>▲ | |

Refusal at 18.8 feet.
Bottom of borehole at 18.8 feet.

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# BORING NUMBER PV-046



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2349.46 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37764 **LONGITUDE** -120.66928
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), soft to very stiff, low plasticity, brown, moist. | SS 1 | 100 | 2-1-1-1 (2) | 0.75 | | |
| | | | SS 2 | 48 | 1-6-13-50/3" | 2.25 | >> | 1st hole auger refusal is at 3.75ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |

Refusal at 3.8 feet.
Bottom of borehole at 3.8 feet.

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# BORING NUMBER PV-047



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2353.79 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.3761 **LONGITUDE** -120.66261
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Poorly Graded Sand (SP-SC), with silty clay, and gravel, medium dense to very dense, brown, dry. | SS 1 | 75 | 2-3-5-21 (8) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.5 ft |
| | | | SS 2 | 70 | 20-50/4" | | >> | Rock fragments in the spoon tip. at 2 ft |
| | | | AU | | | | | |
| | | Refusal at 3.0 feet. Bottom of borehole at 3.0 feet. | | | | | | Rock fragments in the spoon tip. at 3 ft |

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# BORING NUMBER PV-048



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2289.55 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37078 **LONGITUDE** -120.67499
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (sc-sm), loose to medium dense, low plasticity, brown, dry. | SS 1 | 88 | 4-5-5-4 (10) | | | |
| | | | SS 2 | 71 | 3-3-2-5 (5) | | | |
| 5 | | Silty Sand (sm), very dense, non plastic, brown, moist. | SS 3 | 67 | 6-22-35-50/3" | | >> | 1st hole auger refusal is at 6ft bgs, 2nd hole offset 20' refusal is at 7ft bgs. at 4 ft |
| | | | AU | | | | | |
| | | | SS 4 | 73 | 37-50/5" | | >> | Hole-1, rock fragments in the spoon tip. at 6 ft |

Refusal at 7.0 feet.
Bottom of borehole at 7.0 feet.

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# BORING NUMBER PV-049



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2320.34 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37238 **LONGITUDE** -120.66734
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand With Gravel (SC-SM), medium dense to very dense, brown, dry. | SS 1 | 71 | 3-4-7-13 (11) | | | |
| | | | SS 2 | 63 | 10-21-33-50/1" | | >> | 1st hole auger refusal is at 3.6ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |

Refusal at 3.6 feet.
Bottom of borehole at 3.6 feet.

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# BORING NUMBER PV-050



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2411.9 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37227 **LONGITUDE** -120.66065
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Silty Clayey Sand (sc-sm), medium dense, low plasticity, brown, dry. | SS 1 | 83 | 3-5-4-5 (9) | | ▲ | |
| | | Silty Sand (sm), very dense, brown to gray, dry. | SS 2 | 78 | 4-25-38-50/0" | | >> ▲ | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |
| | | Refusal at 3.5 feet.<br>Bottom of borehole at 3.5 feet. | | | | | | Rock fragments in the spoon tip. at 3.5 ft |

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# BORING NUMBER PV-051



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/13/25 **COMPLETED** 9/13/25
**GROUND ELEVATION** 2385.43 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36901 **LONGITUDE** -120.65892
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (sc-sm), dense, low plasticity, brown, dry. | SS 1 | 94 | 2-9-16-50/0" | | >> | 1st hole auger refusal is at 1.75ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.4 ft |
| | | | AU | | | | | |
| | | Refusal at 1.8 feet.<br>Bottom of borehole at 1.8 feet. | | | | | | Rock fragments in the spoon tip. at 1.75 ft |

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# BORING NUMBER PV-052



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/14/25 **COMPLETED** 9/14/25
**GROUND ELEVATION** 2219.05 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36419 **LONGITUDE** -120.67201
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky & Evan Meeks **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), medium dense, brown to gray, dry. | SS 1 | 86 | 2-3-16-50/3" | | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.5 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-053



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2395.89 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36228 **LONGITUDE** -120.66012
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (sc-sm), loose to very dense, low plasticity, brown, moist. | SS 1 | 75 | 2-2-2-2 (4) | | | |
| | | | SS 2 | 88 | 2-4-50/5" | | >> | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |
| | | | AU | | | | | |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-054



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2272.29 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.3584 **LONGITUDE** -120.67259
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (sc-sm), medium dense, low plasticity, brown, moist. | SS 1 | 71 | 5-5-5-4 (10) | | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-055



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2391.09 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.35314 **LONGITUDE** -120.65913
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (sc-sm), very loose, low plasticity, brown, moist. | SS 1 | 75 | 1-1-2-3 (3) | | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2.2ft bgs. at 0.5 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-056



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2302.45 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.34958 **LONGITUDE** -120.66401
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (sc-sm), medium dense, low plasticity, brown, moist. | SS 1 | 88 | 1-2-7-20 (9) | | | 1st hole auger refusal is at 2.2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | Refusal at 2.2 feet. Bottom of borehole at 2.2 feet. | SS 2 | 0 | 50/2" | | >> | No recovery at 2 ft |

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# BORING NUMBER PV-057



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2345.54 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.34608 **LONGITUDE** -120.66146
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (sc-sm), medium dense, low plasticity, brown, moist. | SS 1 | 75 | 4-5-9-13 (14) | | | 1st hole auger refusal is at 2.25ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | | SS 2 | | 50/3" | | >> | Rock fragments in the spoon tip. at 1.9 ft<br>No recovery at 2 ft |
| | | Refusal at 2.3 feet.<br>Bottom of borehole at 2.3 feet. | | | | | | |

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# BORING NUMBER PV-058



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2365.19 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.34223 **LONGITUDE** -120.66011
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt With Gravel (ml), very stiff to hard, low plasticity, brown, moist. | SS 1 | 63 | 4-5-8-8 (13) | 0.5 | | 1st hole auger refusal is at 2.4ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | | SS 2 | | 50/2" | | >> | No recovery at 2 ft |
| | | Refusal at 2.4 feet. Bottom of borehole at 2.4 feet. | AU | | | | | |

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# BORING NUMBER PV-059



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2356.01 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.34044 **LONGITUDE** -120.66539
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), stiff, low plasticity, brown, dry. | SS 1 | 75 | 3-5-5-8 (10) | 0.25 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.8ft bgs. at 0.5 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-060



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/14/25 **COMPLETED** 9/14/25
**GROUND ELEVATION** 2237.41 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36786 **LONGITUDE** -120.68304
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), soft, low plasticity, brown, dry. | SS 1 | 83 | 2-1-1-2 (2) | 0.75 | | |
| | | | SS 2 | 79 | 1-1-1-3 (2) | 0.75 | | |
| 5 | | Silty Sand (sm), loose to very dense, non plastic, brown, moist. | SS 3 | 79 | 2-3-4-6 (7) | | | 1st hole auger refusal is at 7ft bgs, 2nd hole offset 20' refusal is at 7.5ft bgs. at 5 ft |
| | | | SS 4 | 82 | 7-50/5" | | >> | |

Refusal at 7.0 feet.
Bottom of borehole at 7.0 feet.

Rock fragments in the spoon tip. at 7 ft

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# BORING NUMBER PV-061



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/14/25 **COMPLETED** 9/14/25
**GROUND ELEVATION** 2221.7 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36239 **LONGITUDE** -120.67979
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), medium stiff, low plasticity, brown, moist. | SS 1 | 92 | 2-2-2-8 (4) | 1.25 | | |
| | | Silty Sand (sm), very dense, brown to reddish brown, moist. | SS 2 | 90 | 10-15-23-50/2" | | >> | 1st hole auger refusal is at 3.6ft bgs, 2nd hole offset 20' refusal is at 3.2ft bgs. at 2 ft |
| | | Refusal at 3.6 feet.<br>Bottom of borehole at 3.7 feet. | | | | | | Rock fragments in the spoon tip. at 3.6 ft |

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# BORING NUMBER PV-062



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/14/25 **COMPLETED** 9/14/25
**GROUND ELEVATION** 2341.91 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36046 **LONGITUDE** -120.68573
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), medium stiff, low plasticity, brown, moist. | SS 1 | 92 | 2-3-2-2 (5) | 0.75 | | |
| | | Silty Sand (sm), medium dense, brown to gray, moist. | SS 2 | 96 | 2-4-8-23 (12) | | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |
| | | Refusal at 4.0 feet.<br>Bottom of borehole at 4.0 feet. | | | | | | Rock fragments and palagonite are prsent in the tip of spoon. at 4 ft |

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# BORING NUMBER PV-063



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2304.35 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36146 **LONGITUDE** -120.6943
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), soft, low plasticity, brown, moist. | SS 1 | 67 | 2-1-1-4 (2) | 0.75 | | 1st hole auger refusal is at 2.6ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1 ft |
| | | Poorly Graded Gravel With Silt And Sand (gm), very dense, gray, dry. | SS 2 | 86 | 24-50/1" | | >> | Sample is weathered rock at 2.6 ft |
| | | Refusal at 2.6 feet.<br>Bottom of borehole at 2.6 feet. | | | | | | |

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Telephone: 973-630-8000

# BORING NUMBER PV-064



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2287.63 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36589 **LONGITUDE** -120.6894
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), stiff to very stiff, low plasticity, light brown, dry. | SS 1 | 71 | 3-5-3-5 (8) | 0.75 | | |
| | | | SS 2 | 83 | 3-4-11-18 (15) | 0.5 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-065



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2240.47 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37037 **LONGITUDE** -120.69464
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 71 | 3-4-2-2 (6) | 0.5 | | |
| | | | SS 2 | 75 | 2-2-2-3 (4) | 0.75 | | |
| 5 | | Silty Sand (sm), medium dense, brown, moist. | SS 3 | 79 | 3-5-7-9 (12) | | | |
| | | Weathered Rock Fragments. | SS 4 | 100 | 50/1" | | | 1st hole auger refusal is at 6.1ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 5 ft |

Refusal at 6.1 feet.
Bottom of borehole at 6.1 feet.

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# BORING NUMBER PV-066



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2243.84 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37082 **LONGITUDE** -120.70309
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 75 | 3-4-2-4 (6) | 0.5 | | 1st hole auger refusal is at 2.75ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1 ft |
| | | | SS 2 | 44 | 3-50/3" | 0.25 | >> | |

Refusal at 2.8 feet.
Bottom of borehole at 2.8 feet.

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# BORING NUMBER PV-067



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2258.98 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.36103 **LONGITUDE** -120.7029
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), soft to stiff, low plasticity, brown, moist. | SS 1 | 92 | 1-1-1-2 (2) | 0.5 | | |
| | | | SS 2 | 84 | 2-5-6-50/1" | 0.75 | >> | 1st hole auger refusal is at 3.6ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |
| | | Refusal at 3.6 feet.<br>Bottom of borehole at 3.6 feet. | | | | | | Rock fragments in the spoon tip. at 3.6 ft |

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# BORING NUMBER PV-068



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/15/25 **COMPLETED** 9/15/25
**GROUND ELEVATION** 2162.37 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.37178 **LONGITUDE** -120.71033
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand With Gravel (SM), loose, medium plasticity, brown, dry. | SS 1 | 88 | 4-6-50/5" | | >>▲ | 1st hole auger refusal is at 1.4ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.2 ft |

Refusal at 1.4 feet.
Bottom of borehole at 1.4 feet.

Rock fragments in the spoon tip. at 1.4 ft

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# BORING NUMBER PV-069



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2219.9 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.37161 **LONGITUDE** -120.72137
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), stiff, low plasticity, brown, dry. | SS 1 | 86 | 2-4-7-50/3" | 1.7 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.7 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-070



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2138.26 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36589 **LONGITUDE** -120.71437
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), hard, low plasticity, brown, moist. | SS 1 | 50 | 4-4-50 (54) | | ▲ | 1st hole auger refusal is at 1ft bgs, 2nd hole offset 20' refusal is at 1ft bgs. at 0.4 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

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# BORING NUMBER PV-071



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2241.87 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36683 **LONGITUDE** -120.72544
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), medium stiff to stiff, low plasticity, brown, moist. | SS 1 / AU | 89 | 6-50/3" | | >> | 1st hole auger refusal is at 1ft bgs, 2nd hole offset 20' refusal is at 1ft bgs. at 0 ft |
| | | Refusal at 1.0 feet. Bottom of borehole at 1.0 feet. | | | | | | |

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# BORING NUMBER PV-072



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2209.51 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.36098 **LONGITUDE** -120.71695
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 38 | 1-3-3-6 (6) | | | |
| | | Silty Sand (sm), very dense, non plastic, brown, moist. | SS 2 | 72 | 5-12-50 (62) | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 3 ft |
| | | | AU | | | | | |
| | | | SS 3 | 100 | 50 | | | |
| 5 | | | AU | | | | | |

Refusal at 5.0 feet.
Bottom of borehole at 5.0 feet.

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# BORING NUMBER PV-073



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2185.65 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.3626 **LONGITUDE** -120.72601
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Ibrahim Marei **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), stiff, low plasticity, brown, moist. | SS 1 | 58 | 3-3-4-5 (7) | | | |
| | | | SS 2 | 100 | 50/3" | | >> | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.5 ft |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-074



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/16/25
**GROUND ELEVATION** 2242.3 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35706 **LONGITUDE** -120.72285
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Evan Walton **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (SC), very loose to medium dense, medium plasticity, brown, dry. | SS 1 | 88 | 1-1-1-2 (2) | | | |
| | | | SS 2 | 75 | 8-50/2" | | >> | 1st hole auger refusal is at 1.75ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.5 ft |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-075



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/16/25
**GROUND ELEVATION** 2223 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35187 **LONGITUDE** -120.71103
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (sc), very dense, brown to gray, dry. | SS 1 | 86 | 17-50/1" | 0.5 | >> | 1st hole auger refusal is at 0.6ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0 ft<br>Rock fragments in the spoon tip. at 0.6 ft |
| | | Refusal at 0.6 feet.<br>Bottom of borehole at 0.6 feet. | | | | | | |

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6 Century Dr, Suite 300
Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-076



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/16/25
**GROUND ELEVATION** 2245.43 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35366 **LONGITUDE** -120.71711
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 1-2-2-2 (4) | 0.75 | | |
| | | | SS 2 | 71 | 1-2-3-10 (5) | 0.75 | | 1st hole auger refusal is at 1.75ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |
| | | No recovery. Refusal at 4.0 feet. Bottom of borehole at 4.1 feet. | SS 3 | | 50/1" | | | |

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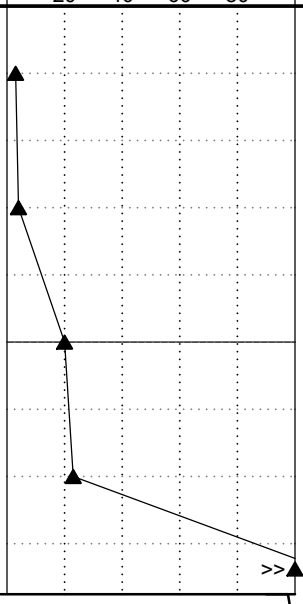
# BORING NUMBER PV-077



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2282.8 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35194 **LONGITUDE** -120.72688
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-2-1-2 (3) | 0.75 | |
| | | | SS 2 | 96 | 1-2-2-3 (4) | 0.75 | |
| 5 | | Sandy Silt (ML), very stiff to hard, low plasticity, brown, moist. | SS 3 | 75 | 3-10-10-13 (20) | | Rock fragments in the spoon tip at 5.5 ft |
| | | | SS 4 | 75 | 13-11-12-25 (23) | | Rock fragments in the spoon tip at 7.5 ft |
| | | | SS 5 | 89 | 36-50/3" | | Rock fragments in the spoon tip at 8.6 ft |




Refusal at 8.5 feet.
Bottom of borehole at 8.8 feet.

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# BORING NUMBER PV-078



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/16/25
**GROUND ELEVATION** 2265.74 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34641 **LONGITUDE** -120.71184
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), very stiff, brown, dry. | SS 1 | 80 | 3-14-50/3" | 0.5 | >> | 1st hole auger refusal is at 1ft bgs, 2nd hole offset 20' refusal is at 1ft bgs. at 0 ft |
| | | Refusal at 1.3 feet.<br>Bottom of borehole at 1.3 feet. | | | | | | Rock fragments in the spoon tip. at 1.25 ft |

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# BORING NUMBER PV-079



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/16/25 **COMPLETED** 9/16/25
**GROUND ELEVATION** 2268.16 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.3492 **LONGITUDE** -120.72155
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Grant Libby & Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), soft to medium stiff, medium plasticity, brown, moist. | SS 1 | 92 | 2-1-2-1 (3) | 0.5 | ▲ | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 75 | 2-50 | 1 | | |
| | | Refusal at 3.0 feet.<br>Bottom of borehole at 3.0 feet. | | | | | | Rock fragments in the spoon tip. at 3 ft |

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# BORING NUMBER PV-080



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2267.61 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34547 **LONGITUDE** -120.72037
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), soft to stiff, medium plasticity, brown, moist. | SS 1 | 88 | 3-2-1-3 (3) | 0.5 | | |
| | | | SS 2 | 79 | 2-2-2-2 (4) | 0.75 | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 3 ft |
| | | | SS 3 | 57 | 10-50/1" | 0.5 | >> | |
| | | Refusal at 4.5 feet.<br>Bottom of borehole at 4.6 feet. | | | | | | |

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# BORING NUMBER PV-081



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2321.17 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34657 **LONGITUDE** -120.72979
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (CL), soft to very stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-2-1-2 (3) | 0.75 | | |
| | | | SS 2 | 83 | 1-2-3-4 (5) | 0.75 | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 3 ft |
| | | | SS 3 | 71 | 21-50/1" | 0.5 | >> | |
| | | Refusal at 4.5 feet.<br>Bottom of borehole at 4.6 feet. | | | | | | |

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# BORING NUMBER PV-082



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2278.17 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35702 **LONGITUDE** -120.73315
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), stiff, medium plasticity, brown, moist. | SS 1 | 63 | 3-3-5-13 (8) | 1 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | Silty Sand (SM), very dense, non plastic, brown, dry. | SS 2 | 82 | 14-50/5" | | >> | |

Refusal at 2.9 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-083



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2335.24 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35706 **LONGITUDE** -120.74412
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), soft to stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-2-1-1 (3) | 0.75 | | |
| | | | SS 2 | 63 | 3-13-50/4" | 1 | >> | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |
| | | | AU | | | | | |
| | | Refusal at 3.5 feet.<br>Bottom of borehole at 3.5 feet. | | | | | | |

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# BORING NUMBER PV-084



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/17/25 **COMPLETED** 9/17/25
**GROUND ELEVATION** 2271.11 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35332 **LONGITUDE** -120.73683
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Fat Clay With Sand (CH), medium stiff to stiff, high plasticity, brown, moist. | SS 1 | 92 | 3-2-2-2 (4) | 0.75 | | |
| | | | SS 2 | 54 | 3-4-6-11 (10) | 0.75 | | |
| 5 | | Silty Sand (SM), dense to very dense, low plasticity, brown, moist. | SS 3 | 92 | 8-16-18-22 (34) | | | |
| | | | SS 4 | 96 | 18-23-28-29 (51) | | | |
| | | | SS 5 | 100 | 22-33-50/3" | | >> | |

Refusal at 9.3 feet.
Bottom of borehole at 9.3 feet.

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# BORING NUMBER PV-085



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2364.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35226 **LONGITUDE** -120.74602
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Silty Clay With Sand (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 57 | 3-2-4-50/5" | 1.75 | >> | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.3 ft<br>Rock fragments in the spoon tip. at 1.5 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.9 feet.

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# BORING NUMBER PV-086



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2340.58 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34646 **LONGITUDE** -120.74563
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), stiff, low plasticity, brown, dry. | SS 1 | 75 | 3-5-5-15 (10) | 1.5 | | Rock fragments in the spoon tip. at 1 ft |
| | | | SS 2 | 90 | 23-50/2" | 0.75 | >> | Rock fragments in the spoon tip. at 2.5 ft |
| | | | AU | | | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 3 ft |
| | | Refusal at 3.0 feet. Bottom of borehole at 3.0 feet. | | | | | | |

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# BORING NUMBER PV-087



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2362.93 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35732 **LONGITUDE** -120.75261
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), medium stiff to stiff, low plasticity, brown, dry. | SS 1 | 71 | 3-2-3-2 (5) | | | |
| | | | SS 2 | 79 | 3-3-4-5 (7) | | | |
| 5 | | Silty Sand (sm), very dense, non plastic, brown, dry. | SS 3 | 78 | 6-15-50 (65) | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 4 ft |

Refusal at 5.0 feet.
Bottom of borehole at 5.5 feet.

Rock fragments in the spoon tip. at 5.45 ft

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Telephone: 973-630-8000

# BORING NUMBER PV-088



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2384.44 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.3569 **LONGITUDE** -120.76484
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff, low plasticity, brown, dry. | SS 1 | 83 | 2-3-3-4 (6) | 1 | | |
| | | Silty Sand (sm), medium dense to very dense, non plastic, brown to brownish yellow, dry. | SS 2 | 83 | 3-5-8-10 (13) | | | |
| 5 | | | SS 3 | 79 | 3-7-15-50/1" | | >> | 1st hole auger refusal is at 5.5ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 4 ft |
| | | | AU | | | | | Rock fragments in the spoon tip. at 5.25 ft |

Refusal at 6.0 feet.
Bottom of borehole at 6.0 feet.

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# BORING NUMBER PV-089



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2388 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.35404 **LONGITUDE** -120.75817
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), stiff, low plasticity, brown, dry. | SS 1 | 71 | 3-4-3-3 (7) | 0.5 | | |
| | | | SS 2 | 40 | 2-3-5-8 (8) | 0.5 | | |
| 5 | | | SS 3 | 79 | 4-12-13-50/1" | 1.5 | >> | 1st hole auger refusal is at 5.5ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 4 ft |

Refusal at 5.5 feet.
Bottom of borehole at 5.6 feet.

Rock fragments in the spoon tip. at 5.6 ft

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# BORING NUMBER PV-090



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2405.46 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34984 **LONGITUDE** -120.75778
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), stiff, low plasticity, brown, dry. | SS 1 | 88 | 3-4-3-4 (7) | 0.25 | | |
| | | | SS 2 | 74 | 4-6-10-50/5" | 0.25 | >> | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |
| | | Refusal at 3.5 feet.<br>Bottom of borehole at 3.9 feet. | | | | | | Rock fragments in the spoon tip. at 3.9 ft |

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# BORING NUMBER PV-091



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2403.77 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34623 **LONGITUDE** -120.75278
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, dry. | SS 1 | 71 | 3-3-4-5 (7) | 0.25 | ▲ | |
| | | | SS 2 | 53 | 5-11-32-50/1" | 0.25 | >>▲ | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |
| | | Refusal at 3.6 feet.<br>Bottom of borehole at 3.6 feet. | | | | | | Rock fragments in the spoon tip. at 3.6 ft |

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# BORING NUMBER PV-092



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2408.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.3475 **LONGITUDE** -120.76575
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to very stiff, low plasticity, brown, dry. | SS 1 | 71 | 2-5-5-5 (10) | | | |
| | | | SS 2 | 79 | 5-5-10-14 (15) | 0.5 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4.5ft bgs. at 3 ft |
| | | | SS 3 | 60 | 50/5" | | >> | |

Refusal at 4.5 feet.
Bottom of borehole at 4.5 feet.

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# BORING NUMBER PV-093



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2424.31 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34366 **LONGITUDE** -120.7593
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), soft to stiff, low plasticity, brown, moist. | SS 1 | 100 | 1-1-1-1 (2) | 0.75 | | |
| | | | SS 2 | 79 | 1-1-2-3 (3) | 0.75 | | |
| 5 | | | SS 3 | 83 | 3-4-4-7 (8) | 0.5 | | 1st hole auger refusal is at 7ft bgs, 2nd hole offset 20' refusal is at 7ft bgs. at 5 ft |
| | | Silty Sand (sm), very dense, brownish yellow, moist. | SS 4 | 93 | 8-15-50/2" | >> | | Rock fragments in the spoon tip. at 6.5 ft |

Refusal at 7.0 feet.
Bottom of borehole at 7.2 feet.

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# BORING NUMBER PV-094



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2421.72 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.33876 **LONGITUDE** -120.75952
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff to stiff, low plasticity, brown, moist. | SS 1 | 71 | 2-2-3-11 (5) | 1.5 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | Refusal at 2.0 feet.<br>Bottom of borehole at 2.1 feet. | SS 2 | 0 | 50/1" | | | Rock fragments in the spoon tip. at 2 ft |

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# BORING NUMBER PV-095



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2423.35 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.33866 **LONGITUDE** -120.76507
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), soft to hard, low plasticity, brown, moist. | SS 1 | 63 | 2-1-1-1 (2) | 0.75 | | |
| | | | SS 2 | 89 | 2-5-20-50/1" | 1.5 | >> | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |
| | | Refusal at 3.0 feet.<br>Bottom of borehole at 3.6 feet. | | | | | | Rock fragments in the spoon tip. at 3.5 ft |

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# BORING NUMBER PV-096



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2400.64 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34205 **LONGITUDE** -120.76907
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft to medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-2-1-1 (3) | 0.5 | | |
| | | | SS 2 | 83 | 1-2-3-5 (5) | 0.5 | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 3 ft |
| 5 | | Silty Sand (sm), very dense, brown to light brown, moist. | SS 3 | 71 | 5-22-50/5" | | >> | Rock fragments in the spoon tip. at 5 ft |

Refusal at 5.0 feet.
Bottom of borehole at 5.4 feet.

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# BORING NUMBER PV-097



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/19/25 **COMPLETED** 9/19/25
**GROUND ELEVATION** 2366.22 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.34154 **LONGITUDE** -120.7793
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), soft to medium stiff, low plasticity, brown, moist. | SS 1 | 92 | 1-1-1-1 (2) | 0.5 | | |
| | | | SS 2 | 67 | 1-1-1-1 (2) | 0.5 | | |
| 5 | | | SS 3 | 67 | 2-3-3-2 (6) | 0.5 | | |
| | | | SS 4 | 96 | 2-2-2-4 (4) | 0.5 | | |
| | | Silty Sand (sm), medium dense, brown, moist. | SS 5 | 100 | 9-8-14-50/4" | | >> | Rock fragments in the spoon tip. at 9.8 ft |

Refusal at 9.5 feet.
Bottom of borehole at 9.8 feet.

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# BORING NUMBER PV-098



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2415.5 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.33775 **LONGITUDE** -120.78312
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), very loose to medium dense, low plasticity, brown, moist. | SS 1 | 71 | 2-1-1-1 (2) | | | |
| | | | SS 2 | 71 | 1-1-1-2 (2) | | | |
| 5 | | | SS 3 | 79 | 2-4-6-15 (10) | | | 1st hole auger refusal is at 6.5ft bgs, 2nd hole offset 20' refusal is at 7ft bgs. at 5 ft |
| | | Silty Sand (sm), very dense, brown to brownish yellow, moist. | SS 4 | 86 | 18-50/1" | | >> | Rock fragments in the spoon tip. at 6.5 ft |

Refusal at 6.6 feet.
Bottom of borehole at 6.6 feet.

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# BORING NUMBER PV-099



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2423.41 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.33516 **LONGITUDE** -120.77872
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff to hard, low plasticity, brown, moist. | SS 1 | 83 | 2-2-2-3 (4) | 0.75 | | |
| | | | SS 2 | 94 | 6-8-50 (58) | 1.5 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |
| | | Refusal at 3.0 feet. Bottom of borehole at 3.5 feet. | | | | | | Rock fragments in the spoon tip. at 3.42 ft |

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# BORING NUMBER PV-100



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2412.03 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.33289 **LONGITUDE** -120.77213
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), medium stiff to very stiff, medium plasticity, dark brown to brown, moist. | SS 1 | 88 | 2-2-3-3 (5) | 1 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.5 ft |
| | | | SS 2 | 100 | 3-17-50/1" | 1 | >> | |

Refusal at 2.5 feet.
Bottom of borehole at 3.1 feet.

Rock fragments in the spoon tip. at 3.08 ft

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# BORING NUMBER PV-101



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2403.24 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.33169 **LONGITUDE** -120.78674
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ML), soft to stiff, low plasticity, brown, moist. | SS 1 | 88 | 2-2-1-1 (3) | 0.5 | | |
| | | | SS 2 | 79 | 1-1-2-2 (3) | 0.25 | | |
| 5 | | | SS 3 | 71 | 2-4-5-10 (9) | 0.75 | | 1st hole auger refusal is at 6.5ft bgs, 2nd hole offset 20' refusal is at 6.5ft bgs. at 5 ft |
| | | Silty Sand (sm), very dense, brownish yellow, moist. | SS 4 | 73 | 10-50/5" | | >> | Rock fragments in the spoon tip. at 6.7 ft |

Refusal at 6.5 feet.
Bottom of borehole at 6.9 feet.

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# BORING NUMBER PV-102



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2350.11 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.34303 **LONGITUDE** -120.79664
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Lean Clay With Sand (cl), hard, medium plasticity, brown, dry. | SS 1 | 86 | 5-50/1" | 0.25 | >> | Rock fragments in the spoon tip. at 0.5 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs, 2nd spoon attempt; spoon refusal at 0.5ft, same material as above. at 2 ft

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# BORING NUMBER PV-103



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2399.08 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.33737 **LONGITUDE** -120.80648
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), medium stiff to very stiff, medium plasticity, brown to dark brown, moist. | SS 1 | 83 | 2-2-3-3 (5) | 1.25 | ▲ | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs at 1.5 ft |
| | | | SS 2 | 79 | 4-19-50/2" | 1.5 | >>▲ | Rock fragments in the spoon tip. at 3.1 ft |
| | | Refusal at 3.0 feet.<br>Bottom of borehole at 3.2 feet. | | | | | | |

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# BORING NUMBER PV-104



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2403.46 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.33311 **LONGITUDE** -120.80561
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), medium stiff to hard, medium plasticity, brown, moist. | SS 1 | 88 | 2-2-2-4 (4) | 1.75 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs at 1.5 ft |
| | | | SS 2 | 67 | 3-5-25-50/0" | 1.5 | >> | Rock fragments in the spoon tip. at 3 ft |

Refusal at 3.0 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-105



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2384.35 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.33158 **LONGITUDE** -120.7951
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand With Gravel (SM), very dense, brown to gray, dry. | SS 1 | 73 | 5-50/5" | | >> | Rock fragments in the spoon tip. at 0.67 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 1.5 ft

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# BORING NUMBER PV-106



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2377.54 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.32816 **LONGITUDE** -120.79835
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 79 | 4-2-3-3 (5) | 0.75 | | |
| | | | SS 2 | 83 | 2-2-3-5 (5) | 0.25 | | |
| 5 | | Silty Sand (sm), medium dense to very dense, non plastic, brown to gray, moist. | SS 3 | 83 | 4-9-8-10 (17) | | | |
| | | | SS 4 | 79 | 5-25-50/2" | | >> | Rock fragments in the spoon tip. at 7.1 ft |
| | | | AU | | | | | |

Refusal at 8.0 feet.
Bottom of borehole at 8.0 feet.

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# BORING NUMBER PV-107



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2420.23 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.32292 **LONGITUDE** -120.79783
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), stiff, brown, moist. | SS 1 | 83 | 2-3-4-3 (7) | 1.25 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | Clayey Sand (sc), very dense, brown, moist. | SS 2 | 69 | 12-23-50/1" | | >> | Rock fragments in the spoon tip. at 2.9 ft |

Refusal at 3.0 feet.
Bottom of borehole at 3.1 feet.

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# BORING NUMBER PV-108



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2405.07 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.31811 **LONGITUDE** -120.79687
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), stiff, brown, moist. | SS 1 | 95 | 4-4-5-50/1" | 1.5 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.8 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-109



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2415.04 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.31859 **LONGITUDE** -120.79163
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand With Gravel (SC-SM), loose to medium dense, brown, moist. | SS 1 | 100 | 2-2-2-2 (4) | | ▲ | |
| | | | SS 2 | 78 | 2-3-14-50/5" | | >>▲ | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft<br>Rock fragments in the spoon tip. at 3.5 ft |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-110



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2434.43 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.32644 **LONGITUDE** -120.77147
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), stiff to hard, medium plasticity, brown, moist. | SS 1 | 79 | 3-5-4-6 (9) | 0.75 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 67 | 8-50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 2.5 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-111



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/21/25 **COMPLETED** 9/21/25
**GROUND ELEVATION** 2443.98 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.32212 **LONGITUDE** -120.77861
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff to soft, low plasticity, brown, moist. | SS 1 | 83 | 3-3-2-3 (5) | 0.25 | | |
| | | | SS 2 | 83 | 3-2-1-3 (3) | 0.25 | | |
| 5 | | Silty Sand (SM), medium dense to very dense, low plasticity, brown, moist. | SS 3 | 75 | 4-5-5-5 (10) | | | 1st hole auger refusal is at 6.5ft bgs, 2nd hole offset 20' refusal is at 7ft bgs. at 5 ft |
| | | | SS 4 | 86 | 4-7-50/2" | | >> | Rock fragments in the spoon tip. at 7 ft |

Refusal at 6.5 feet.
Bottom of borehole at 7.3 feet.

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# BORING NUMBER PV-112



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/20/25 **COMPLETED** 9/20/25
**GROUND ELEVATION** 2443.5 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31929 **LONGITUDE** -120.77229
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to medium stiff, low plasticity, brown, moist. | SS 1 | 88 | 3-4-4-4 (8) | 0.75 | | |
| | | | SS 2 | 75 | 2-3-3-6 (6) | | | |
| 5 | | Silty Sand (sm), dense, brownish yellow, moist. | SS 3 | 78 | 5-8-15-50/5" | | >> | 1st hole auger refusal is at 5.5ft bgs, 2nd hole offset 20' refusal is at 5.5ft bgs. at 4 ft<br>Rock fragments in the spoon tip. at 5.5 ft |

Refusal at 5.5 feet.
Bottom of borehole at 5.9 feet.

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# BORING NUMBER PV-113



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/21/25 **COMPLETED** 9/21/25
**GROUND ELEVATION** 2420.04 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31728 **LONGITUDE** -120.78454
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), hard, low plasticity, brown, moist. | SS 1 | 76 | 3-50/5" | | >> | 1st hole auger refusal is at 0.5ft bgs, 2nd hole offset 20' refusal is at 1ft bgs. at 0 ft |

Refusal at 1.0 feet.
Bottom of borehole at 1.0 feet.

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# BORING NUMBER PV-114



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/21/25 **COMPLETED** 9/21/25
**GROUND ELEVATION** 2434.01 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31352 **LONGITUDE** -120.77968
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (SM), medium dense to very dense, brown, moist. | SS 1 | 83 | 3-5-3-5 (8) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 100 | 11-50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-115



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/21/25 **COMPLETED** 9/21/25
**GROUND ELEVATION** 2443.35 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31459 **LONGITUDE** -120.77172
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), soft, low plasticity, brown, moist. | SS 1 | 100 | 2-1-2-1 (3) | 0.5 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1.5 ft |
| | | | SS 2 | 71 | 1-1-1-14 (2) | 0.5 | | Rock fragments in the spoon tip. at 3.4 ft |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-116



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/22/25 **COMPLETED** 9/22/25
**GROUND ELEVATION** 2402.46 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31018 **LONGITUDE** -120.7846
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), very stiff, brown, moist. | SS 1 | 88 | 5-6-7-11 (13) | 2.5 | | |
| | | Silty Sand (sm), very dense, non plastic, brown, moist. | SS 2 | 73 | 15-50/5" | | >> | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.5 ft |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-117



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/21/25 **COMPLETED** 9/21/25
**GROUND ELEVATION** 2452.24 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31037 **LONGITUDE** -120.77316
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 79 | 3-4-5-23 (9) | 0.5 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 100 | 28-50/1" | 2.25 | >> | Rock fragments in the spoon tip. at 2.5 ft |
| | | | AU | | | | | |
| | | Refusal at 3.0 feet. Bottom of borehole at 3.0 feet. | | | | | | |

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# BORING NUMBER PV-118



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/22/25 **COMPLETED** 9/22/25
**GROUND ELEVATION** 2384.89 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30681 **LONGITUDE** -120.78605
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand With Gravel (sm), very dense, brown, dry. | SS 1 | 77 | 6-22-50/1" | 2.5 | >> | Rock fragments in the spoon tip. at 0.8 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 1.5 ft

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# BORING NUMBER PV-119



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/22/25 **COMPLETED** 9/22/25
**GROUND ELEVATION** 2383.8 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30291 **LONGITUDE** -120.78196
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), stiff to very stiff, low plasticity, brown, dry. | SS 1 | 83 | 3-4-4-9 (8) | 1.25 | | |
| | | | SS 2 | 89 | 22-50/3" | 1 | >> | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.5 ft |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-120



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/22/25 **COMPLETED** 9/22/25
**GROUND ELEVATION** 2443.34 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30754 **LONGITUDE** -120.7764
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), very stiff, brown, dry. | SS 1 | 86 | 3-5-11-50/3" | 1 | >> | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.2 ft<br>Rock fragments in the spoon tip. at 1.5 ft |
| | | Refusal at 1.5 feet.<br>Bottom of borehole at 1.8 feet. | | | | | | |

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# BORING NUMBER PV-121



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/22/25 **COMPLETED** 9/22/25
**GROUND ELEVATION** 2456.74 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30338 **LONGITUDE** -120.77112
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (SC), medium dense to dense, medium plasticity, brown, dry. | SS 1 | 92 | 4-5-5-5 (10) | | ▲ | |
| | | | SS 1 | 69 | 9-31-50/1" | | >>▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |

Refusal at 3.0 feet.
Bottom of borehole at 3.1 feet.

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# BORING NUMBER PV-122



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/25/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2378.28 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31431 **LONGITUDE** -120.81659
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silt (ml), stiff, low plasticity, brown, moist. | SS 1 | 92 | 4-4-4-8 (8) | 1.5 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | Silty Sand (sm), very dense, brown, moist. | SS 2 | 67 | 50 | | | |
| | | Refusal at 2.5 feet. Bottom of borehole at 2.5 feet. | | | | | | |

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# BORING NUMBER PV-123



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/25/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2389.06 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.31221 **LONGITUDE** -120.8248
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ML), medium dense to very dense, non plastic, brown, moist. | SS 1 | 79 | 3-4-5-1 (9) | | ▲ | |
| | | | SS 2 | 100 | 8-14-50/3" | | >>▲ | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-124



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/25/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2365.48 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30784 **LONGITUDE** -120.82388
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), medium dense, non plastic, light brown, moist. | SS 1 | 92 | 4-5-5-8 (10) | 1.5 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 0.7 ft |
| | | | SS 2 | 100 | 18 | | | |

Refusal at 2.5 feet.
Bottom of borehole at 2.5 feet.

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# BORING NUMBER PV-125



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/25/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2362.05 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30518 **LONGITUDE** -120.82778
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), medium dense to very dense, non plastic, light brown, moist. | SS 1 | 100 | 3-5-5-8 (10) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 91 | 12-50/5" | | >> | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-126



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/25/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2347.46 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30239 **LONGITUDE** -120.82355
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ML), very stiff, low plasticity, light brown, moist. | SS 1 | 85 | 3-10-50/1" | | >>▲ | |

Refusal at 1.0 feet.
Bottom of borehole at 1.1 feet.

1st hole auger refusal is at 1ft bgs, 2nd hole offset 20' refusal is at 1ft bgs. at 1.08 ft

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# BORING NUMBER PV-127



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/25/25 **COMPLETED** 9/25/25
**GROUND ELEVATION** 2346.87 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29962 **LONGITUDE** -120.82762
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff, low plasticity, light brown, moist. | SS 1 | 92 | 3-2-2-2 (4) | | | |
| | | | SS 2 | 100 | 1-2-4-6 (6) | | | |
| 5 | | Silty Sand (sm), dense, brown, moist. | SS 3 | 75 | 3-7-18-50 (25) | | | 1st hole auger refusal is at 6ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 4 ft |

Refusal at 6.0 feet.
Bottom of borehole at 6.0 feet.

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# BORING NUMBER PV-128



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2349.3 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.30044 **LONGITUDE** -120.83495
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Gravel (gc), dense, brown, moist. | SS 1 | 100 | 3-27-50/0" | | >> | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.3 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

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# BORING NUMBER PV-129



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2344.39 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29642 **LONGITUDE** -120.82742
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), stiff, low plasticity, brown, moist. | SS 1 | 54 | 6-4-3-6 (7) | 0.5 | | 1st hole auger refusal is at 4.1ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1.5 ft |
| | | | SS 2 | 71 | 6-6-7-22 (13) | 2.5 | | |
| | | | AU | | | | | |

Refusal at 4.1 feet.
Bottom of borehole at 4.1 feet.

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# BORING NUMBER PV-130



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2343.32 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29667 **LONGITUDE** -120.83349
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), medium stiff to hard, low plasticity, brown, moist. | SS 1 | 67 | 2-2-2-2 (4) | 0.5 | | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1.5 ft |
| | | | SS 2 | 67 | 6-8-19-50/3" | 1 | >> | |

Refusal at 3.5 feet.
Bottom of borehole at 3.8 feet.

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# BORING NUMBER PV-131



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2343.85 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29505 **LONGITUDE** -120.83937
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Vanessa Glaser **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), stiff, low plasticity, light brown, moist. | SS 1 | 46 | 3-6-4-4 (10) | 0.5 | | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1.5 ft |
| | | Clayey Gravel (gc), medium dense, brown, moist. | SS 2 | 67 | 2-6-18-50/3" | | >> | |

Refusal at 3.5 feet.
Bottom of borehole at 3.8 feet.

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# BORING NUMBER PV-132



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2337.69 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29265 **LONGITUDE** -120.82739
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand With Gravel (SC-SM), medium dense, low plasticity, brown, moist. | SS 1 | 83 | 4-5-4-8 (9) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | | SS 2 | 56 | 11-50/3" | | >> | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-133



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2327.04 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29217 **LONGITUDE** -120.83414
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), loose to medium dense, brown, moist. | SS 1 | 54 | 2-2-2-2 (4) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 69 | 2-9-50/1" | | >> | |

Refusal at 3.0 feet.
Bottom of borehole at 3.1 feet.

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# BORING NUMBER PV-134



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2384.8 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29245 **LONGITUDE** -120.84291
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silt (ml), stiff, low plasticity, light brown, moist. | SS 1 | 83 | 3-5-3-4 (8) | 2 | | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1 ft |
| | | Silty Sand (sm), medium dense, light brown, moist. | SS 2 | 84 | 5-4-15-50/1" | | >> | |

Refusal at 3.5 feet.
Bottom of borehole at 3.6 feet.

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# BORING NUMBER PV-135



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2348.3 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28819 **LONGITUDE** -120.82735
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), very dense, moist. | SS 1 | 87 | 4-10-50/3" | | >>▲ | 1st hole auger refusal is at 1.55ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.2 ft |
| | | | AU | | | | | |

Refusal at 1.6 feet.
Bottom of borehole at 1.6 feet.

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# BORING NUMBER PV-136



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2326.89 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.2882 **LONGITUDE** -120.83457
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), loose to very dense, non plastic, brown, moist. | SS 1 | 75 | 3-3-3-3 (6) | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 4.5ft bgs. at 2 ft |
| | | | SS 2 | 88 | 2-8-10-17 (18) | | | |
| 5 | | | SS 3 | 100 | 15-50/4" | | >> | |
| | | | AU | | | | | |
| | | Refusal at 5.0 feet. Bottom of borehole at 5.0 feet. | | | | | | |

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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-137



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2333.71 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28905 **LONGITUDE** -120.84052
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand With Gravel (SM), medium dense, brown, moist. | SS 1 | 75 | 3-5-6-23 (11) | | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.5 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-138



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/26/25 **COMPLETED** 9/26/25
**GROUND ELEVATION** 2372.59 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28776 **LONGITUDE** -120.84746
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), medium dense, light brown, moist. | SS 1 | 84 | 3-6-9-27 (15) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.8 ft |
| | | Poorly Graded Gravel (gp), very dense, brown, dry. | SS 2 | 100 | 36-50/1" | | >> | |
| | | Refusal at 2.5 feet.<br>Bottom of borehole at 2.6 feet. | | | | | | |

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# BORING NUMBER PV-139



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2330.55 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28408 **LONGITUDE** -120.8275
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand (sc), medium dense, brown, moist. | SS 1 | 83 | 3-4-4-11 (8) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.8 ft |
| | | Silty Sand (sm), very dense, moist. | SS 2 | 67 | 50/3" | | >> | |
| | | Refusal at 2.5 feet.<br>Bottom of borehole at 2.5 feet. | AU | | | | | |

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# BORING NUMBER PV-140



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/30/25 **COMPLETED** 9/30/25
**GROUND ELEVATION** 2321.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28279 **LONGITUDE** -120.8379
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff, low plasticity, brown, moist. | SS 1 | 71 | 3-3-3-3 (6) | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 2 ft |
| | | | SS 2 | 63 | 3-3-3-8 (6) | | | |
| 5 | | Silty Sand (sm), very dense, brown, moist. | SS 3 | 90 | 16-50/4" | | >> | |
| | | | AU | | | | | |

Refusal at 5.0 feet.
Bottom of borehole at 5.0 feet.

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# BORING NUMBER PV-141



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/29/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2371.73 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28385 **LONGITUDE** -120.84802
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), stiff, low plasticity, brown, moist. | SS 1 | 83 | 4-5-3-4 (8) | | | |
| | | Clayey Sand (sc), medium dense, brown, moist. | SS 2 | 75 | 3-3-5-15 (8) | | | 1st hole auger refusal is at 6.5ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 3 ft |
| 5 | | Silty Sand (sm), medium dense, brown to brownish yellow, moist. | SS 3 | 92 | 10-11-8-10 (19) | | | |
| | | | SS 4 | 86 | 18-50/1" | | >> | |

Refusal at 6.5 feet.
Bottom of borehole at 6.6 feet.

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# BORING NUMBER PV-142



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2325.27 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.27992 **LONGITUDE** -120.82757
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt With Gravel (ML), stiff, low plasticity, brown, moist. | SS 1 | 88 | 3-4-5-15 (9) | | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | Refusal at 2.0 feet. Bottom of borehole at 2.1 feet. | SS 2 | 0 | 50/1" | | | No recovery at 2 ft |

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# BORING NUMBER PV-143



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/29/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2339.08 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.27858 **LONGITUDE** -120.83529
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 83 | 3-5-4-2 (9) | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 2 ft |
| | | | SS 2 | 67 | 1-3-10-12 (13) | | | |
| 5 | | Poorly Graded Sand (sp), very dense, dry. | SS 3 | 100 | 13-18-50/1" | | >> | |

Refusal at 5.0 feet.
Bottom of borehole at 5.1 feet.

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# BORING NUMBER PV-144



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/29/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2322.4 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.27818 **LONGITUDE** -120.8442
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff to very stiff, low plasticity, brown, moist. | SS 1 | 92 | 3-3-3-3 (6) | | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 2 ft |
| | | | SS 2 | 79 | 2-4-10-22 (14) | | | |
| | | | SS 3 | 80 | 50/5" | | >> | |

Refusal at 4.5 feet.
Bottom of borehole at 4.5 feet.

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# BORING NUMBER PV-145



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/29/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2323.42 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.27942 **LONGITUDE** -120.85735
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff, low plasticity, brown, moist. | SS 1 | 83 | 3-4-2-2 (6) | | | 1st hole auger refusal is at 5ft bgs, 2nd hole offset 20' refusal is at 5ft bgs. at 2 ft |
| | | | SS 2 | 63 | 1-2-2-5 (4) | | | |
| 5 | | Silty Sand (sm), very dense, gray to brown, moist. | SS 3 | 77 | 12-23-50/1" | | >> | |

Refusal at 5.0 feet.
Bottom of borehole at 5.1 feet.

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# BORING NUMBER PV-146



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2316.01 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.2756 **LONGITUDE** -120.82574
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 92 | 3-4-4-10 (8) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.5 ft |
| | | | SS 2 | 40 | 50/5" | | >> | |

Refusal at 2.5 feet.
Bottom of borehole at 2.5 feet.

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# BORING NUMBER PV-147



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/29/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2328.77 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.27499 **LONGITUDE** -120.8314
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff, low plasticity, brown, moist. | SS 1 | 83 | 3-3-2-2 (5) | | | |
| | | Silty Sand (sm), medium dense to very dense, brown, moist. | SS 2 | 75 | 2-7-9-10 (16) | | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 3 ft |
| | | | SS 3 | 100 | 50/5" | | >> | |

Refusal at 4.5 feet.
Bottom of borehole at 4.5 feet.

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# BORING NUMBER PV-148



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/28/25 **COMPLETED** 9/29/25
**GROUND ELEVATION** 2306.46 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.27456 **LONGITUDE** -120.84392
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 96 | 3-4-3-4 (7) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 80 | 3-50/4" | | >> | |
| | | | AU | | | | | |

Refusal at 2.5 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-149



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2332.66 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.26998 **LONGITUDE** -120.8291
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 88 | 3-4-5-3 (9) | | | |
| | | | SS 2 | 88 | 5-16-50/4" | | >> | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-150



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2325.58 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.26925 **LONGITUDE** -120.83706
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), stiff to hard, low plasticity, brown, moist. | SS 1 | 83 | 3-5-6-9 (11) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Clayey Gravel (gc), very dense, brown, moist. | SS 2 | 100 | 50/5" | | >> | |
| | | Refusal at 2.5 feet.<br>Bottom of borehole at 2.5 feet. | | | | | | |

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# BORING NUMBER PV-151



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2333.18 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.26605 **LONGITUDE** -120.83149
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Gravelly Lean Clay With Sand (CL), very stiff, medium plasticity, brown, moist. | SS 1 | 96 | 3-3-17-24 (20) | | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.3 ft |
| | | | SS 2 | 0 | 50/5" | | >> | No recovery at 2 ft |
| | | Refusal at 2.0 feet. Bottom of borehole at 2.4 feet. | | | | | | |

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# BORING NUMBER PV-152



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/5/25 **COMPLETED** 10/5/25
**GROUND ELEVATION** 2268.02 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Mason
**LATITUDE** 45.2618 **LONGITUDE** -120.82683
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), stiff to hard, low plasticity, brown, moist. | SS 1 | 50 | 4-3-4-5 (7) | >4.5 | | |
| | | | SS 2 | 88 | 15-25-34-46 (59) | 3.5 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-153



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2320.88 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.2608 **LONGITUDE** -120.83578
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), very stiff, low plasticity, brown, moist. | SS 1 | 92 | 3-6-9-21 (15) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Poorly Graded Sand (sp), very dense, brown, dry. | SS 2 | 100 | 50/3" | | >> | |
| | | Refusal at 2.5 feet. Bottom of borehole at 2.5 feet. | AU | | | | | |

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# BORING NUMBER PV-154



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/6/25 **COMPLETED** 10/6/25
**GROUND ELEVATION** 2240.83 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.25929 **LONGITUDE** -120.82621
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL-ML), hard, low plasticity, brown, moist. | SS 1 | 6 | 1-1-50/5" | 2 | >>▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-155



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2251.49 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.25831 **LONGITUDE** -120.83183
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), medium stiff to hard, low plasticity, brown, moist. | SS 1 | 71 | 2-6-50/5" | 2.5 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.8 ft |
| | | | AU | | | | | |
| | | Refusal at 2.0 feet. Bottom of borehole at 2.1 feet. | SS 2 | 0 | 50/1" | | >> | |

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# BORING NUMBER PV-156



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2289.55 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.25593 **LONGITUDE** -120.83711
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Acker Rebel, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (cl-ml), very stiff to hard, low plasticity, brown, dry. | SS 1 | 91 | 3-7-6-50/4" | 1.5 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-157



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/27/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2344.44 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29249 **LONGITUDE** -120.85932
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand (sc), loose, low plasticity, brown, moist. | SS 1 | 75 | 3-3-3-2 (6) | | | |
| | | | SS 2 | 79 | 2-2-2-3 (4) | | | |
| 5 | | | SS 3 | 75 | 2-3-3-14 (6) | | | 1st hole auger refusal is at 6.5ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 5 ft |
| | | Silty Sand (sm), very dense, moist. | SS 4 | 67 | 50/3" | | >> | |
| | | Refusal at 6.5 feet.<br>Bottom of borehole at 6.5 feet. | AU | | | | | |

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# BORING NUMBER PV-158



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/27/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2319.65 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.2922 **LONGITUDE** -120.86644
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), stiff, low plasticity, brown, moist to dry. | SS 1 | 83 | 4-4-4-18 (8) | | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | Refusal at 2.0 feet. Bottom of borehole at 2.1 feet. | SS 2 | 100 | 50/1" | | | |

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# BORING NUMBER PV-159



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/27/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2376.6 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28903 **LONGITUDE** -120.85311
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand (sc), loose to medium dense, low plasticity, brown, moist. | SS 1 | 79 | 2-2-2-3 (4) | | | |
| | | | SS 2 | 83 | 2-2-2-3 (4) | | | |
| 5 | | | SS 3 | 88 | 3-5-7-10 (12) | | | 1st hole auger refusal is at 6ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 4 ft |
| | | Refusal at 6.0 feet. Bottom of borehole at 6.1 feet. | SS 4 | 0 | 50/1" | | | |

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# BORING NUMBER PV-160



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/27/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2339.54 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28563 **LONGITUDE** -120.85819
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand (SC), loose to medium dense, low plasticity, brown, moist. | SS 1 | 71 | 3-3-3-3 (6) | | | |
| | | | SS 2 | 88 | 2-5-10-14 (15) | | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 4.5ft bgs. at 3 ft |
| | | Silty Sand (sm), very dense, brown, moist. | SS 3 | 100 | 50 | | | |

Refusal at 4.5 feet.
Bottom of borehole at 4.5 feet.

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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-161



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/27/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2329.32 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28741 **LONGITUDE** -120.86622
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), loose to medium dense, brown, moist. | SS 1 | 92 | 4-4-3-3 (7) | | | |
| | | | SS 2 | 63 | 1-2-6-10 (8) | | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 3 ft |
| | | | SS 3 | 71 | 6-50/1" | | >> | |

Refusal at 4.5 feet.
Bottom of borehole at 4.6 feet.

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# BORING NUMBER PV-162



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/27/25 **COMPLETED** 9/27/25
**GROUND ELEVATION** 2322.51 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28175 **LONGITUDE** -120.86425
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), loose to very dense, non plastic, brown, moist. | SS 1 | 83 | 3-3-3-4 (6) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal >>▲is at 3.5ft bgs. at 1.7 ft |
| | | | SS 2 | 100 | 4-8-50/2" | | | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-163



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/18/25 **COMPLETED** 9/18/25
**GROUND ELEVATION** 2324.92 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28434 **LONGITUDE** -120.87045
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), medium dense to very dense, non plastic, brown, moist. | SS 1 | 75 | 4-4-4-5 (8) | | | |
| | | | SS 2 | 73 | 8-12-50/3" | | >> | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.7 ft |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-164



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/28/25 **COMPLETED** 9/28/25
**GROUND ELEVATION** 2278.05 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.283 **LONGITUDE** -120.87475
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), medium stiff to hard, medium plasticity, brown, moist. | SS 1 | 83 | 11-5-6-5 (11) | | | |
| | | | SS 2 | 75 | 3-3-3-3 (6) | | | |
| 5 | | | SS 3 | 79 | 5-14-17-26 (31) | | | 1st hole auger refusal is at 6.5ft bgs, 2nd hole offset 20' refusal is at 6ft bgs. at 5 ft |
| | | | SS 4 | 57 | 7-50/1" | | >> | |

Refusal at 6.5 feet.
Bottom of borehole at 6.6 feet.

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# BORING NUMBER PV-165



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/28/25 **COMPLETED** 9/28/25
**GROUND ELEVATION** 2318.49 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28168 **LONGITUDE** -120.87803
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Connor Shillcock **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), medium dense, brown, moist. | SS 1 | 84 | 3-6-6-50/1" | | >> | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.8 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-166



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/24/25
**GROUND ELEVATION** 2360.37 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29933 **LONGITUDE** -120.81193
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Sand (sm), very dense, brown, dry. | SS 1 | 77 | 2-30-50/1" | | >>▲ | 1st hole auger refusal is at 1.08ft bgs, 2nd hole offset 20' refusal is at 8in bgs. at 0 ft |

Refusal at 1.1 feet.
Bottom of borehole at 1.1 feet.

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# BORING NUMBER PV-167



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/24/25
**GROUND ELEVATION** 2358.58 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29605 **LONGITUDE** -120.81141
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), stiff, low plasticity, brown, moist. | SS 1 | 79 | 4-4-5-7 (9) | 1.5 | ▲ | |
| | | Poorly Graded Sand With Gravel (sp), very dense, brown to yellowish brown, dry. | SS 2 | 67 | 16-23-50/3" | | >>▲ | 1st hole auger refusal is at 3.25ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.5 ft |

Refusal at 3.3 feet.
Bottom of borehole at 3.3 feet.

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# BORING NUMBER PV-168



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/24/25
**GROUND ELEVATION** 2374.4 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29224 **LONGITUDE** -120.81251
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), medium stiff, low plasticity, brown, moist. | SS 1 | 65 | 2-3-1-2 (4) | 0.25 | | |
| | | | SS 2 | 85 | 2-2-2-2 (4) | 0.25 | | |
| 5 | | Silty Sand (sm), very dense, brown, moist. | SS 3 | 66 | 4-13-50/3" | | >> | 1st hole auger refusal is at 5.25ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 4 ft |

Refusal at 5.3 feet.
Bottom of borehole at 5.3 feet.

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# BORING NUMBER PV-169



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2379.66 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.28724 **LONGITUDE** -120.81155
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), stiff, low plasticity, brown, dry. | SS 1 | 67 | 3-5-6-6 (11) | 0.2 | | |
| | | | SS 2 | 7 | 5-10-50/3" | 2.5 | >> | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-170



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2364.13 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.28176 **LONGITUDE** -120.81119
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), stiff, low plasticity, brown, dry. | SS 1 | 67 | 4-5-6-20 (11) | 2 | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |
| | | | SS 2 | 0 | 50/2" | | | |
| | | Refusal at 2.0 feet. Bottom of borehole at 2.2 feet. | | | | | | |

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# BORING NUMBER PV-171



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2349.82 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.27672 **LONGITUDE** -120.81074
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff to hard, low plasticity, brown, dry. | SS 1 | 75 | 1-2-3-4 (5) | 1.2 | | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 43 | 3-6-50/2" | 0.5 | >> | |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-172



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2340.1 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.27555 **LONGITUDE** -120.81528
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (CL-ML), stiff, low plasticity, brown, dry. | SS 1 | 75 | 3-3-4-5 (7) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Silty Sand (sm), very dense, brown, dry. | SS 2 / AU | 40 | 50/5" | | >> | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-173



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/7/25 **COMPLETED** 10/7/25
**GROUND ELEVATION** 2342.07 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.27369 **LONGITUDE** -120.81134
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), very stiff, low plasticity, brown, dry. | SS 1 | 78 | 3-6-8-20/5" | 3 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.5 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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Telephone: 973-630-8000

# BORING NUMBER PV-174



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/6/25 **COMPLETED** 10/6/25
**GROUND ELEVATION** 2290.53 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.26649 **LONGITUDE** -120.81197
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silt (ml), medium stiff to hard, brown, dry. | SS 1 | 88 | 3-5-3-4 (8) | 1.6 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 43 | 4-5-50/2" | 1.8 | >> | |

Refusal at 3.0 feet.
Bottom of borehole at 3.2 feet.

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# BORING NUMBER PV-175



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/6/25 **COMPLETED** 10/6/25
**GROUND ELEVATION** 2246.42 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.26185 **LONGITUDE** -120.81579
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay (ml), very stiff, low plasticity, brown, moist. | SS 1 | 88 | 4-7-10-16 (17) | 1.8 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | Sandy Silt (sm), very dense, brown, dry. | SS 2 | 60 | 14-32-50/3" | 4.5 | >> | |

Refusal at 3.0 feet.
Bottom of borehole at 3.3 feet.

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# BORING NUMBER PV-176



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/6/25 **COMPLETED** 10/6/25
**GROUND ELEVATION** 2248.82 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Dakota
**LATITUDE** 45.25947 **LONGITUDE** -120.81593
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Silty Clay With Sand (cl-ml), very stiff to hard, low plasticity, brown, moist. | SS 1 | 90 | 3-6-7-50/2" | 1.6 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.6 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-177



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/24/25
**GROUND ELEVATION** 2403.25 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29669 **LONGITUDE** -120.80215
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay With Sand (cl-ml), medium stiff to very stiff, low plasticity, brown, moist. | SS 1 | 60 | 3-3-3-2 (6) | 1.5 | | |
| | | | SS 2 | 50 | 3-2-12-14 (14) | 1 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-178



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/24/25
**GROUND ELEVATION** 2385.32 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29052 **LONGITUDE** -120.80674
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand With Gravel (SC-SM), medium dense, low plasticity, brown, moist. | SS 1 | 80 | 3-4-4-5 (8) | | | 1st hole auger refusal is at 2.75ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | | SS 2 | 78 | 3-50/3" | | >> | |

Refusal at 2.8 feet.
Bottom of borehole at 2.8 feet.

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# BORING NUMBER PV-179



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/24/25 **COMPLETED** 9/24/25
**GROUND ELEVATION** 2405.39 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29901 **LONGITUDE** -120.79502
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL), stiff, low plasticity, brown, moist. | SS 1 | 63 | 3-4-4-6 (8) | 0.25 | | 1st hole auger refusal is at 2.75ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 0.7 ft |
| | | Poorly Graded Sand With Gravel (sp), very dense, brown, dry. | SS 2 | 80 | 20-50/3" | 4.5 | >> | |

Refusal at 2.8 feet.
Bottom of borehole at 2.8 feet.

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# BORING NUMBER PV-180



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2353.56 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29384 **LONGITUDE** -120.79324
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), stiff to hard, low plasticity, brown, moist. | SS 1 | 75 | 3-4-4-12 (8) | 1.75 | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.8 ft |
| | | | SS 2 | 101 | 50/5" | | >> | |

Refusal at 2.0 feet.
Bottom of borehole at 2.5 feet.

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# BORING NUMBER PV-181



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2346.88 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28902 **LONGITUDE** -120.7907
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), stiff, low plasticity, brown, moist. | SS 1 | 65 | 3-3-4-7 (7) | | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.4 ft |
| | | Poorly Graded Sand (sp), very dense, brown, dry. | SS 2 | 51 | 20-50/1" | | >> | Rock fragments in the spoon tip. at 2.3 ft |
| | | Refusal at 2.0 feet. Bottom of borehole at 2.6 feet. | | | | | | |

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# BORING NUMBER PV-182



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/22/25 **COMPLETED** 9/22/25
**GROUND ELEVATION** 2389.65 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29974 **LONGITUDE** -120.78674
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl-ml), stiff to very stiff, low plasticity, brown, moist. | SS 1 | 71 | 3-4-3-6 (7) | 0.25 | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.4 ft |
| | | | SS 2 | 77 | 12-23-50/1" | 1 | >> | Rock fragments in the spoon tip. at 2.9 ft |

Refusal at 2.5 feet.
Bottom of borehole at 3.1 feet.

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# BORING NUMBER PV-183



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2420.52 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29871 **LONGITUDE** -120.77996
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Lean Clay (CL), hard, medium plasticity, brown, moist. | SS 1 | 87 | 3-6-50/3" | 2.5 | >> | Rock fragments in the spoon tip. at 1.08 ft |
| | | | AU | | | | | |
| | | Refusal at 1.5 feet. Bottom of borehole at 1.5 feet. | | | | | | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 1.5 ft |

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# BORING NUMBER PV-184



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2464.5 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29905 **LONGITUDE** -120.77206
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Lean Clay (cl), medium stiff, low plasticity, brown, moist. | SS 1 | 83 | 3-3-3-50/5" | 1.5 | >> | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.5 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-185



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2400.78 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29471 **LONGITUDE** -120.77819
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), very stiff, low plasticity, brown, moist. | SS 1 | 80 | 3-5-12-26 (17) | 0.5 | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.8 ft |
| | | Silty Sand (sm), very dense, non plastic, brown, dry. | SS 2 | 93 | 28-50/3" | | >> | |

Refusal at 2.0 feet.
Bottom of borehole at 2.8 feet.

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# BORING NUMBER PV-186



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2372.13 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29112 **LONGITUDE** -120.78552
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), stiff, low plasticity, brown, moist. | SS 1 | 71 | 4-4-4-4 (8) | 0.5 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1 ft |
| | | Silty Sand (sm), very dense, non plastic, brown, moist. | SS 2 | 49 | 3-16-50/5" | | >> | |

Refusal at 3.0 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-187



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2372.83 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28927 **LONGITUDE** -120.77801
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), very stiff, low plasticity, brown, moist. | SS 1 | 75 | 3-5-8-25 (13) | 2 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 0.8 ft |
| | | Silty Sand (sm), very dense, non plastic, brown, moist. | SS 2 | 84 | 20-50/4" | | >> | Rock fragments in the spoon tip. at 2.7 ft |
| | | | AU | | | | | |

Refusal at 2.5 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-188



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2405.02 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.29189 **LONGITUDE** -120.77236
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Silty Clay (CL-ML), medium stiff to stiff, low plasticity, brown, moist. | SS 1 | 71 | 3-2-2-2 (4) | | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1 ft |
| | | | SS 2 | 76 | 2-8-50/5" | 2 | >> | Rock fragments in the spoon tip. at 3.08 ft |

Refusal at 3.0 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-189



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 9/23/25 **COMPLETED** 9/23/25
**GROUND ELEVATION** 2381.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Jeff
**LATITUDE** 45.28779 **LONGITUDE** -120.78415
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Cooper **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), very stiff, medium plasticity, brown, moist. | SS 1 | 81 | 3-7-13-50/3" | 0.5 | >> | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.2 ft<br>Rock fragments in the spoon tip. at 1.42 ft |
| | | | AU | | | | | |

Refusal at 1.5 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-190



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2486.09 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.30008 **LONGITUDE** -120.76571
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay (cl), medium stiff, medium plasticity, brown, dry. | SS 1 | 83 | 2-2-2-12 (4) | 2.2 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.5 ft |
| | | Silty Gravel With Sand (gm), very dense, gray, dry. | SS 2 | 60 | 50/5" | | >> | |
| | | Refusal at 2.5 feet.<br>Bottom of borehole at 2.5 feet. | | | | | | |

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# BORING NUMBER PV-191



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2485.02 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.29571 **LONGITUDE** -120.76577
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay (cl), medium stiff, medium plasticity, brown, dry. | SS 1 | 75 | 2-3-3-6 (6) | 2.5 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | Silty Sand (sm), very dense, brown, dry. | SS 2 | 33 | 17-50/3" | | >> | Rock fragments in the spoon tip. at 2.7 ft |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-192



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2472.5 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.293 **LONGITUDE** -120.75956
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft to very stiff, low plasticity, brown, moist. | SS 1 | 83 | 2-1-2-1 (3) | 0.75 | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1 ft |
| | | | SS 2 | 78 | 2-1-14-50/5" | 0.75 | >> | Rock fragments in the spoon tip. at 3.4 ft |
| | | Refusal at 4.0 feet.<br>Bottom of borehole at 4.0 feet. | | | | | | |

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# BORING NUMBER PV-193



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2488.94 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28837 **LONGITUDE** -120.76246
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), soft to stiff, low plasticity, brown, moist. | SS 1 | 71 | 2-1-1-2 (2) | 1.0 | | |
| | | | SS 2 | 79 | 2-2-7-28 (9) | 1.25 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 2 ft |

Refusal at 3.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-194



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2384.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.2857 **LONGITUDE** -120.78205
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Clayey Sand (sc), very dense, low plasticity, brown. | SS 1 | 61 | 2-12-30-50/5" | | >>▲ | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.4 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.9 feet.

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# BORING NUMBER PV-195



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2338.49 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28194 **LONGITUDE** -120.78175
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL), medium stiff, medium plasticity, brown, moist. | SS 1 | 71 | 2-2-2-8 (4) | 1.25 | | |
| | | Silty Sand (sm), very dense, brown to gray, dry. | SS 2 | 92 | 9-22-50/0" | | >> | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 1.5 ft |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-196



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2311.61 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.28087 **LONGITUDE** -120.78769
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), stiff, medium plasticity, brown, dry. | SS 1 | 83 | 2-4-3-4 (7) | 2 | | |
| | | Silty Sand (sm), very dense, brown, dry. | SS 2 | 44 | 13-50/3" | | >> | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1.5 ft |
| | | | AU | | | | | |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-197



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/8/25 **COMPLETED** 10/8/25
**GROUND ELEVATION** 2318.6 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Rocky
**LATITUDE** 45.27816 **LONGITUDE** -120.78741
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Alexander Lesky **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), very stiff to hard, medium plasticity, brown, moist. | SS 1 | 83 | 3-5-8-31 (13) | 2.2 | | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1 ft |
| | | | SS 2 | 0 | 50/4" | | >> | |
| | | | AU | | | | | |

Refusal at 3.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-198



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2404.82 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28088 **LONGITUDE** -120.77567
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (CL), soft, medium plasticity, brown, moist. | SS 1 | 75 | 1-2-1-2 (3) | 0.75 | | |
| | | Silty Sand (sm), very dense, brown, dry. | SS 2 | 82 | 4-20-50/5" | | >> | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1.5 ft |

Refusal at 3.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-199



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2416.75 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27735 **LONGITUDE** -120.77113
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), stiff, medium plasticity, brown, moist. | SS 1 | 75 | 2-3-8-26 (11) | 1 | | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.5 ft |
| | | | SS 2 | 0 | 50/3" | | >> | |
| | | Refusal at 1.5 feet.<br>Bottom of borehole at 2.3 feet. | | | | | | |

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# BORING NUMBER PV-200



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2434.77 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28574 **LONGITUDE** -120.77095
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), medium stiff, brown, moist. | SS 1 | 63 | 1-2-2-5 (4) | 1.25 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.5 ft |
| | | Rock Fragments. | SS 2 | 100 | 50/5" | | >> | |

Refusal at 2.5 feet.
Bottom of borehole at 2.5 feet.

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# BORING NUMBER PV-201



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2462.67 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28544 **LONGITUDE** -120.76545
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), medium stiff to hard, medium plasticity, brown, moist. | SS 1 | 79 | 2-2-2-6 (4) | 0.75 | ▲ | |
| | | | SS 2 | 71 | 10-24-50/5" | 2.25 | >> ▲ | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 3.5ft bgs. at 2 ft |
| | | | AU | | | | | |

Refusal at 4.0 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-202



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2466.16 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28564 **LONGITUDE** -120.75536
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Sandy Lean Clay (cl), soft to hard, medium plasticity, brown, moist. | SS 1 | 79 | 2-1-2-1 (3) | 1.25 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | | SS 2 | 75 | 26-50 | 0.5 | | |

Refusal at 2.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-203



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2463.74 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28525 **LONGITUDE** -120.74877
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Clayey Sand With Gravel (sc), medium dense, low plasticity, brown, moist. | SS 1 | 83 | 2-2-8-50/0" | 1.25 | >>▲ | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.3 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

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# BORING NUMBER PV-204



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2458.1 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.28334 **LONGITUDE** -120.75945
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (SC), loose to very dense, low plasticity, brown, moist. | SS 1 | 92 | 1-2-2-2 (4) | 1 | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | | SS 2 | 86 | 14-28-50/2" | | >> | |

Refusal at 2.0 feet.
Bottom of borehole at 3.2 feet.

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# BORING NUMBER PV-205



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/4/25 **COMPLETED** 10/4/25
**GROUND ELEVATION** 2446.48 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27909 **LONGITUDE** -120.76567
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft, medium plasticity, brown, moist. | SS 1 | 88 | 2-1-2-3 (3) | 1 | | 1st hole auger refusal is at 1ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Silty Sand (sm), medium dense, brown, dry. | SS 2 | 82 | 15-50/5" | | >> | |

Refusal at 1.0 feet.
Bottom of borehole at 2.9 feet.

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# BORING NUMBER PV-206



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2469.26 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27814 **LONGITUDE** -120.74953
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft to medium stiff, medium plasticity, brown, moist. | SS 1 | 83 | 2-2-1-3 (3) | 1.25 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0.6 ft |
| | | | SS 2 | 67 | 4-50/0" | 1.25 | >> | |

Refusal at 2.5 feet.
Bottom of borehole at 2.5 feet.

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# BORING NUMBER PV-207



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2462.67 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27461 **LONGITUDE** -120.75271
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), soft to medium stiff, medium plasticity, brown, moist. | SS 1 | 83 | 2-1-2-1 (3) | 1.25 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | | SS 2 | 91 | 6-50/5" | | >> | |

Refusal at 2.5 feet.
Bottom of borehole at 2.9 feet.

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# BORING NUMBER PV-208



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2475.91 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27447 **LONGITUDE** -120.74903
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft to hard, medium plasticity, brown, moist. | SS 1 | 100 | 2-1-1-2 (2) | 0.75 | | |
| | | | SS 2 | 91 | 4-4-14-50/5" | 1.5 | >> | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.7 ft |

Refusal at 3.0 feet.
Bottom of borehole at 3.9 feet.

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# BORING NUMBER PV-209



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2429.15 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26998 **LONGITUDE** -120.74371
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft to hard, medium plasticity, brown, moist. | SS 1 | 3 | 1-1-2-1 (3) | 0.75 | | |
| | | | SS 2 | 3 | 4-36-50/5" | 0.5 | >> | 1st hole auger refusal is at 3ft bgs, 2nd hole offset 20' refusal is at 3ft bgs. at 1.4 ft |

Refusal at 3.0 feet.
Bottom of borehole at 3.4 feet.

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# BORING NUMBER PV-210



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2433.97 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27038 **LONGITUDE** -120.73262
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clayey Sand (SC-SM), very loose to medium dense, low plasticity, brown, moist. | SS 1 | 79 | 1-2-1-1 (3) | | | 1st hole auger refusal is at 4.5ft bgs, 2nd hole offset 20' refusal is at 4.5ft bgs. at 1.4 ft |
| | | | SS 2 | 96 | 1-2-8-37 (10) | | | |
| | | Poorly Graded Sand (sp), very dense, brown, dry. | SS 3 | 40 | 50/5" | | >> | |

Refusal at 4.5 feet.
Bottom of borehole at 4.5 feet.

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# BORING NUMBER PV-211



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2415.13 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26658 **LONGITUDE** -120.73687
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay (cl), soft, medium plasticity, brown, dry. | SS 1 | 92 | 1-2-1-6 (3) | 1.5 | | |
| | | Clayey Sand With Gravel (sc), very dense, brown to gray, dry. | SS 2 | 64 | 15-50/5" | | >> | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1.5 ft |

Refusal at 2.5 feet.
Bottom of borehole at 2.9 feet.

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# BORING NUMBER PV-212



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2364.88 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26099 **LONGITUDE** -120.74508
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Gravelly Lean Clay (CL), soft, medium plasticity, brown, moist. | SS 1 | 70 | 2-1-2-11 (3) | 1 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Poorly Graded Gravel (gp), very dense, brown to gray. | SS 2 | 80 | 50 | | | |
| | | Refusal at 2.5 feet.<br>Bottom of borehole at 2.5 feet. | | | | | | |

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# BORING NUMBER PV-213



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2369.09 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.25836 **LONGITUDE** -120.74221
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Gravelly Lean Clay (cl), soft to medium stiff, medium plasticity, brown, moist. | SS 1 | 75 | 1-1-1-1 (2) | 1 | ▲ | 1st hole auger refusal is at 2.33ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | | SS 2 | 70 | 6-50 | | | |

Refusal at 2.3 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-214



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2410.99 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.25942 **LONGITUDE** -120.73386
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (SC), very loose, medium plasticity, brown, moist. | SS 1 | 65 | 1-2-1-1 (3) | | | |
| | | | SS 2 | 65 | 1-6-24-50 (30) | | | 1st hole auger refusal is at 4ft bgs, 2nd hole offset 20' refusal is at 4.5ft bgs. at 3 ft |
| | | | SS 3 | 0 | 50 | | | |

Refusal at 4.0 feet.
Bottom of borehole at 4.5 feet.

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# BORING NUMBER PV-215



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2403.43 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26152 **LONGITUDE** -120.73078
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Clayey Sand (sc), very dense, medium plasticity, brown, moist. | SS 1 | 70 | 2-10-49-50 (59) | | | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.6 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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# BORING NUMBER PV-216



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2437.35 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.2705 **LONGITUDE** -120.72563
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (sc), medium dense, medium plasticity, brown to gray, dry. | SS 1 | 91 | 2-2-12-50/5" | | >>▲ | 1st hole auger refusal is at 1.8ft bgs, 2nd hole offset 20' refusal is at 1.8ft bgs. at 0.4 ft |

Refusal at 1.8 feet.
Bottom of borehole at 1.9 feet.

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# BORING NUMBER PV-217



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2456.4 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27012 **LONGITUDE** -120.71778
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (SC), very loose to loose, medium plasticity, brown, dry. | SS 1 | 54 | 2-1-1-2 (2) | | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | | SS 2 | | 6-50/5" | | >> | |

Refusal at 2.5 feet.
Bottom of borehole at 2.9 feet.

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# BORING NUMBER PV-218



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/3/25 **COMPLETED** 10/3/25
**GROUND ELEVATION** 2461.85 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27056 **LONGITUDE** -120.71126
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Clayey Sand With Gravel (sc), dense, medium plasticity, brown to gray, dry. | SS 1 | 52 | 2-12-17-50/5" | | >>▲ | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.8ft bgs. at 0.4 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.9 feet.

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# BORING NUMBER PV-219



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2459.63 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26701 **LONGITUDE** -120.71113
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Evan Walters **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay (cl), very stiff, medium plasticity, dark brown, moist. | SS 1 | 80 | 1-2-15-19 (17) | 1.5 | | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1.4 ft |
| | | Clayey Gravel (gc), very dense, gray to brown, moist. | SS 2 | 60 | 8-28-50 (78) | | | |

Refusal at 2.5 feet.
Bottom of borehole at 3.5 feet.

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# BORING NUMBER PV-220



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2419.09 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26119 **LONGITUDE** -120.72418
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft to hard, medium plasticity, brown, moist. | SS 1 | 85 | 1-2-1-1 (3) | 1 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | | SS 2 | 50 | 7-50 | 1.5 | | |

Refusal at 2.0 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-221



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2433.65 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26223 **LONGITUDE** -120.71548
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft, medium plasticity, brown, moist. | SS 1 | 80 | 2-1-1-6 (2) | 1 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Clayey Gravel (gc), very dense, gray to brown, moist. | SS 2 | 50 | 24-50 | | | |

Refusal at 2.5 feet.
Bottom of borehole at 3.0 feet.

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# BORING NUMBER PV-222



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2443.3 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.25856 **LONGITUDE** -120.7253
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), medium stiff to hard, medium plasticity, brown, moist. | SS 1 | 70 | 1-1-4-5 (5) | 1.5 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | | SS 2 | 80 | 50 | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.5 feet.

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# BORING NUMBER PV-223



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/2/25 **COMPLETED** 10/2/25
**GROUND ELEVATION** 2436.49 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.25869 **LONGITUDE** -120.71863
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), soft, medium plasticity, brown, moist. | SS 1 | 75 | 1-1-1-2 (2) | 1.5 ▲ | | 1st hole auger refusal is at 2.83ft bgs, 2nd hole offset 20' refusal is at 2.83ft bgs. at 1 ft |
| | | Clayey Gravel (gc), very dense, gray to brown, moist. | SS 2 | 60 | 11-50 | | | |

Refusal at 2.8 feet.
Bottom of borehole at 3.0 feet.

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Tetra Tech, Inc
6 Century Dr, Suite 300
Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-224



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2480.98 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.25932 **LONGITUDE** -120.71039
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Lean Clay (cl), soft, medium plasticity, brown, moist. | SS 1 | 80 | 2-1-2-15 (3) | 1 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 1 ft |
| | | Clayey Gravel (gc), very dense, gray to brown, moist. | SS 2 | 50 | 25-50 | | | |

Refusal at 2.5 feet.
Bottom of borehole at 3.0 feet.

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Telephone: 973-630-8000

# BORING NUMBER PV-225



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2553.18 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.27037 **LONGITUDE** -120.69869
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), stiff, low plasticity, brown, moist. | SS 1 | 60 | 2-4-3-50 (7) | 2.5 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2.67ft bgs. at 1 ft |
| | | | AU | | | | | |

Refusal at 2.0 feet.
Bottom of borehole at 2.7 feet.

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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-226



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2597.23 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26967 **LONGITUDE** -120.69181
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | |
| | | Lean Clay With Sand (CL), stiff, low plasticity, dark brown, moist. | SS 1 | 80 | 3-5-4-25 (9) | 2.5 | ▲ | 1st hole auger refusal is at 2ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 0.6 ft |

Refusal at 2.0 feet.
Bottom of borehole at 2.0 feet.

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6 Century Dr, Suite 300
Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-227



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2586.48 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26715 **LONGITUDE** -120.69416
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay (cl), hard, low plasticity, dark brown, moist. | SS 1 | 60 | 3-50 | 0 | | 1st hole auger refusal is at 0.75ft bgs, 2nd hole offset 20' refusal is at 2.5ft bgs. at 0 ft |

Refusal at 0.8 feet.
Bottom of borehole at 1.0 feet.

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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-228



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2544.89 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26274 **LONGITUDE** -120.69921
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Silty Clay (cl), hard, low plasticity, brown, moist. | SS 1 | 73 | 2-1-50 (51) | 1.5 | ▲ | 1st hole auger refusal is at 1.5ft bgs, 2nd hole offset 20' refusal is at 1.5ft bgs. at 0.2 ft |

Refusal at 1.5 feet.
Bottom of borehole at 1.5 feet.

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Parsippany, NJ 07054
Telephone: 973-630-8000

# BORING NUMBER PV-229



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2593.15 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.26268 **LONGITUDE** -120.68999
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES**
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (cl), soft to hard, low plasticity, brown, moist. | SS 1 | 85 | 2-2-1-3 (3) | 2 | | 1st hole auger refusal is at 3.5ft bgs, 2nd hole offset 20' refusal is at 4ft bgs. at 1 ft |
| | | | SS 1 | 60 | 9-17-50 (67) | 2 | | |
| | | | AU | | | | | |

Refusal at 3.5 feet.
Bottom of borehole at 4.0 feet.

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# BORING NUMBER PV-230



**CLIENT** Brookfield Renewable U.S.
**PROJECT NAME** Speedway Solar Geotechnical Exploration
**PROJECT NUMBER** 194-1284-0097
**PROJECT LOCATION** Grass Valley, Sherman County, Oregon
**DATE STARTED** 10/1/25 **COMPLETED** 10/1/25
**GROUND ELEVATION** 2585.38 ft **HOLE SIZE** 3.25
**CONTRACTOR/DRILLER** GTFO/ Matt
**LATITUDE** 45.25928 **LONGITUDE** -120.68991
**DRILLING METHOD** 3-1/4" Hollow stem auger
**RIG AND HAMMER TYPE** Fraste PL-G, Automatic 80%
**ROCK CORING METHOD**
**GWL AT TIME OF DRILLING** ---
**LOGGED BY** Julia Ayer **CHECKED BY** Ahmed Hassan
**GWL AT END OF DRILLING** ---
**NOTES** Bulk samples collected for laboratory testing
**GWL AFTER DRILLING** ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY % (RQD) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | ▲ SPT N VALUE ▲ 20 40 60 80 / PL MC LL 20 40 60 80 / ☐ FINES CONTENT (%) ☐ 20 40 60 80 | REMARKS AND OTHER TESTS |
|---|---|---|---|---|---|---|---|---|
| 0 | | Lean Clay With Sand (CL), soft to hard, low plasticity, brown, moist. | SS 1 | 85 | 2-1-2-2 (3) | 1.5 | ▲ | 1st hole auger refusal is at 2.5ft bgs, 2nd hole offset 20' refusal is at 2ft bgs. at 1 ft |
| | | | SS 2 | 60 | 50 | | | |

Refusal at 2.5 feet.
Bottom of borehole at 2.5 feet.

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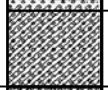
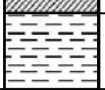
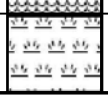
TETRA TECH

# BORING LOG SYMBOLS

## SOIL CLASSIFICATION CHART

| MAJOR DIVISIONS | | | SYMBOLS GRAPH | SYMBOLS LETTER | TYPICAL DESCRIPTIONS |
|---|---|---|---|---|---|
| COARSE GRAINED SOILS (MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE) | GRAVEL AND GRAVELLY SOILS (MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE) | CLEAN GRAVELS (LITTLE OR NO FINES) | | GW | Well-graded gravels, gravel sand mixtures, little or no fines. |
| | | | | GP | Poorley graded gravels, gravel-sand mixtures, little or no fines. |
| | | GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES) | | GM | Silty gravels, gravel-sand-silt mixtures. |
| | | | | GC | Clayey gravels, gravel-sand-clay mixtures. |
| | SAND AND SANDY SOILS (MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE) | CLEAN SANDS (LITTLE OR NO FINES) | | SW | Well-graded sands, gravely sands, little or no fines. |
| | | | | SP | Poorley graded sands, gravely sands, little or no fines. |
| | | SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES) | | SM | Silty sands, sand-silt mixtures. |
| | | |  | SC | Clayey sands, sand-clay mixtures. |
| FINE GRAINED SOILS (MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE) | SILTS AND CLAYS | LIQUID LIMIT LESS THAN 50 | | ML | Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity. |
| | | | | CL | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays. |
| | | |  | OL | Organic silts and organic silty clays of low plasticity. |
| | SILTS AND CLAYS | LIQUID LIMIT GREATER THAN 50 | | MH | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts. |
| | | | | CH | Inorganic clays of high plasticity, fat clays. |
| | | | | OH | Organic clays of medium to high plasticity, organic silts. |
| HIGHLY ORGANIC SOILS | | |  | PT | Peat and other highly organic soils. |

## ADDITIONAL SYMBOLS

| SYMBOLS GRAPH | SYMBOLS LETTER | TYPICAL DESCRIPTIONS |
|---|---|---|
| | GC-SM | Silty, clayey gravel. |
| | GP-GM | Poorly graded gravel with silt. |
| | GP-GC | Poorly graded gravel with clay. |
| | GW-GM | Well graded gravel with silt. |
| | SC-SM | Silty, clayey sand. |
| | SP-SM | Poorly graded sand with silt. |
| | SW-SM | Well graded sand with silt. |
| | SW-SC | Well graded sand with clay. |
| | SHALE | Shale. |

NOTES: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS.
LETTER SYMBOLS ARE CAPITALIZED WHERE CONFIRMED BY LAB TEST RESULTS.

ABBREVIATIONS:

RQD: Rock Quality Designation (not applicable for this project)
MC: Moisture Content
LL: Liquid Limit
PL: Plastic Limit
NP: Non-plastic
-200%: Percentage of soil passing through No. 200 sieve
PP: Pocket penetrometer
phi': Drained friction angle
c': Drained cohesion
phi: Undrained friction angle
c: Undrained cohesion
Cc: Compression index
Cr: Recompression index
WR: Weight of rod, denotes zero blow count for 6-inch penentration
WH: Weight of hammer, denotes zero blow count for 6-inch penentration

NOTES:

1. USCS soil classification based on visual classifications and laboratory tests and the results of the laboratory tests are incorporated into the logs.
2. Change of strata depths within the spoons are based on the depth from the top of the spoon and are approximate.
3. The SPT sampling was performed using the automatic hammer of 140 lb falling 30 inches in accordance with ASTM D1586. The reported SPT blow counts are field measured and the relative densities are based on SPT corrected for the hammer efficiency (Manual or Safety Hammer Efficiency is 60 percent and Automatic Hammer Efficiency is 80 percent).
4. The outer diameter of the split-spoon is 2-inches.

**Photo 1A: Boring SB-01 – Rock Core Box 1 of 3.**

**Photo 1B: Boring SB-01 – Rock Core Box 2 of 3.**

**Photo 1C: Boring SB-01 – Rock Core Box 3 of 3.**

**Photo 2A: Boring SB-02 – Rock Core Box 1 of 3.**

**Photo 2B: Boring SB-02 – Rock Core Box 2 of 3.**

**Photo 2C: Boring SB-02 – Rock Core Box 3 of 3.**

**Photo 3A: Boring WTG-01 – Rock Core Box 1 of 3.**

**Photo 3B: Boring WTG-01 – Rock Core Box 2 of 3.**

**Photo 3C: Boring WTG-01 – Rock Core Box 3 of 3.**

**Photo 4A: Boring WTG-02 – Rock Core Box 1 of 3.**

**Photo 4B: Boring WTG-02 – Rock Core Box 2 of 3.**

**Photo 4C: Boring WTG-02 – Rock Core Box 3 of 3.**

**Photo 5A: Boring WTG-03 – Rock Core Box 1 of 3.**

**Photo 5B: Boring WTG-03 – Rock Core Box 2 of 3.**

**Photo 5C: Boring WTG-03 – Rock Core Box 3 of 3.**

**Photo 6A: Boring WTG-04 – Rock Core Box 1 of 3.**

**Photo 6B: Boring WTG-04 – Rock Core Box 2 of 3.**

**Photo 6C: Boring WTG-04 – Rock Core Box 3 of 3.**

**Photo 7A: Boring WTG-05 – Rock Core Box 1 of 4.**

**Photo 7B: Boring WTG-05 – Rock Core Box 2 of 4.**

**Photo 7C: Boring WTG-05 – Rock Core Box 3 of 4.**

**Photo 7D: Boring WTG-05 – Rock Core Box 4 of 4**

**Photo 8A: Boring WTG-06 – Rock Core Box 1 of 3.**

**Photo 8B: Boring WTG-06 – Rock Core Box 2 of 3.**

**Photo 8C: Boring WTG-06 – Rock Core Box 3 of 3.**

**Photo 9A: Boring WTG-07 – Rock Core Box 1 of 4.**

**Photo 9B: Boring WTG-07 – Rock Core Box 2 of 4.**

**Photo 9C: Boring WTG-07 – Rock Core Box 3 of 4.**

**Photo 9D: Boring WTG-07 – Rock Core Box 4 of 4.**

**Photo 1: Boring PV-005 – Rock Core Box.**

**Photo 2: Boring PV-005 – Drilling Activities.**

**Photo 3: Boring WTG-01 – Mobilizing Drill Rig.**

**Photo 4: Boring PV-119 – Drilling Activities.**

**Photo 5: Boring PV-182 – Drilling Activities.**

**Photo 6: Boring PV-184 – Mobilizing Drill Rig.**

**Photo 7: Boring PV-185 – Drilling Activities.**

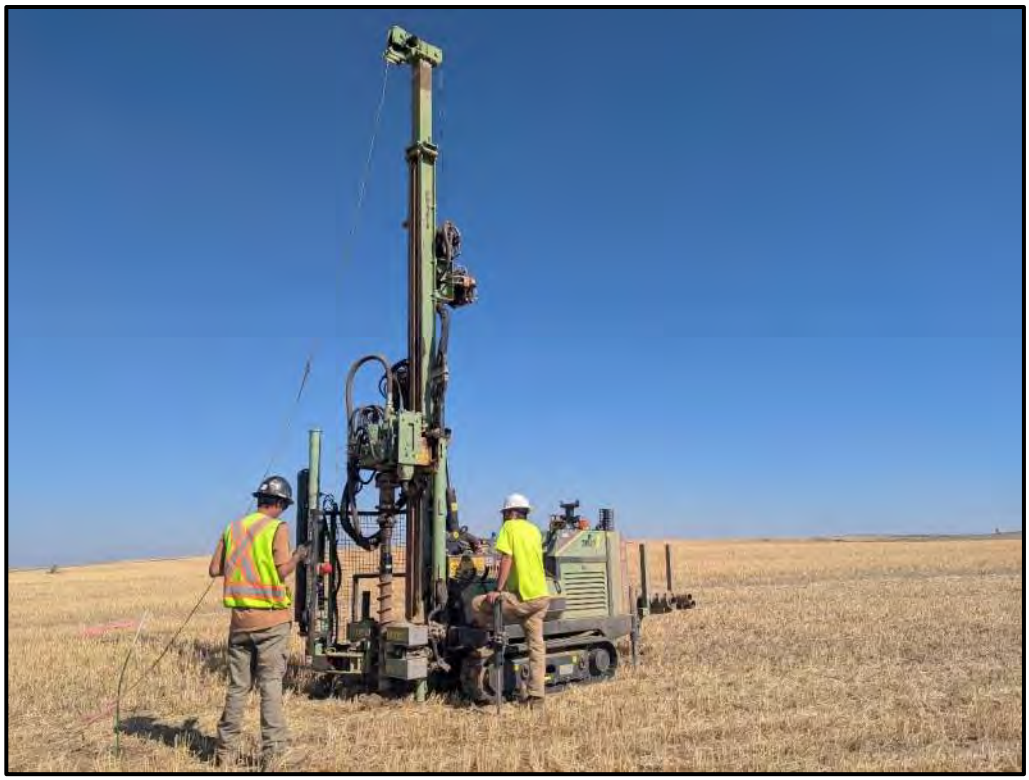


**Photo 8: Boring PV-186 – Drilling Activities.**

**Photo 9: Boring PV-187 – Drilling Activities.**

**Photo 10: Boring PV-151 – Percolation Testing.**

**Photo 11: Boring PV-151 – Percolation Testing.**

**Photo 12: Driving Electrodes (rods) into ground for ERT Testing.**

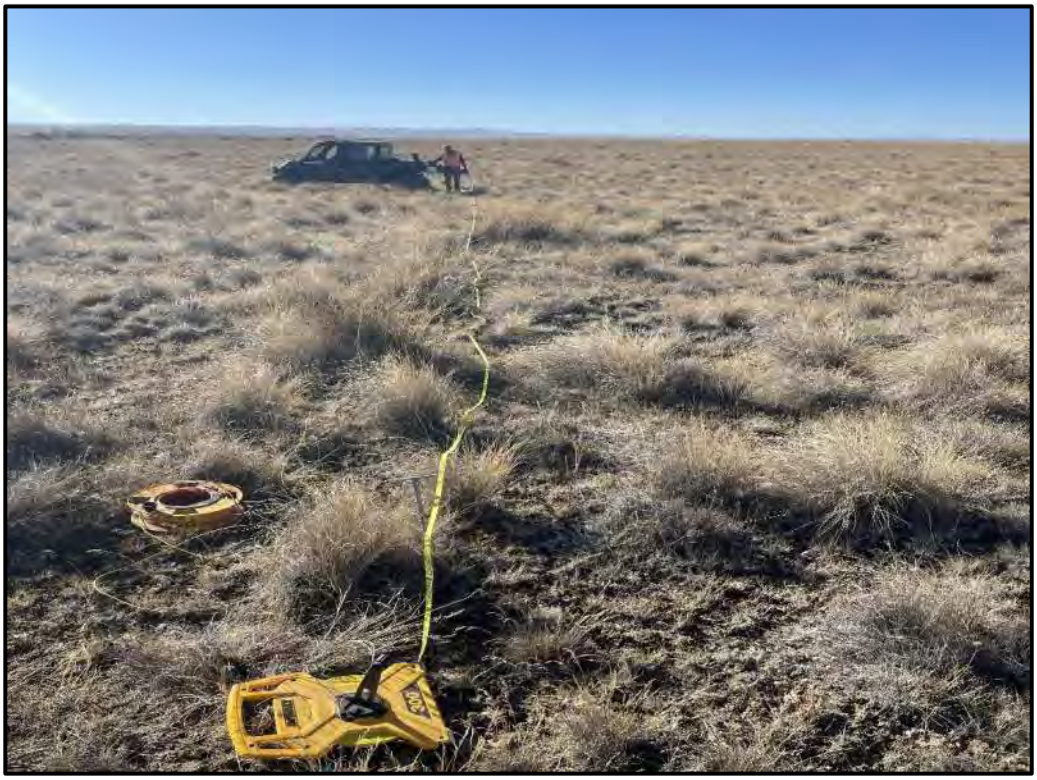


**Photo 13: Spreading Cable and connecting with Electrodes (rods).**

**Photo 14: ERT Testing.**

**Photo 15: ERT Testing at PV-230.**

**Photo 16: Boring PV-230 – Drilling Activities.**

**Photo 17: Pile Positioning.**

**Photo 18: Pile Driving with Pile Rig.**

**Photo 19: Mobilizing Pile Rig.**

**Photo 20: Installated Pile in the ground.**

# Appendix C: Laboratory Testing Reports

**ANS CONSULTANTS, INC.**
4405 South Clinton Avenue
South Plainfield, NJ 07080
**Tel: (800) 585-ATUL**
**(908) 754-8383**
**Fax: (908) 754-8633**
**NJ EDA Approved Testing Laboratory • MBE/DBE Certified • NJ DEP Certified**
**www.ANSConsultants.net**

**Soil, Concrete, Masonry, Rebar, Asphalt, Structural Steel, Precast, Piles, Caissons, Fire-Proofing, Roofing, Soil Boring, Concrete/Rock Coring, UST Removal, Environmental Testing & Reports**

January 16, 2026

ANS Geo, Inc.
4405 South Clinton Ave, Suite A
South Plainfield, NJ 07080

Attn: Dr. Vatsal A. Shah, Ph.D, P.E, D.GE, F.NSPE

CC: Michael Lionikis, EIT
Alexander Lesky

Re: Laboratory Test Results
Tetra Tech – Speedway
Sherman County, OR

Dear Dr. Shah,

Please find attached the laboratory test results. The following testing was conducted on the samples:

| | | |
|---|---|---|
| 1. | ASTM D2216 | Water (Moisture) Content (x98 Tests) |
| 2. | ASTM D6913 | Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis (x98 Tests) |
| 3. | ASTM D7928 | Particle-Size Distribution (Gradation) - Sieve & Hydrometer Analysis (x30 Tests) |
| 4. | ASTM D4318 | Liquid Limit, Plastic Limit, and Plasticity Index of Soils (x98 Tests) |
| 5. | ASTM D698 | Compaction Characteristics of Soil Using Standard Effort (x80 Tests) |
| 6. | ASTM D5334 | Thermal Conductivity of Soil and Rock (x80 Tests) |
| 7. | ASTM D1883 | California Bearing Ratio (CBR) of Laboratory-Compacted Soils (x30 Tests) |
| 8. | ASTM G187 | Soil Resistivity Using the Two-Electrode Soil Box Method (x80 Tests) |
| 9. | ASTM G51 | pH of soil in corrosion testing (x80 Tests) |
| 10. | ASTM C1580 | Water-Soluble Sulfate in Soil (x80 Tests) |
| 11. | AASHTO T291 | Water-Soluble Chloride Ion Content in Soil (x80 Tests) |
| 12. | ASTM D4658 | Sulfide Ion in Water (x80 Tests) |
| 13. | ASTM G200 | Oxidation-Reduction Potential (ORP) of Soil (x80 Tests) |
| 14. | ASTM D7012 | Compressive Strength of Intact Rock Core Specimens (x13 Tests) |

Should you have any questions, please do not hesitate to contact the undersigned at 908-754-8383.

Sincerely,
ANS Consultants, Inc.

Atulkumar N. Shah, PE, PP, F.ASCE
President

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# MOISTURE CONTENT

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: TetraTech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-570
Date: 10/21/2025

| Sample ID | PV-01,TRT | PV-03, TRT | PV-08, TRT | PV-12, TRT | PV-15, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1351.4 | 1433.7 | 1383.2 | 1444.8 | 1218.9 |
| Dry soil + Tare (g) | 1233.6 | 1349.5 | 1362.5 | 1413.7 | 1066.1 |
| Wt. of Tare (g) | 181.2 | 186.2 | 192.7 | 185.4 | 169.9 |
| Moisture Content | **11.2%** | **7.2%** | **1.8%** | **2.5%** | **17.1%** |

| Sample ID | PV-16, TRT | PV-21, TRT | PV-24, TRT | PV-26, TRT | PV-29, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1282.6 | 1236.0 | 1483.5 | 1230.4 | 1279.9 |
| Dry soil + Tare (g) | 1174.2 | 1085.8 | 1349.2 | 1076.9 | 1167.2 |
| Wt. of Tare (g) | 174.9 | 169.2 | 170.3 | 165.5 | 171.8 |
| Moisture Content | **10.8%** | **16.4%** | **11.4%** | **16.8%** | **11.3%** |

| Sample ID | PV-34, TRT | PV-36, TRT | PV-40, TRT | PV-47, TRT | PV-49, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 0.5'-2' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1156.9 | 1399.1 | 1390.2 | 1332.2 | 1417.3 |
| Dry soil + Tare (g) | 1086.3 | 1323.6 | 1216.4 | 1248.3 | 1315.6 |
| Wt. of Tare (g) | 172.9 | 170.6 | 167.1 | 170.4 | 167.8 |
| Moisture Content | **7.7%** | **6.5%** | **16.6%** | **7.8%** | **8.9%** |

Tested By: DS
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: TetraTech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-570
Date: 10/21/2025

| Sample ID | PV-52, TRT | WTG-01, TRT | WTG-02, TRT | WTG-03, TRT |
|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1049.7 | 1365.8 | 1427.7 | 1320.0 |
| Dry soil + Tare (g) | 845.3 | 1186.0 | 1266.3 | 1246.9 |
| Wt. of Tare (g) | 170.4 | 169.0 | 197.7 | 187.9 |
| Moisture Content | **30.3%** | **17.7%** | **15.1%** | **6.9%** |

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-569
Date: 10/14/2025

| Sample ID | PV-01, CORR | PV-03, CORR | PV-08, CORR | PV-12, CORR | PV-15, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 236.0 | 303.3 | 383.6 | 305.5 | 249.4 |
| Dry soil + Tare (g) | 209.4 | 277.1 | 360.6 | 291.7 | 216.5 |
| Wt. of Tare (g) | 11.6 | 12.3 | 12.5 | 12.2 | 13.2 |
| Moisture Content | **13.4%** | **9.9%** | **6.6%** | **5.0%** | **16.2%** |

| Sample ID | PV-16, CORR | PV-21, CORR | PV-24, CORR | PV-26, CORR | PV-29, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 242.7 | 267.9 | 212.8 | 229.8 | 239.4 |
| Dry soil + Tare (g) | 220.6 | 241.4 | 197.7 | 192.6 | 208.6 |
| Wt. of Tare (g) | 13.0 | 13.1 | 12.3 | 12.7 | 12.5 |
| Moisture Content | **10.6%** | **11.6%** | **8.1%** | **20.7%** | **15.7%** |

| Sample ID | PV-34, CORR | PV-36, CORR | PV-40, CORR | PV-47, CORR | PV-49, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 0.5'-2' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 254.9 | 251.8 | 254.4 | 300.4 | 328.0 |
| Dry soil + Tare (g) | 231.3 | 232.5 | 217.7 | 283.4 | 301.5 |
| Wt. of Tare (g) | 13.0 | 15.0 | 12.5 | 13.0 | 12.5 |
| Moisture Content | **10.8%** | **8.9%** | **17.9%** | **6.3%** | **9.2%** |

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
LAB IRN: 25-N-569
Project Name: Speedway, Sherman County, OR
Date: 10/14/2025

| Sample ID | PV-52, CORR | WTG-01, CORR | WTG-02, CORR | WTG-03, CORR |
|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 214.2 | 361.9 | 408.1 | 422.6 |
| Dry soil + Tare (g) | 153.5 | 323.6 | 367.8 | 402.6 |
| Wt. of Tare (g) | 12.6 | 117.1 | 118.8 | 118.8 |
| Moisture Content | **43.1%** | **18.6%** | **16.2%** | **7.0%** |

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-T-215
Date: 11/10/2025

| Sample ID | PV-058, TRT | PV-064, TRT | PV-068, TRT | PV-071, TRT | PV-074, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 2017.8 | 1423.6 | 1401.3 | 1386.6 | 1666.4 |
| Dry soil + Tare (g) | 1870.3 | 1317.4 | 1292.0 | 1284.7 | 1551.6 |
| Wt. of Tare (g) | 187.3 | 304.5 | 183.6 | 180.3 | 182.2 |
| Moisture Content | **8.8%** | **10.5%** | **9.9%** | **9.2%** | **8.4%** |

| Sample ID | PV-079, TRT | PV-081, TRT | PV-084, TRT | PV-100, TRT | SB-01, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1319.3 | 1214.2 | 1139.1 | 1169.9 | 2386.8 |
| Dry soil + Tare (g) | 1167.4 | 1073.4 | 929.8 | 1003.4 | 2067.7 |
| Wt. of Tare (g) | 180.8 | 189.9 | 187.5 | 187.9 | 295.6 |
| Moisture Content | **15.4%** | **15.9%** | **28.2%** | **20.4%** | **18.0%** |

| Sample ID | SB-02, TRT | PV-058, CORR | PV-064, CORR | PV-068, CORR | PV-071, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 2688.8 | 209.4 | 204.9 | 214.1 | 212.6 |
| Dry soil + Tare (g) | 2433.5 | 194.3 | 186.9 | 200.0 | 180.1 |
| Wt. of Tare (g) | 300.9 | 14.6 | 14.6 | 14.8 | 15.2 |
| Moisture Content | **12.0%** | **8.4%** | **10.5%** | **7.6%** | **19.7%** |

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

| Sample ID | PV-074, CORR | SB-01, CORR | SB-02, CORR |
|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 237.3 | 225.4 | 220.7 |
| Dry soil + Tare (g) | 222.9 | 188.4 | 201.6 |
| Wt. of Tare (g) | 15.3 | 14.6 | 14.7 |
| Moisture Content | **6.9%** | **21.3%** | **10.2%** |

Tested By: ES

Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-597
Date: 10/23/2025

| Sample ID | PV-043, TRT | PV-045, TRT | PV-089, TRT | PV-090, TRT | PV-095, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 3044.0 | 1308.5 | 1411.3 | 1487.5 | 2642.0 |
| Dry soil + Tare (g) | 2789.3 | 1235.6 | 1285.1 | 1359.7 | 2362.0 |
| Wt. of Tare (g) | 312.9 | 322.1 | 313.1 | 318.0 | 309.0 |
| Moisture Content | **10.3%** | **8.0%** | **13.0%** | **12.3%** | **13.6%** |

| Sample ID | PV-097, TRT | PV-105, TRT | PV-109, TRT | PV-111, TRT | PV-114, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 1'-2' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 2340.1 | 1534.0 | 1202.8 | 1380.0 | 1572.7 |
| Dry soil + Tare (g) | 1976.0 | 1438.5 | 1081.5 | 1291.5 | 1475.6 |
| Wt. of Tare (g) | 194.3 | 320.5 | 324.6 | 322.6 | 306.3 |
| Moisture Content | **20.4%** | **8.5%** | **16.0%** | **9.1%** | **8.3%** |

| Sample ID | PV-119, TRT | PV-121, TRT | PV-123, TRT | PV-126, TRT | PV-127, TRT |
|---|---|---|---|---|---|
| Depth | 1'-2' | 2'-5' | 2'-5' | 1'-2' | 2'-5' |
| Wet soil + Tare (g) | 1323.4 | 1773.4 | 1115.7 | 953.8 | 1210.5 |
| Dry soil + Tare (g) | 1263.3 | 1678.5 | 1059.6 | 901.9 | 1093.0 |
| Wt. of Tare (g) | 316.6 | 311.1 | 316.9 | 176.3 | 318.1 |
| Moisture Content | **6.4%** | **6.9%** | **7.6%** | **7.2%** | **15.2%** |

Tested By: ST
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-597
Date: 10/23/2025

| Sample ID | PV-132, TRT | PV-137, TRT | PV-142, TRT | PV-144, TRT | PV-145, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 1'-2' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1505.5 | 1521.7 | 1308.3 | 1256.9 | 1153.3 |
| Dry soil + Tare (g) | 1444.9 | 1438.4 | 1245.6 | 1127.7 | 1063.0 |
| Wt. of Tare (g) | 314.5 | 306.9 | 310.7 | 311.6 | 317.2 |
| Moisture Content | **5.4%** | **7.4%** | **6.7%** | **15.8%** | **12.1%** |

Tested By: ST
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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-594
Date: 10/25/2025

| Sample ID | PV-137, CORR | PV-142, CORR | PV-144, CORR | PV-145, CORR | PV-151, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 1'-2' | 2'-5' | 2'-5' | 1'-2' |
| Wet soil + Tare (g) | 217.5 | 258.6 | 240.4 | 299.1 | 210.9 |
| Dry soil + Tare (g) | 200.5 | 243.4 | 209.1 | 264.8 | 195.2 |
| Wt. of Tare (g) | 12.9 | 13.0 | 12.1 | 12.6 | 13.3 |
| Moisture Content | **9.1%** | **6.6%** | **15.9%** | **13.6%** | **8.7%** |

| Sample ID | PV-154, CORR | PV-158, CORR | PV-160, CORR | PV-164, CORR | PV-169, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 244.0 | 232.5 | 223.9 | 210.9 | 203.4 |
| Dry soil + Tare (g) | 227.3 | 216.8 | 199.2 | 191.9 | 190.7 |
| Wt. of Tare (g) | 12.5 | 13.8 | 12.5 | 12.9 | 12.1 |
| Moisture Content | **7.7%** | **7.7%** | **13.3%** | **10.6%** | **7.1%** |

| Sample ID | PV-172, CORR | PV-178, CORR | PV-179, CORR | PV-181, CORR | PV-183, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 241.5 | 237.3 | 253.9 | 222.2 | 248.8 |
| Dry soil + Tare (g) | 223.5 | 221.9 | 238.6 | 207.7 | 233.1 |
| Wt. of Tare (g) | 13.2 | 13.5 | 12.4 | 12.5 | 12.1 |
| Moisture Content | **8.6%** | **7.4%** | **6.8%** | **7.4%** | **7.1%** |

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Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-594
Date: 10/25/2025

| Sample ID | PV-188, CORR | PV-189, CORR | PV-193, CORR | PV-195, CORR | PV-198, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 276.3 | 206.1 | 253.8 | 234.3 | 224.0 |
| Dry soil + Tare (g) | 257.5 | 193.6 | 216.8 | 218.0 | 189.2 |
| Wt. of Tare (g) | 12.2 | 12.7 | 12.5 | 12.0 | 12.6 |
| Moisture Content | **7.7%** | **6.9%** | **18.1%** | **7.9%** | **19.7%** |

Tested By: GE
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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-598
Date: 11/6/2025

| Sample ID | PV-151, TRT/CBR | PV-154, TRT | PV-164, TRT/CBR | PV-169, TRT | PV-172, TRT |
|---|---|---|---|---|---|
| Depth | 1'-2' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1290.1 | 1139.2 | 1194.8 | 1144.8 | 1120.2 |
| Dry soil + Tare (g) | 1200.8 | 1068.3 | 1102.5 | 1083.8 | 1049.3 |
| Wt. of Tare (g) | 194.3 | 188.9 | 188.6 | 182.3 | 192.6 |
| Moisture Content | **8.9%** | **8.1%** | **10.1%** | **6.8%** | **8.3%** |

| Sample ID | PV-178, TRT/CBR | PV-179, TRT | PV-181, TRT | PV-183, TRT/CBR | PV-188, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1291.6 | 1189.4 | 1331.3 | 1015.0 | 1178.3 |
| Dry soil + Tare (g) | 1219.2 | 1126.6 | 1262.2 | 962.0 | 1111.0 |
| Wt. of Tare (g) | 191.7 | 197.7 | 194.7 | 197.2 | 195.8 |
| Moisture Content | **7.0%** | **6.8%** | **6.5%** | **6.9%** | **7.4%** |

| Sample ID | PV-189, TRT | PV-193, TRT | PV-195, TRT/CBR | PV-198 TRT | PV-204, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 1095.2 | 1241.4 | 1128.6 | 1043.3 | 1310.5 |
| Dry soil + Tare (g) | 1037.9 | 1083.5 | 1060.8 | 911.3 | 1173.4 |
| Wt. of Tare (g) | 197.4 | 189.9 | 196.4 | 200.6 | 202.9 |
| Moisture Content | **6.8%** | **17.7%** | **7.8%** | **18.6%** | **14.1%** |

Tested By: FM
Checked By: ANS

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4405 South Clinton Avenue
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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-598
Date: 11/6/2025

| Sample ID | PV-207, TRT/CBR | PV-210, TRT | PV-212, TRT |
|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 1'-2' |
| Wet soil + Tare (g) | 1325.1 | 1201.0 | 1154.4 |
| Dry soil + Tare (g) | 1161.4 | 1064.4 | 1060.6 |
| Wt. of Tare (g) | 188.7 | 204.9 | 200.4 |
| Moisture Content | **16.8%** | **15.9%** | **10.9%** |

Tested By: FM
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-653
Date: 11/18/2025

| Sample ID | PV-158, TRT | PV-160, TRT |
|---|---|---|
| Depth | 2'-5' | 2'-5' |
| Wet soil + Tare (g) | 11670.3 | 9278.3 |
| Dry soil + Tare (g) | 11094.5 | 8524.7 |
| Wt. of Tare (g) | 1164.9 | 1189.8 |
| Moisture Content | **5.8%** | **10.3%** |

Tested By: MG
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-599
Date: 10/27/2025

| Sample ID | PV-214, TRT | PV-217, TRT | PV-223, TRT | PV-226, TRT | PV-230, TRT |
|---|---|---|---|---|---|
| Depth | 1'-2' | 1'-3' | 1'-2' | 1'-2' | 1'-2' |
| Wet soil + Tare (g) | 1295.3 | 1196.3 | 1150.4 | 1088.7 | 964.3 |
| Dry soil + Tare (g) | 1190.5 | 1082.2 | 1027.3 | 1031.0 | 838.4 |
| Wt. of Tare (g) | 107.9 | 108.8 | 108.8 | 108.4 | 112.2 |
| Moisture Content | **9.7%** | **11.7%** | **13.4%** | **6.3%** | **17.3%** |

| Sample ID | WTG-04, TRT | WTG-05, TRT | WTG-06, TRT | WTG-07, TRT | WTG-08, TRT |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 2'-5' | 1'-2' |
| Wet soil + Tare (g) | 1102.0 | 1110.3 | 1373.2 | 1086.5 | 978.0 |
| Dry soil + Tare (g) | 983.4 | 1048.1 | 1297.9 | 931.0 | 874.3 |
| Wt. of Tare (g) | 110.1 | 109.9 | 108.6 | 109.2 | 111.1 |
| Moisture Content | **13.6%** | **6.6%** | **6.3%** | **18.9%** | **13.6%** |

Tested By: RS
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-595
Date: 10/28/2025

| Sample ID | PV-204, CORR | PV-207, CORR | PV-210, CORR | PV-212, CORR | PV-214, CORR |
|---|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 1'-2' | 1'-2' |
| Wet soil + Tare (g) | 246.0 | 305.0 | 338.8 | 403.6 | 344.9 |
| Dry soil + Tare (g) | 212.7 | 263.5 | 301.8 | 377.8 | 315.3 |
| Wt. of Tare (g) | 12.9 | 12.2 | 12.0 | 13.2 | 12.5 |
| Moisture Content | **16.7%** | **16.5%** | **12.8%** | **7.1%** | **9.8%** |

| Sample ID | PV-217, CORR | PV-223, CORR | PV-226, CORR | PV-230, CORR | WTG-04, CORR |
|---|---|---|---|---|---|
| Depth | 1'-3' | 1'-2' | 1'-2' | 1'-2' | 2'-5' |
| Wet soil + Tare (g) | 373.0 | 210.9 | 291.5 | 388.5 | 282.7 |
| Dry soil + Tare (g) | 343.1 | 182.5 | 279.7 | 346.4 | 249.4 |
| Wt. of Tare (g) | 14.7 | 13.0 | 12.5 | 12.3 | 13.1 |
| Moisture Content | **9.1%** | **16.7%** | **4.4%** | **12.6%** | **14.1%** |

| Sample ID | WTG-05, CORR | WTG-06, CORR | WTG-07, CORR | WTG-08, CORR |
|---|---|---|---|---|
| Depth | 2'-5' | 2'-5' | 2'-5' | 1'-2' |
| Wet soil + Tare (g) | 290.3 | 284.1 | 306.5 | 304.0 |
| Dry soil + Tare (g) | 273.1 | 268.1 | 264.7 | 268.2 |
| Wt. of Tare (g) | 12.7 | 13.1 | 12.4 | 12.0 |
| Moisture Content | **6.6%** | **6.3%** | **16.6%** | **13.9%** |

Tested By: AG
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-742
Date: 12/16/2025

| Sample ID | PV-004, S-1 -S-3 | PV-005, S-1 - S-4 | PV-005, S-5 - S-6 | PV-017, S-1 - S-3 | PV-017, S-4 - S-6 |
|---|---|---|---|---|---|
| Depth | 0'-6' | 0'-8' | 8'-15' | 0'-6' | 6'-13.9' |
| Wet soil + Tare (g) | 845.3 | 949.1 | 891.0 | 986.1 | 1097.7 |
| Dry soil + Tare (g) | 751.1 | 839.7 | 769.6 | 901.4 | 989.7 |
| Wt. of Tare (g) | 112.2 | 115.9 | 121.0 | 111.1 | 186.0 |
| Moisture Content | **14.7%** | **15.1%** | **18.7%** | **10.7%** | **13.4%** |

| Sample ID | PV-019, S-3 -S-5 | PV-020, S-2 -S-4 | PV-028, S-3 -S-4 | PV-030, S-1 - S-3 | PV-031, S-1 - S-3 |
|---|---|---|---|---|---|
| Depth | 4'-8.4' | 2'-7.3' | 4'-8' | 0'-6' | 0'-6' |
| Wet soil + Tare (g) | 635.8 | 1114.0 | 880.0 | 1024.5 | 1054.9 |
| Dry soil + Tare (g) | 560.3 | 1041.9 | 783.0 | 933.9 | 935.6 |
| Wt. of Tare (g) | 117.7 | 109.3 | 119.6 | 108.8 | 108.8 |
| Moisture Content | **17.1%** | **7.7%** | **14.6%** | **11.0%** | **14.4%** |

| Sample ID | PV-045, S-5 - S-7 | PV-077, S-2 - S-5 | PV-084, S-3 - S-5 | PV-093, S-1 -S-3 | PV-098, S-1 -S-3 |
|---|---|---|---|---|---|
| Depth | 8'-18.8' | 4'-8.5' | 4'-9.3' | 0'-6' | 0'-6' |
| Wet soil + Tare (g) | 1039.5 | 896.5 | 1412.8 | 1662.7 | 1326.5 |
| Dry soil + Tare (g) | 913.6 | 752.8 | 1143.6 | 1464.1 | 1161.4 |
| Wt. of Tare (g) | 110.6 | 124.7 | 194.3 | 195.3 | 109.4 |
| Moisture Content | **15.7%** | **22.9%** | **28.3%** | **15.7%** | **15.7%** |

Tested By: CB/GE
Checked By: ANS

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-742
Date: 12/16/2025

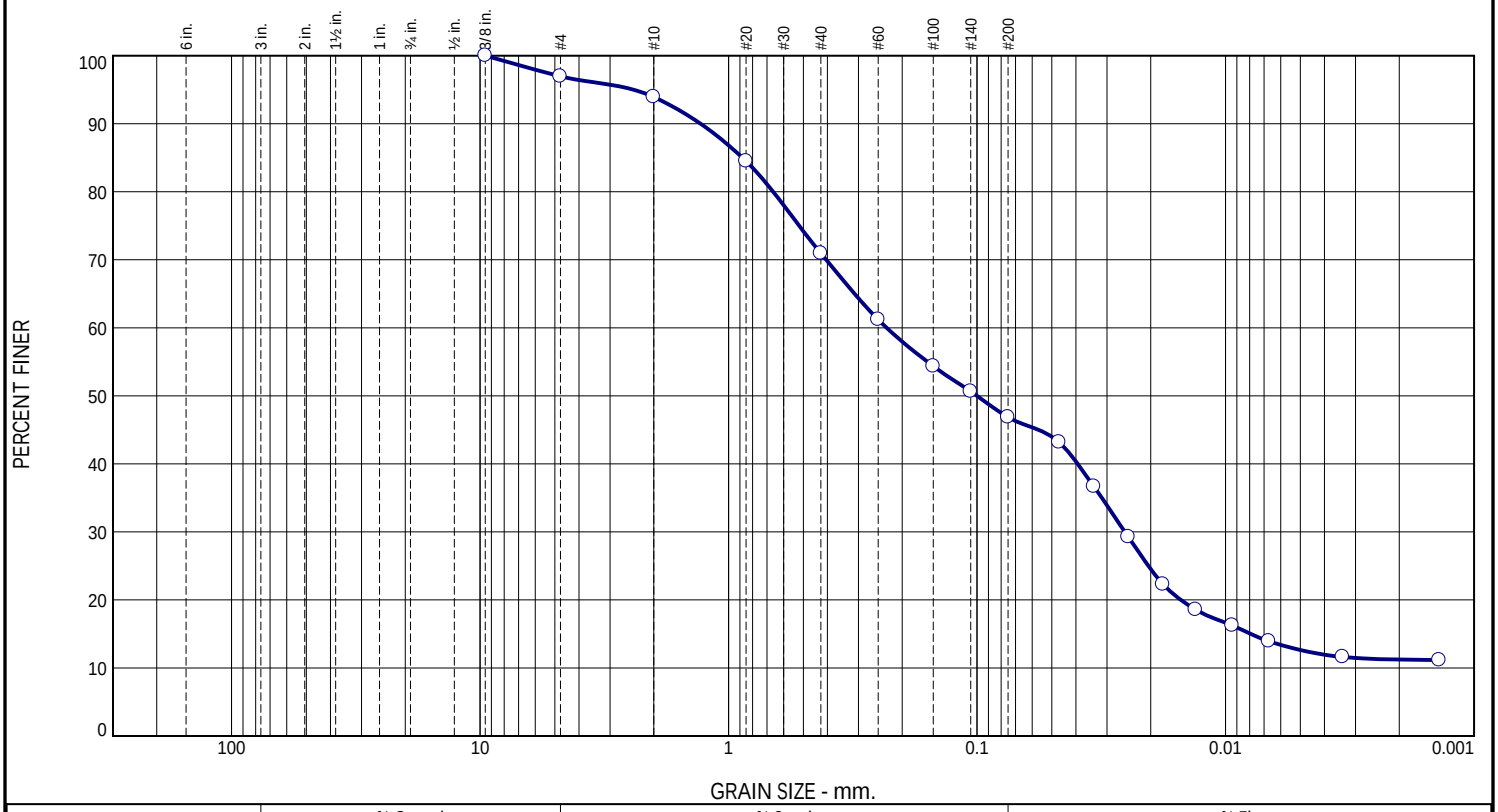
| Sample ID | PV-101, S-1 -S-3 | PV-111, S-3 -S-4 | PV-140, S-1 -S-2 |
|---|---|---|---|
| Depth | 0'-6' | 4'-7.1' | 0'-4' |
| Wet soil + Tare (g) | 1268.9 | 1057.6 | 1370.3 |
| Dry soil + Tare (g) | 1126.6 | 929.5 | 1294.1 |
| Wt. of Tare (g) | 111.5 | 109.4 | 192.4 |
| Moisture Content | **14.0%** | **15.6%** | **6.9%** |

Tested By: CB/GE
Checked By: ANS

# SIEVE-HYDROMETER ANALYSES

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 3.0 | 3.1 | 23.0 | 24.1 | 35.6 | 11.2 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 97.0 | | | |
| #10 | 93.9 | | | |
| #20 | 84.5 | | | 90.0 |
| #40 | 70.9 | | | 75.5 |
| #60 | 61.2 | | | 65.2 |
| #100 | 54.4 | | | 57.9 |
| #140 | 50.6 | | | 53.9 |
| #200 | 46.8 | | | 49.9 |
| 0.0467 mm. | 43.2 | | | |
| 0.0339 mm. | 36.7 | | | |
| 0.0246 mm. | 29.2 | | | |
| 0.0178 mm. | 22.3 | | | |
| 0.0132 mm. | 18.6 | | | |
| 0.0094 mm. | 16.2 | | | |
| 0.0067 mm. | 13.9 | | | |
| 0.0034 mm. | 11.6 | | | |
| 0.0014 mm. | 11.1 | | | |

* (no specification provided)

**Material Description**

Brown silty, clayey sand

**Atterberg Limits**

PL= 19 LL= 24 PI= 5

**Coefficients**

$D_{90}$= 1.2961 $D_{85}$= 0.8790 $D_{60}$= 0.2312

$D_{50}$= 0.1000 $D_{30}$= 0.0254 $D_{15}$= 0.0079

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: WTG-01, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

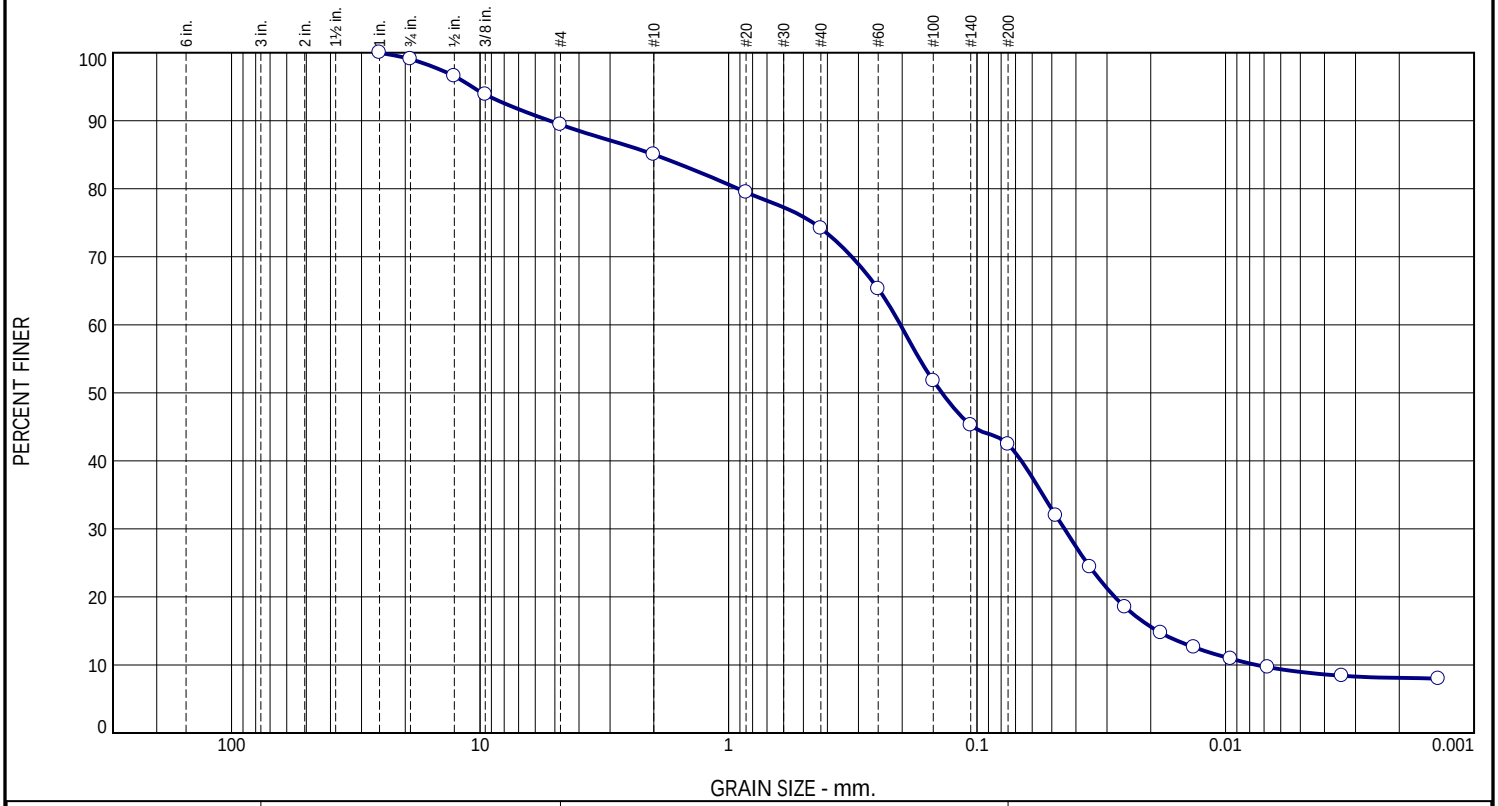
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.9 | 9.7 | 4.4 | 10.8 | 31.8 | 34.3 | 8.1 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 99.1 | | | |
| 0.5" | 96.6 | | | |
| 0.375" | 93.8 | | | |
| #4 | 89.4 | | | |
| #10 | 85.0 | | | |
| #20 | 79.5 | | | 93.5 |
| #40 | 74.2 | | | 87.2 |
| #60 | 65.3 | | | 76.8 |
| #100 | 51.8 | | | 60.9 |
| #140 | 45.2 | | | 53.2 |
| #200 | 42.4 | | | 49.9 |
| 0.0482 mm. | 31.9 | | | |
| 0.0351 mm. | 24.4 | | | |
| 0.0254 mm. | 18.5 | | | |
| 0.0182 mm. | 14.7 | | | |
| 0.0134 mm. | 12.6 | | | |
| 0.0095 mm. | 10.9 | | | |
| 0.0068 mm. | 9.7 | | | |
| 0.0034 mm. | 8.4 | | | |
| 0.0014 mm. | 8.0 | | | |

* (no specification provided)

**Material Description**

Grayish Brown silty, clayey sand

**Atterberg Limits**

PL= 17 LL= 22 PI= 5

**Coefficients**

$D_{90}$= 5.2443 $D_{85}$= 1.9881 $D_{60}$= 0.2034
$D_{50}$= 0.1384 $D_{30}$= 0.0445 $D_{15}$= 0.0188
$D_{10}$= 0.0075 $C_u$= 27.04 $C_c$= 1.29

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: WTG-02, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

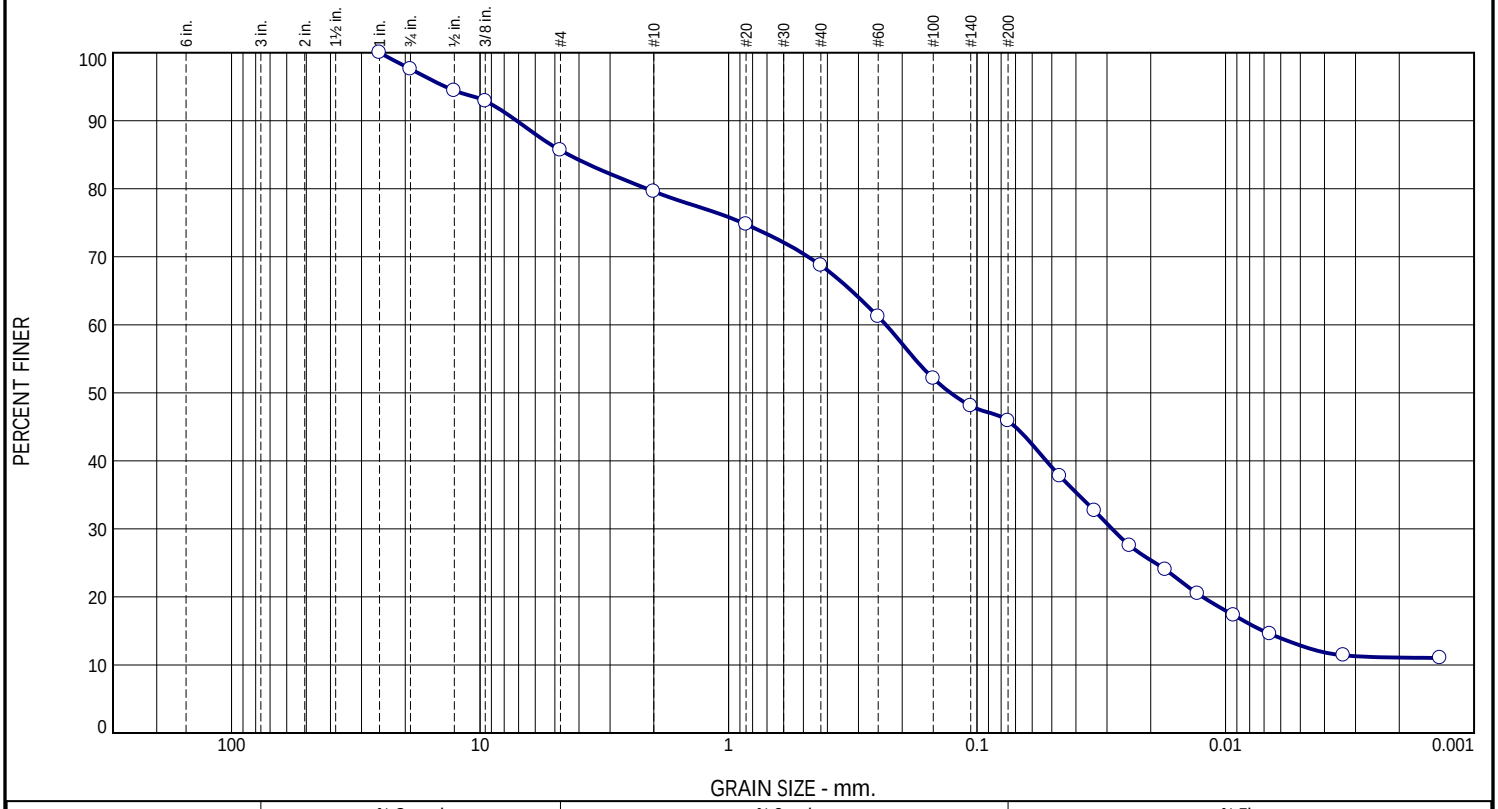
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 2.4 | 11.9 | 6.1 | 10.9 | 22.8 | 34.8 | 11.1 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 97.6 | | | |
| 0.5" | 94.4 | | | |
| 0.375" | 92.9 | | | |
| #4 | 85.7 | | | |
| #10 | 79.6 | | | |
| #20 | 74.8 | | | 93.9 |
| #40 | 68.7 | | | 86.3 |
| #60 | 61.2 | | | 76.9 |
| #100 | 52.1 | | | 65.5 |
| #140 | 48.1 | | | 60.4 |
| #200 | 45.9 | | | 57.6 |
| 0.0465 mm. | 37.8 | | | |
| 0.0337 mm. | 32.7 | | | |
| 0.0243 mm. | 27.5 | | | |
| 0.0175 mm. | 24.0 | | | |
| 0.0129 mm. | 20.5 | | | |
| 0.0093 mm. | 17.3 | | | |
| 0.0066 mm. | 14.6 | | | |
| 0.0034 mm. | 11.4 | | | |
| 0.0014 mm. | 11.0 | | | |

* (no specification provided)

**Material Description**

Brown silty, clayey sand

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 7.1211 $D_{85}$= 4.3966 $D_{60}$= 0.2328

$D_{50}$= 0.1279 $D_{30}$= 0.0286 $D_{15}$= 0.0071

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: WTG-03, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

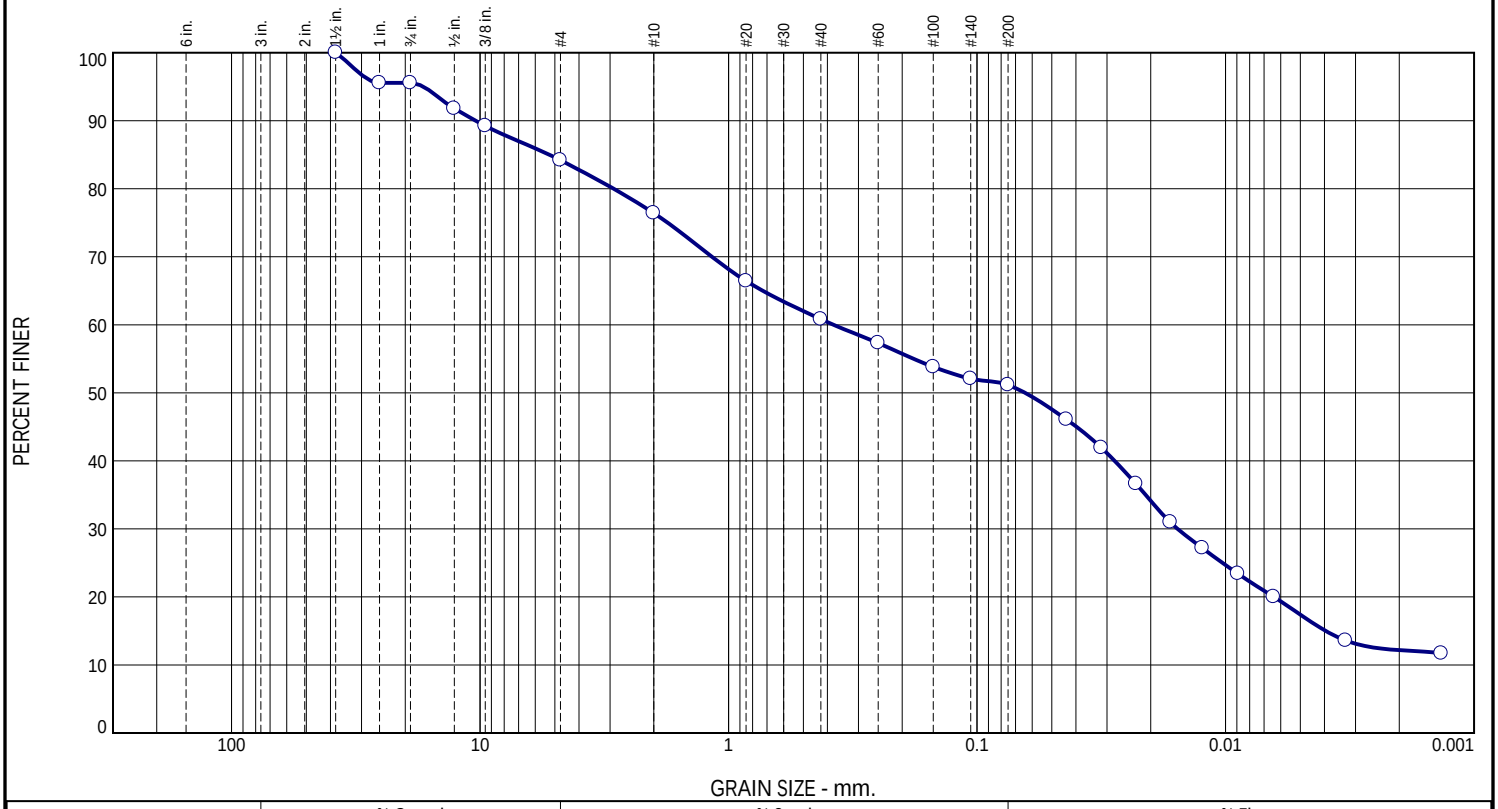
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.4 | 11.4 | 7.8 | 15.6 | 9.6 | 39.0 | 12.2 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 95.6 | | | |
| 0.75" | 95.6 | | | |
| 0.5" | 91.8 | | | |
| 0.375" | 89.2 | | | |
| #4 | 84.2 | | | |
| #10 | 76.4 | | | |
| #20 | 66.4 | | | 86.9 |
| #40 | 60.8 | | | 79.6 |
| #60 | 57.3 | | | 75.0 |
| #100 | 53.8 | | | 70.4 |
| #140 | 52.1 | | | 68.1 |
| #200 | 51.2 | | | 66.9 |
| 0.0436 mm. | 46.1 | | | |
| 0.0316 mm. | 41.9 | | | |
| 0.0229 mm. | 36.6 | | | |
| 0.0167 mm. | 31.0 | | | |
| 0.0124 mm. | 27.2 | | | |
| 0.0089 mm. | 23.4 | | | |
| 0.0064 mm. | 20.0 | | | |
| 0.0033 mm. | 13.6 | | | |
| 0.0014 mm. | 11.7 | | | |

* (no specification provided)

**Material Description**

Brown sandy lean clay with gravel

**Atterberg Limits**

PL= 19 LL= 28 PI= 9

**Coefficients**

$D_{90}$= 10.4288 $D_{85}$= 5.2654 $D_{60}$= 0.3780
$D_{50}$= 0.0641 $D_{30}$= 0.0156 $D_{15}$= 0.0040
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-4(2)

**Test Remarks**

SG Assumed

Sample Number: WTG-04, TRT Depth: 2'-5'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

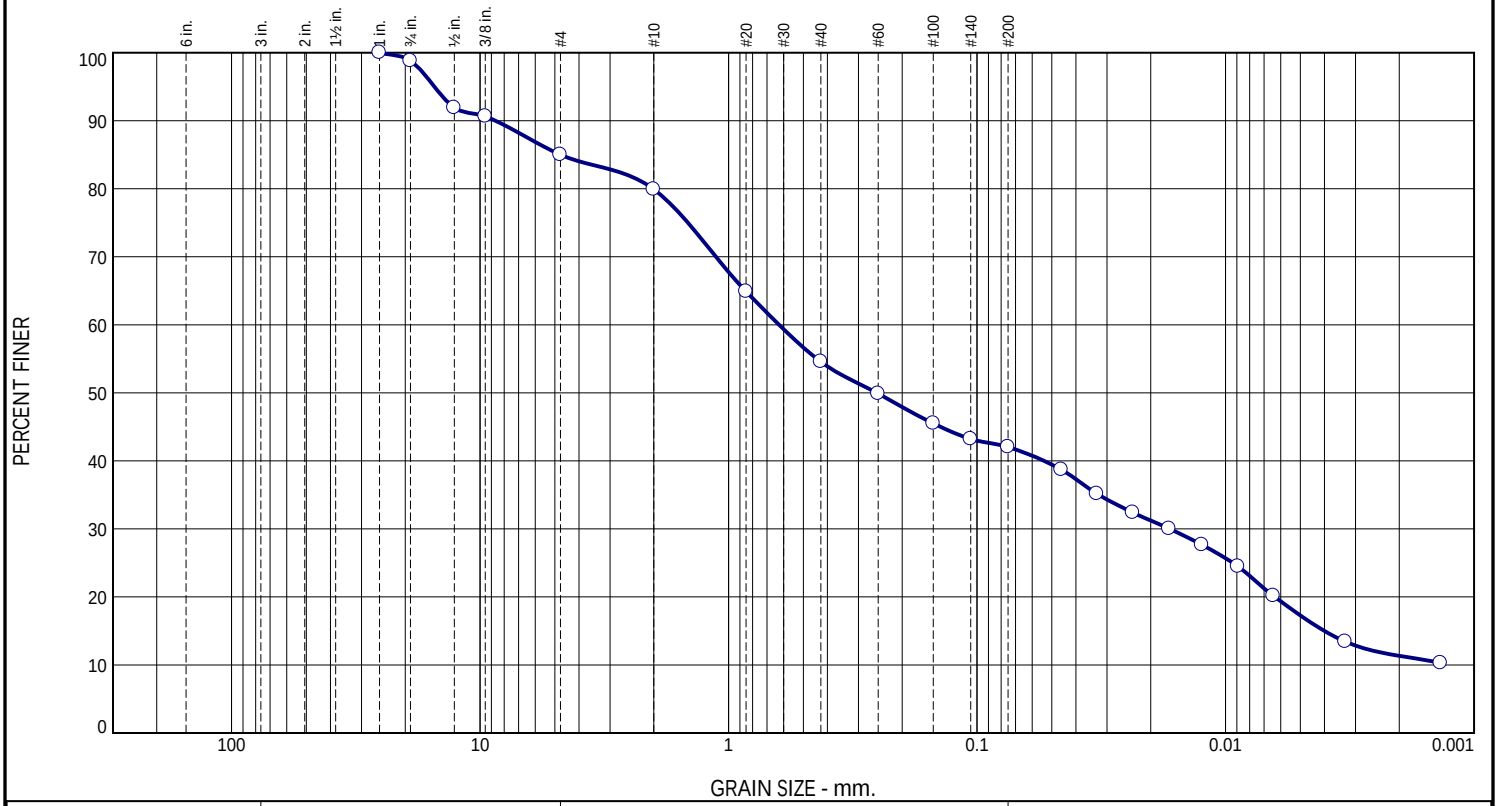
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 1.2 | 13.8 | 5.1 | 25.3 | 12.6 | 30.7 | 11.3 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 98.8 | | | |
| 0.5" | 91.9 | | | |
| 0.375" | 90.6 | | | |
| #4 | 85.0 | | | |
| #10 | 79.9 | | | |
| #20 | 64.9 | | | 81.2 |
| #40 | 54.6 | | | 68.3 |
| #60 | 49.9 | | | 62.4 |
| #100 | 45.5 | | | 56.9 |
| #140 | 43.2 | | | 54.1 |
| #200 | 42.0 | | | 52.6 |
| 0.0458 mm. | 38.7 | | | |
| 0.0329 mm. | 35.2 | | | |
| 0.0236 mm. | 32.4 | | | |
| 0.0169 mm. | 30.0 | | | |
| 0.0124 mm. | 27.6 | | | |
| 0.0089 mm. | 24.5 | | | |
| 0.0064 mm. | 20.1 | | | |
| 0.0033 mm. | 13.4 | | | |
| 0.0014 mm. | 10.3 | | | |

* (no specification provided)

**Material Description**

Brown clayey sand with gravel

**Atterberg Limits**

PL= 21 LL= 32 PI= 11

**Coefficients**

$D_{90}$= 8.6801 $D_{85}$= 4.7450 $D_{60}$= 0.6266
$D_{50}$= 0.2533 $D_{30}$= 0.0168 $D_{15}$= 0.0040
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC AASHTO= A-6(1)

**Test Remarks**

SG Assumed

Sample Number: WTG-05, TRT Depth: 2'-5'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

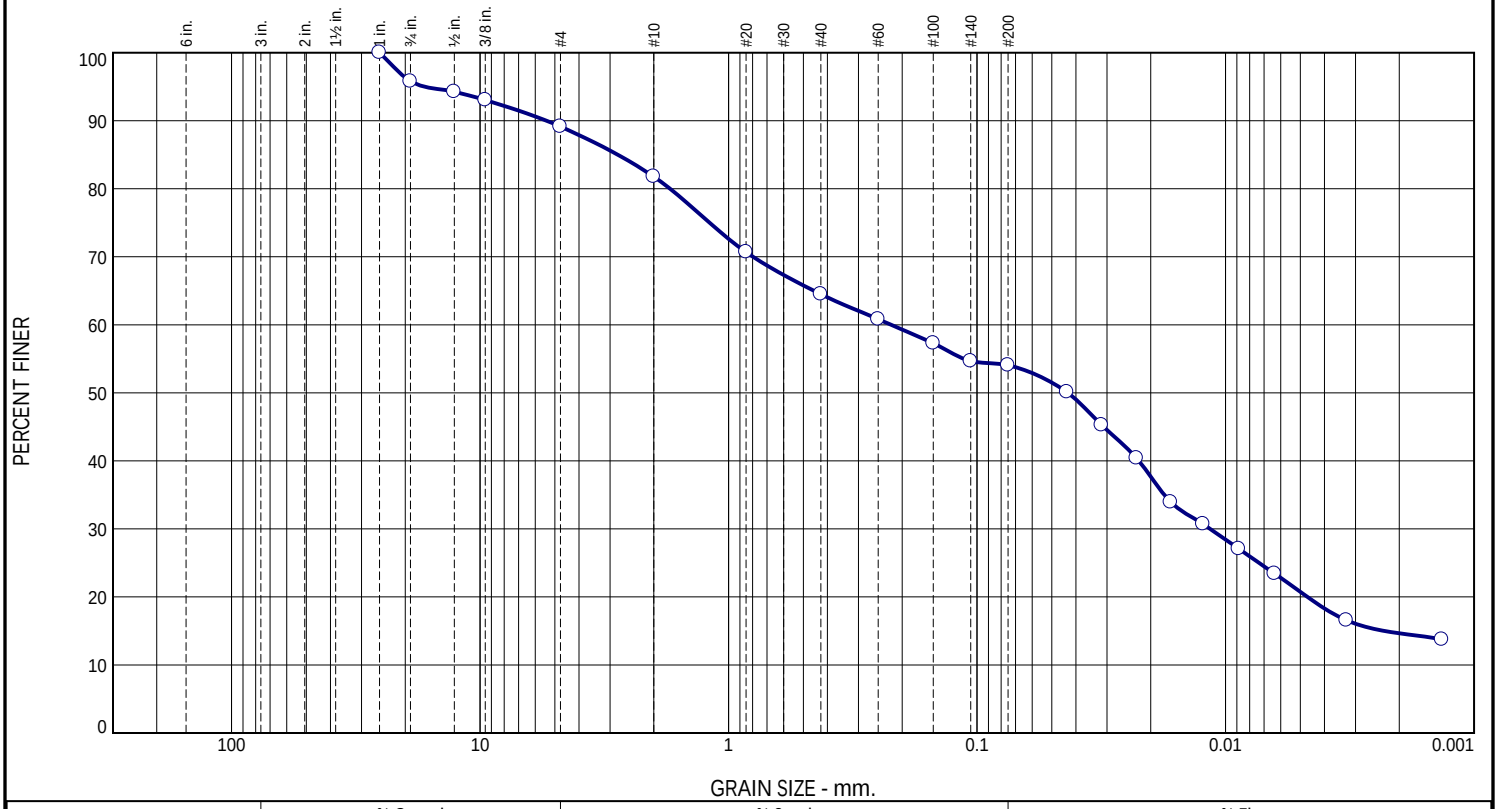
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.2 | 6.7 | 7.3 | 17.3 | 10.4 | 39.4 | 14.7 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 95.8 | | | |
| 0.5" | 94.3 | | | |
| 0.375" | 93.0 | | | |
| #4 | 89.1 | | | |
| #10 | 81.8 | | | |
| #20 | 70.7 | | | 86.4 |
| #40 | 64.5 | | | 78.9 |
| #60 | 60.8 | | | 74.4 |
| #100 | 57.3 | | | 70.1 |
| #140 | 54.7 | | | 66.9 |
| #200 | 54.1 | | | 66.1 |
| 0.0434 mm. | 50.1 | | | |
| 0.0315 mm. | 45.3 | | | |
| 0.0228 mm. | 40.4 | | | |
| 0.0166 mm. | 34.0 | | | |
| 0.0123 mm. | 30.7 | | | |
| 0.0088 mm. | 27.1 | | | |
| 0.0063 mm. | 23.4 | | | |
| 0.0033 mm. | 16.6 | | | |
| 0.0013 mm. | 13.7 | | | |

* (no specification provided)

**Material Description**

Brown sandy lean clay

**Atterberg Limits**

PL= 23 LL= 33 PI= 10

**Coefficients**

$D_{90}$= 5.4036 $D_{85}$= 2.7890 $D_{60}$= 0.2217
$D_{50}$= 0.0431 $D_{30}$= 0.0115 $D_{15}$= 0.0023
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-4(3)

**Test Remarks**

SG Assumed

Sample Number: WTG-06, TRT Depth: 2'-5'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

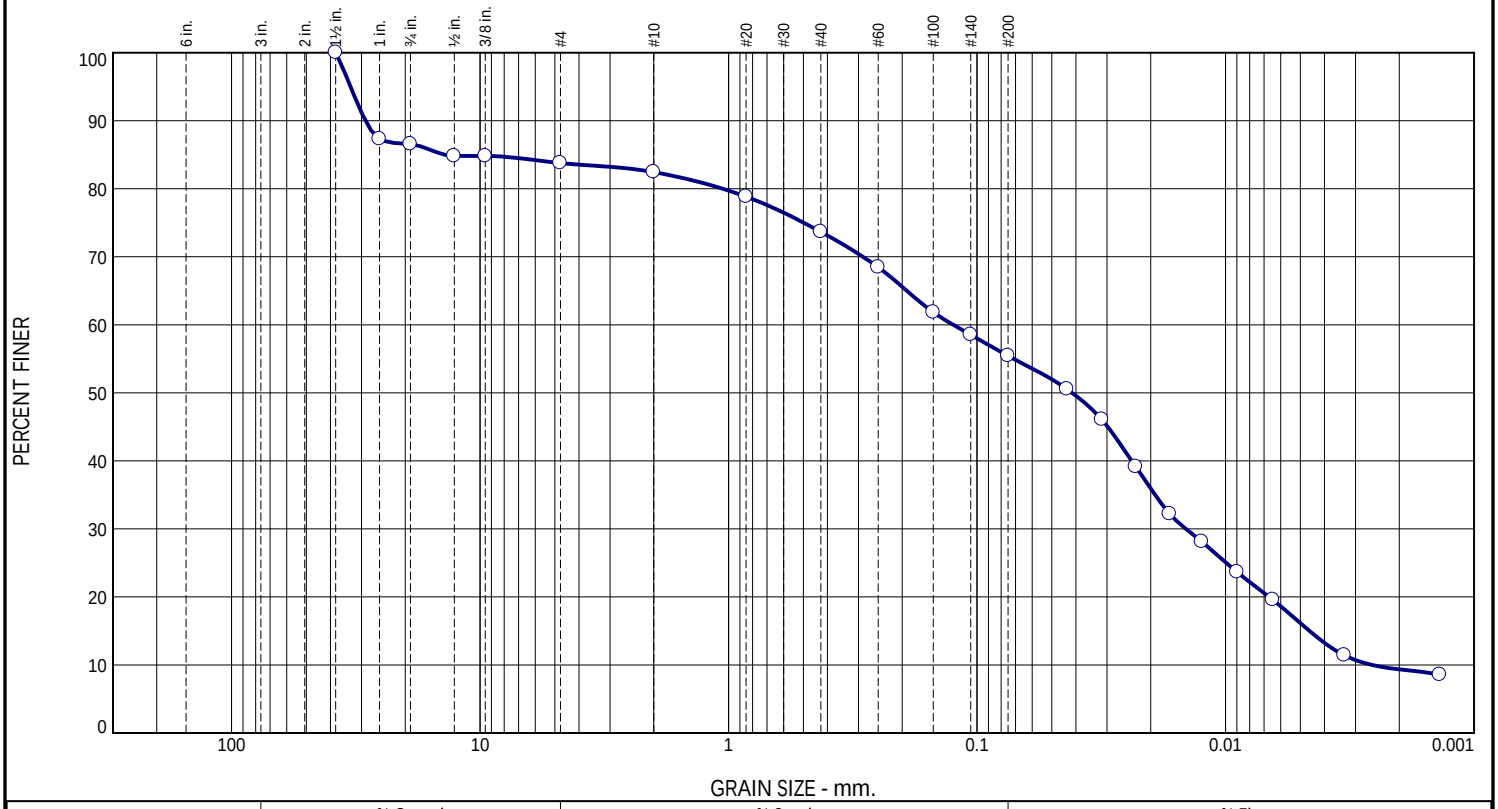
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 13.4 | 2.8 | 1.4 | 8.7 | 18.3 | 46.0 | 9.4 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 87.3 | | | |
| 0.75" | 86.6 | | | |
| 0.5" | 84.8 | | | |
| 0.375" | 84.8 | | | |
| #4 | 83.8 | | | |
| #10 | 82.4 | | | |
| #20 | 78.8 | | | 95.6 |
| #40 | 73.7 | | | 89.3 |
| #60 | 68.5 | | | 83.0 |
| #100 | 61.9 | | | 75.0 |
| #140 | 58.5 | | | 71.0 |
| #200 | 55.4 | | | 67.2 |
| 0.0434 mm. | 50.5 | | | |
| 0.0314 mm. | 46.0 | | | |
| 0.0230 mm. | 39.1 | | | |
| 0.0168 mm. | 32.2 | | | |
| 0.0125 mm. | 28.1 | | | |
| 0.0090 mm. | 23.6 | | | |
| 0.0065 mm. | 19.6 | | | |
| 0.0033 mm. | 11.4 | | | |
| 0.0014 mm. | 8.6 | | | |

* (no specification provided)

**Material Description**

Brown sandy lean clay with gravel

**Atterberg Limits**

PL= 19 LL= 28 PI= 9

**Coefficients**

$D_{90}$= 28.9401 $D_{85}$= 13.8547 $D_{60}$= 0.1246
$D_{50}$= 0.0414 $D_{30}$= 0.0144 $D_{15}$= 0.0046
$D_{10}$= 0.0026 $C_u$= 48.38 $C_c$= 0.65

**Classification**

USCS= CL AASHTO= A-4(2)

**Test Remarks**

SG Assumed

Sample Number: WTG-07, TRT Depth: 2'-5'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

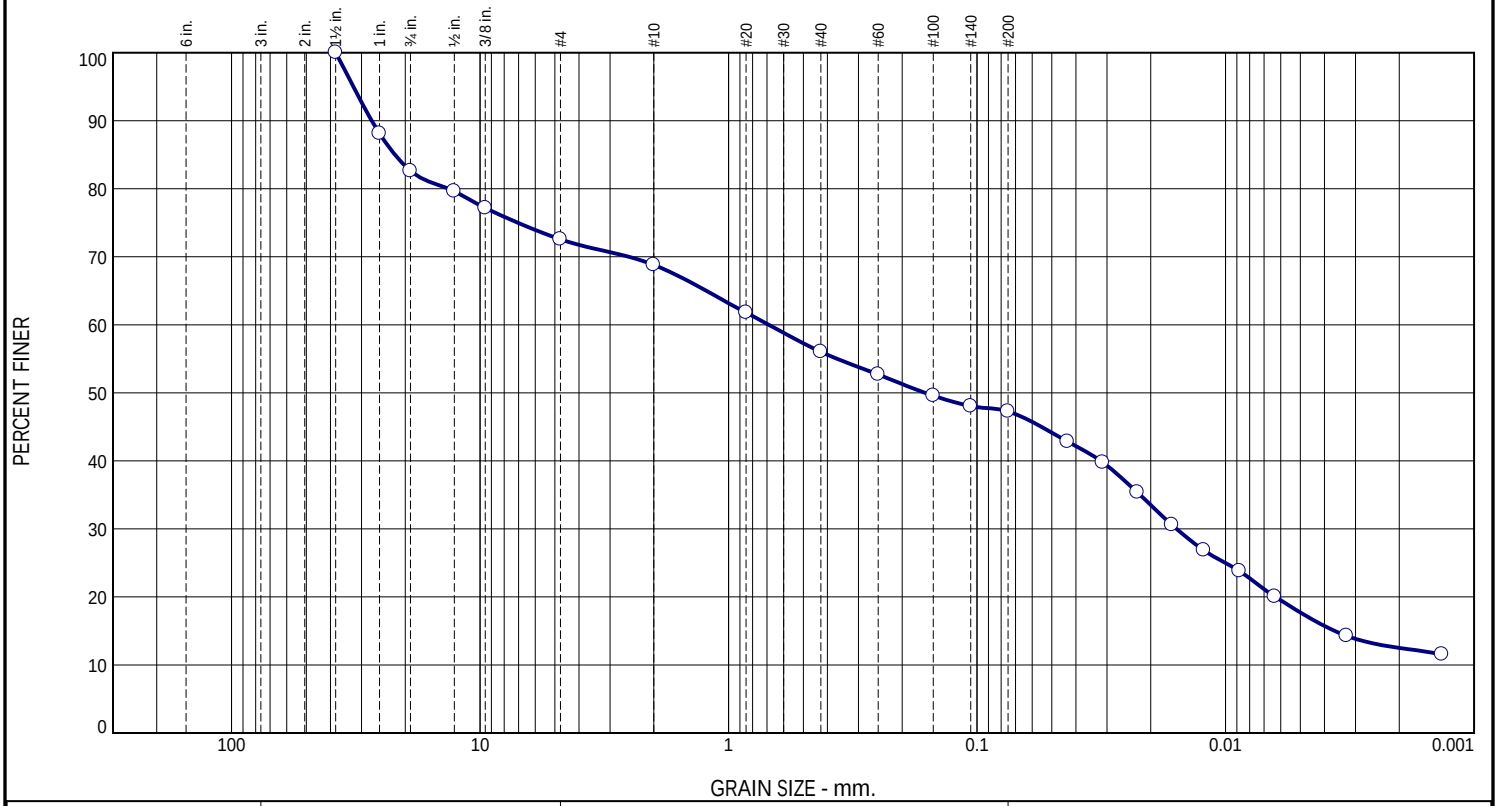
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 17.4 | 10.0 | 3.8 | 12.8 | 8.7 | 34.8 | 12.5 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 88.1 | | | |
| 0.75" | 82.6 | | | |
| 0.5" | 79.6 | | | |
| 0.375" | 77.2 | | | |
| #4 | 72.6 | | | |
| #10 | 68.8 | | | |
| #20 | 61.8 | | | 89.8 |
| #40 | 56.0 | | | 81.4 |
| #60 | 52.7 | | | 76.6 |
| #100 | 49.6 | | | 72.1 |
| #140 | 48.0 | | | 69.8 |
| #200 | 47.3 | | | 68.7 |
| 0.0433 mm. | 42.8 | | | |
| 0.0312 mm. | 39.8 | | | |
| 0.0226 mm. | 35.4 | | | |
| 0.0164 mm. | 30.6 | | | |
| 0.0122 mm. | 26.9 | | | |
| 0.0088 mm. | 23.8 | | | |
| 0.0063 mm. | 20.1 | | | |
| 0.0033 mm. | 14.3 | | | |
| 0.0013 mm. | 11.6 | | | |

* (no specification provided)

**Material Description**

Brown clayey gravel with sand

**Atterberg Limits**

PL= 22 LL= 36 PI= 14

**Coefficients**

$D_{90}$= 27.3146 $D_{85}$= 22.0269 $D_{60}$= 0.6887

$D_{50}$= 0.1618 $D_{30}$= 0.0157 $D_{15}$= 0.0036

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= GC AASHTO= A-6(3)

**Test Remarks**

SG Assumed

Sample Number: WTG-08, TRT Depth: 1'-2'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

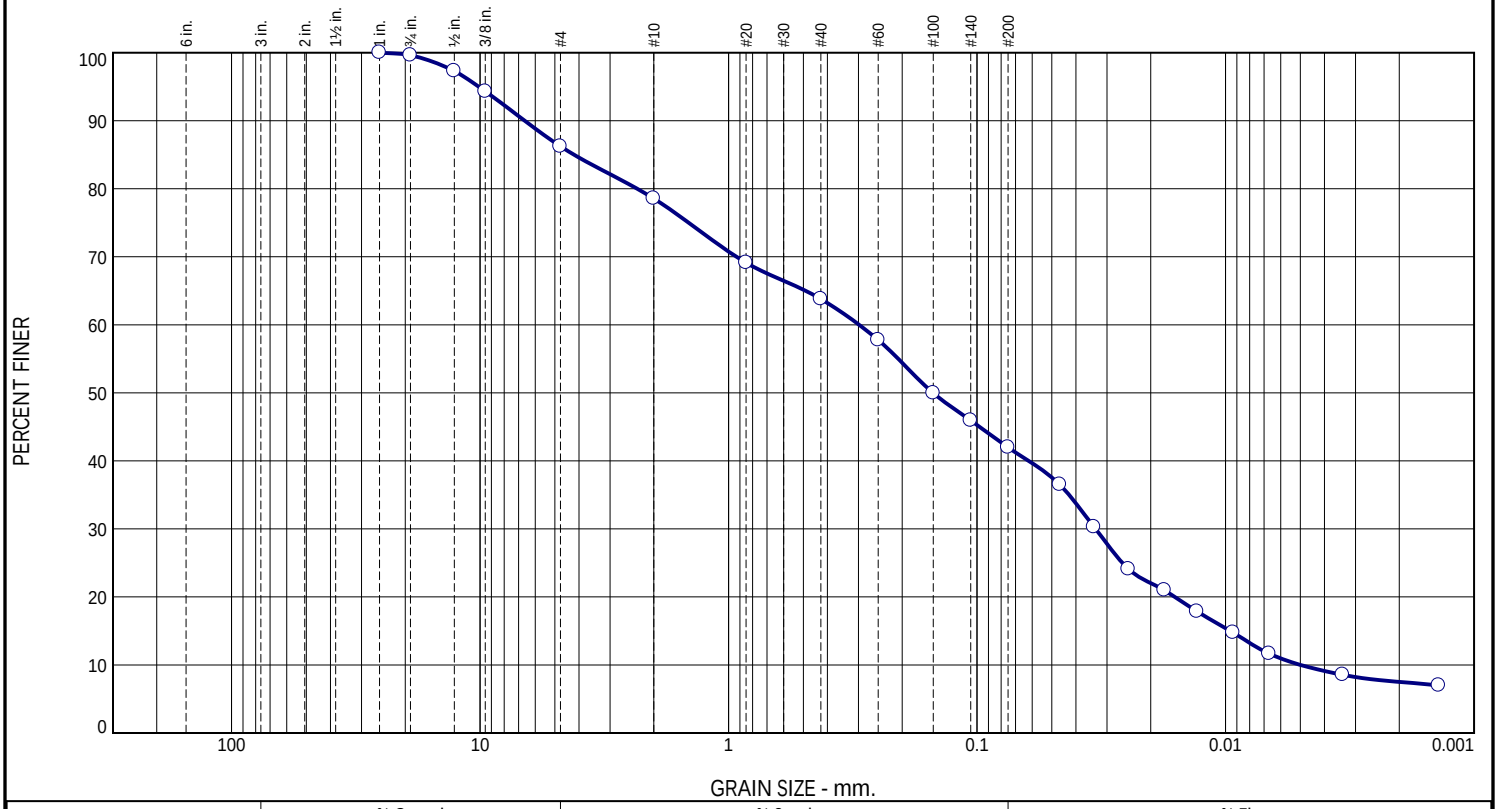
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.4 | 13.4 | 7.6 | 14.8 | 21.8 | 34.5 | 7.5 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 99.6 | | | |
| 0.5" | 97.3 | | | |
| 0.375" | 94.3 | | | |
| #4 | 86.2 | | | |
| #10 | 78.6 | | | |
| #20 | 69.1 | | | 88.0 |
| #40 | 63.8 | | | 81.2 |
| #60 | 57.8 | | | 73.5 |
| #100 | 50.0 | | | 63.6 |
| #140 | 45.9 | | | 58.5 |
| #200 | 42.0 | | | 53.4 |
| 0.0465 mm. | 36.5 | | | |
| 0.0338 mm. | 30.3 | | | |
| 0.0246 mm. | 24.1 | | | |
| 0.0176 mm. | 21.0 | | | |
| 0.0130 mm. | 17.9 | | | |
| 0.0093 mm. | 14.8 | | | |
| 0.0067 mm. | 11.7 | | | |
| 0.0034 mm. | 8.5 | | | |
| 0.0014 mm. | 7.0 | | | |

* (no specification provided)

**Material Description**

Brown silty sand

**Atterberg Limits**

PL= NP LL= NV PI= NP

**Coefficients**

$D_{90}$= 6.6131 $D_{85}$= 4.1838 $D_{60}$= 0.2983
$D_{50}$= 0.1504 $D_{30}$= 0.0333 $D_{15}$= 0.0096
$D_{10}$= 0.0050 $C_u$= 59.75 $C_c$= 0.75

**Classification**

USCS= SM AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: SB-01, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

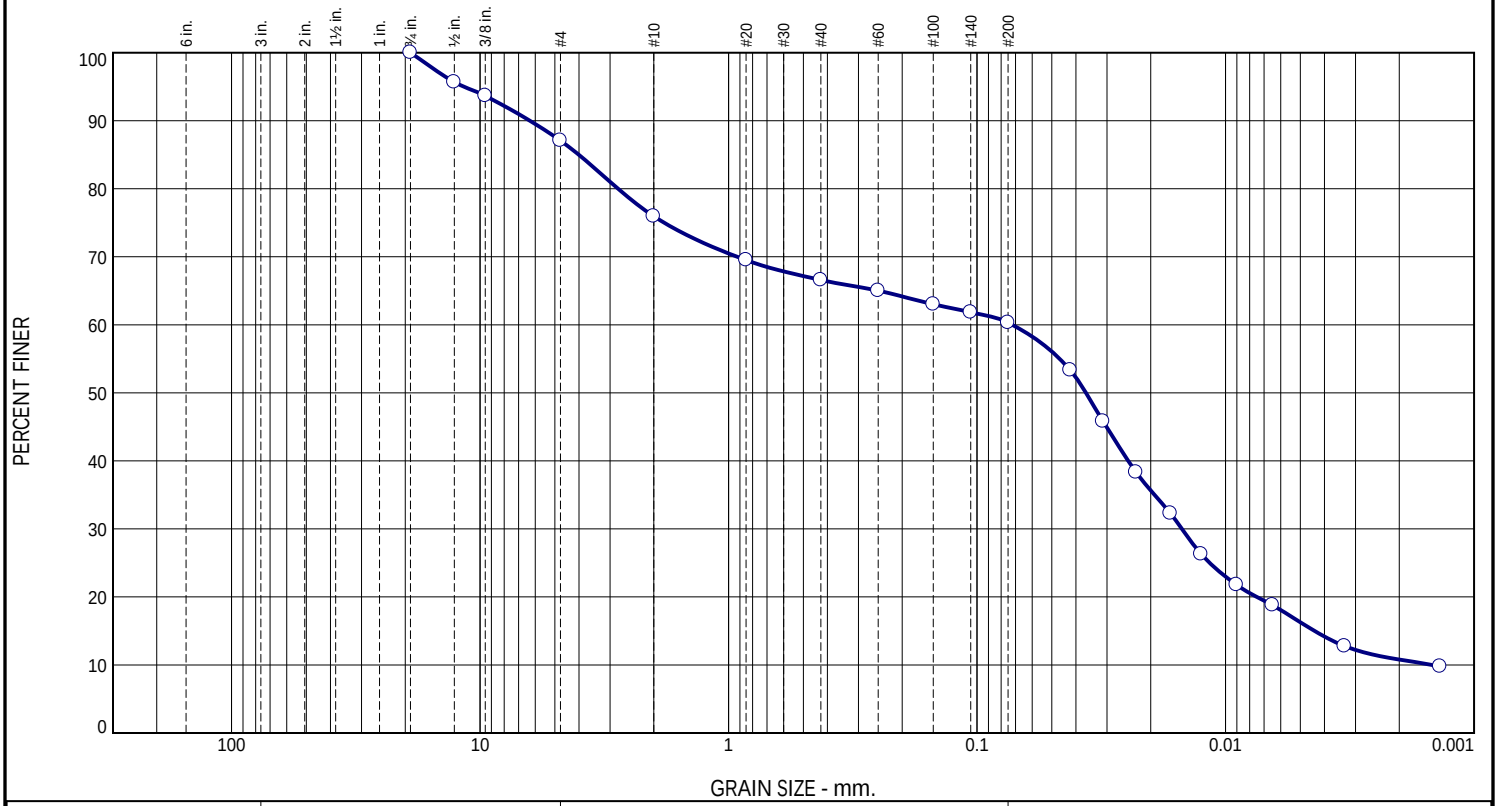
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 12.9 | 11.1 | 9.4 | 6.3 | 49.5 | 10.8 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 95.7 | | | |
| 0.375" | 93.7 | | | |
| #4 | 87.1 | | | |
| #10 | 76.0 | | | |
| #20 | 69.5 | | | 91.5 |
| #40 | 66.6 | | | 87.7 |
| #60 | 65.0 | | | 85.6 |
| #100 | 63.0 | | | 83.0 |
| #140 | 61.8 | | | 81.4 |
| #200 | 60.3 | | | 79.4 |
| 0.0421 mm. | 53.4 | | | |
| 0.0311 mm. | 45.8 | | | |
| 0.0229 mm. | 38.3 | | | |
| 0.0167 mm. | 32.3 | | | |
| 0.0125 mm. | 26.3 | | | |
| 0.0090 mm. | 21.8 | | | |
| 0.0065 mm. | 18.8 | | | |
| 0.0033 mm. | 12.8 | | | |
| 0.0014 mm. | 9.8 | | | |

* (no specification provided)

Material Description

Brown sandy lean clay

Atterberg Limits

PL= 22 LL= 32 PI= 10

Coefficients

$D_{90}$= 6.3010 $D_{85}$= 4.0049 $D_{60}$= 0.0722
$D_{50}$= 0.0365 $D_{30}$= 0.0150 $D_{15}$= 0.0044
$D_{10}$= 0.0015 $C_u$= 48.88 $C_c$= 2.11

Classification

USCS= CL AASHTO= A-4(4)

Test Remarks

SG Assumed

Sample Number: SB-02, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

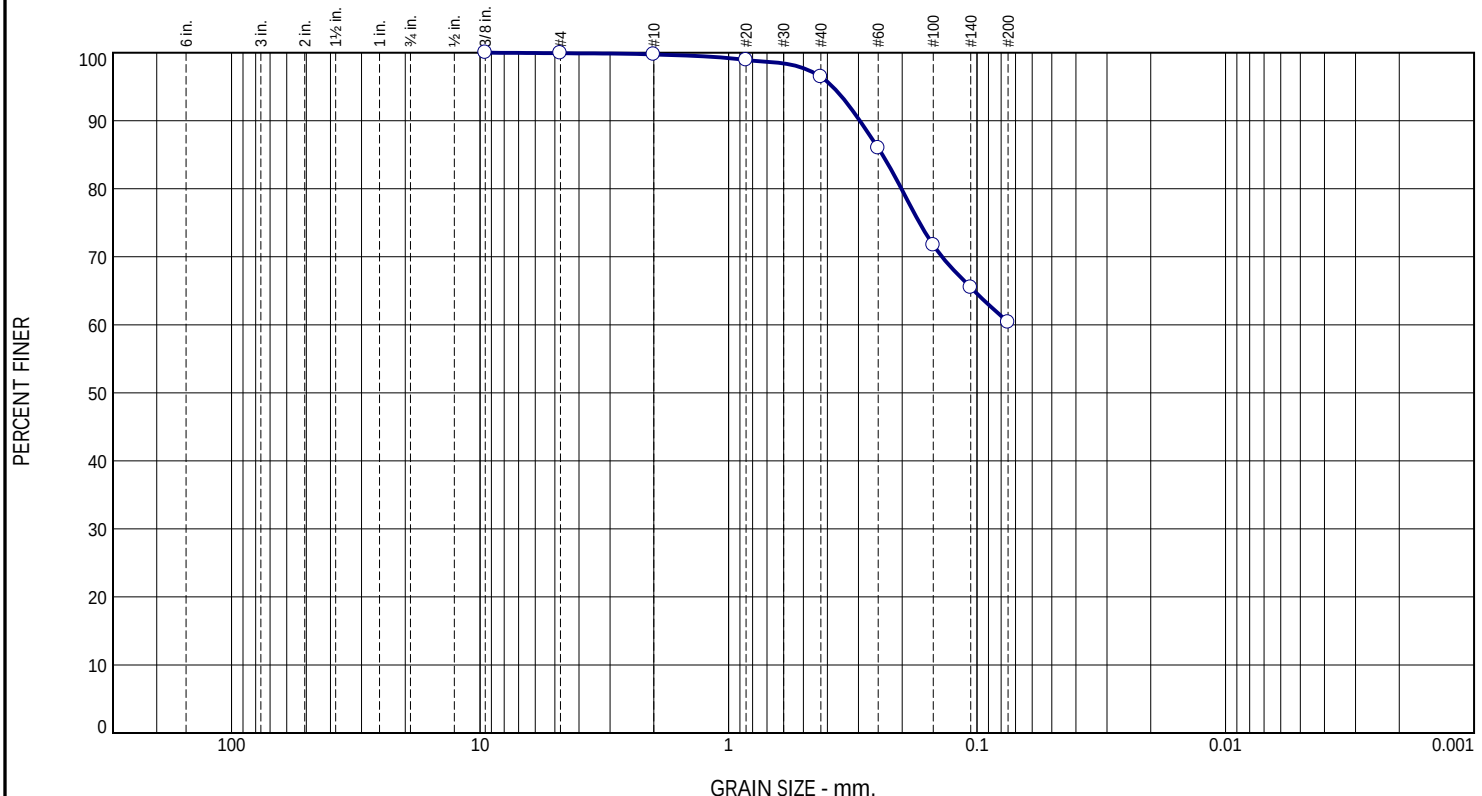
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.2 | 3.2 | 36.1 | 60.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.7 | | | |
| #20 | 98.9 | | | 99.2 |
| #40 | 96.5 | | | 96.7 |
| #60 | 86.0 | | | 86.2 |
| #100 | 71.7 | | | 71.9 |
| #140 | 65.5 | | | 65.7 |
| #200 | 60.4 | | | 60.5 |

* (no specification provided)

Material Description

Dark Brown sandy silty clay

Atterberg Limits

PL= 16 LL= 21 PI= 5

Coefficients

$D_{90}$= 0.2963 $D_{85}$= 0.2403 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(0)

Test Remarks

Sample Number: PV-01, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

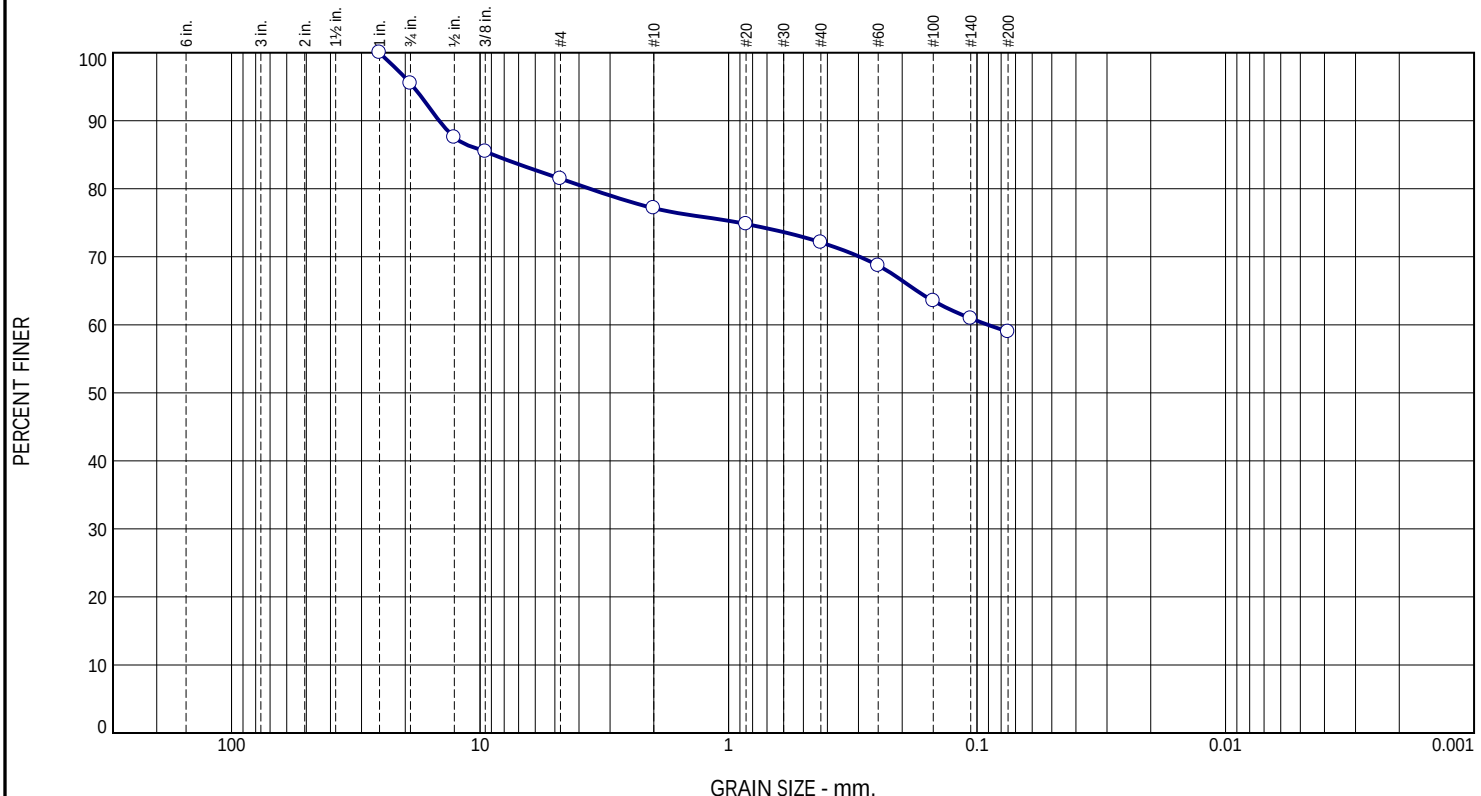
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.5 | 14.0 | 4.4 | 5.0 | 13.1 | 59.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 95.5 | | | |
| 0.5" | 87.6 | | | |
| 0.375" | 85.5 | | | |
| #4 | 81.5 | | | |
| #10 | 77.1 | | | |
| #20 | 74.8 | | | 97.0 |
| #40 | 72.1 | | | 93.5 |
| #60 | 68.7 | | | 89.1 |
| #100 | 63.5 | | | 82.3 |
| #140 | 60.9 | | | 79.0 |
| #200 | 59.0 | | | 76.4 |

* (no specification provided)

**Material Description**

Dark Brown sandy silty clay with gravel

**Atterberg Limits**

PL= 22 LL= 28 PI= 6

**Coefficients**

$D_{90}$= 14.6140 $D_{85}$= 8.8467 $D_{60}$= 0.0905
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(2)

**Test Remarks**

Sample Number: PV-03, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

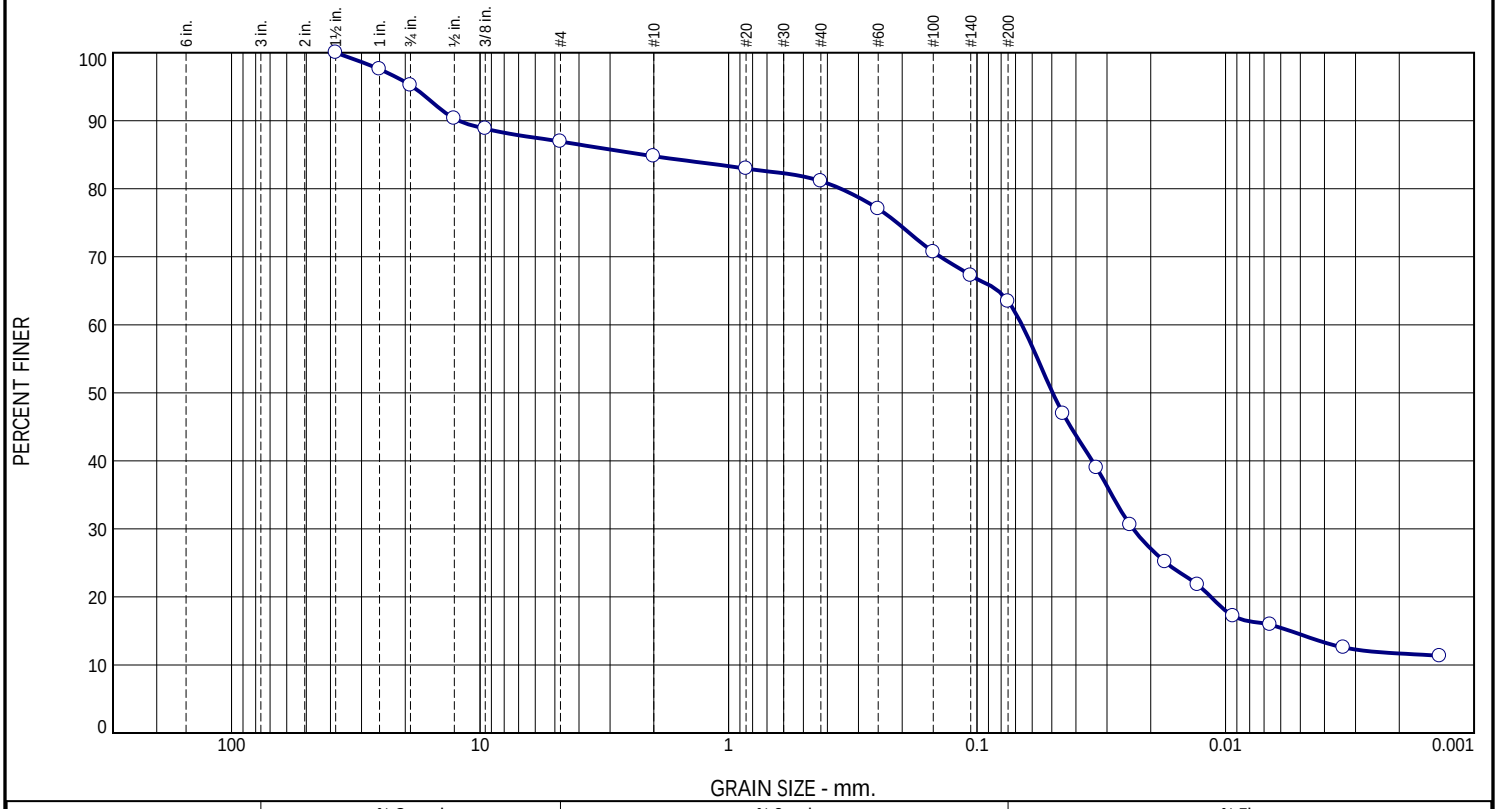
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.8 | 8.3 | 2.1 | 3.7 | 17.6 | 51.8 | 11.7 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 97.6 | | | |
| 0.75" | 95.2 | | | |
| 0.5" | 90.3 | | | |
| 0.375" | 88.8 | | | |
| #4 | 86.9 | | | |
| #10 | 84.8 | | | |
| #20 | 83.0 | | | 97.8 |
| #40 | 81.1 | | | 95.7 |
| #60 | 77.1 | | | 90.9 |
| #100 | 70.7 | | | 83.4 |
| #140 | 67.3 | | | 79.3 |
| #200 | 63.5 | | | 74.8 |
| 0.0451 mm. | 46.9 | | | |
| 0.0331 mm. | 39.0 | | | |
| 0.0242 mm. | 30.6 | | | |
| 0.0175 mm. | 25.2 | | | |
| 0.0129 mm. | 21.8 | | | |
| 0.0093 mm. | 17.2 | | | |
| 0.0066 mm. | 15.9 | | | |
| 0.0033 mm. | 12.6 | | | |
| 0.0014 mm. | 11.3 | | | |

* (no specification provided)

**Material Description**

Light Brown sandy silty clay

**Atterberg Limits**

PL= 21 LL= 26 PI= 5

**Coefficients**

$D_{90}$= 12.1847 $D_{85}$= 2.1914 $D_{60}$= 0.0660
$D_{50}$= 0.0496 $D_{30}$= 0.0235 $D_{15}$= 0.0055
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

SG Assumed

Sample Number: PV-08, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

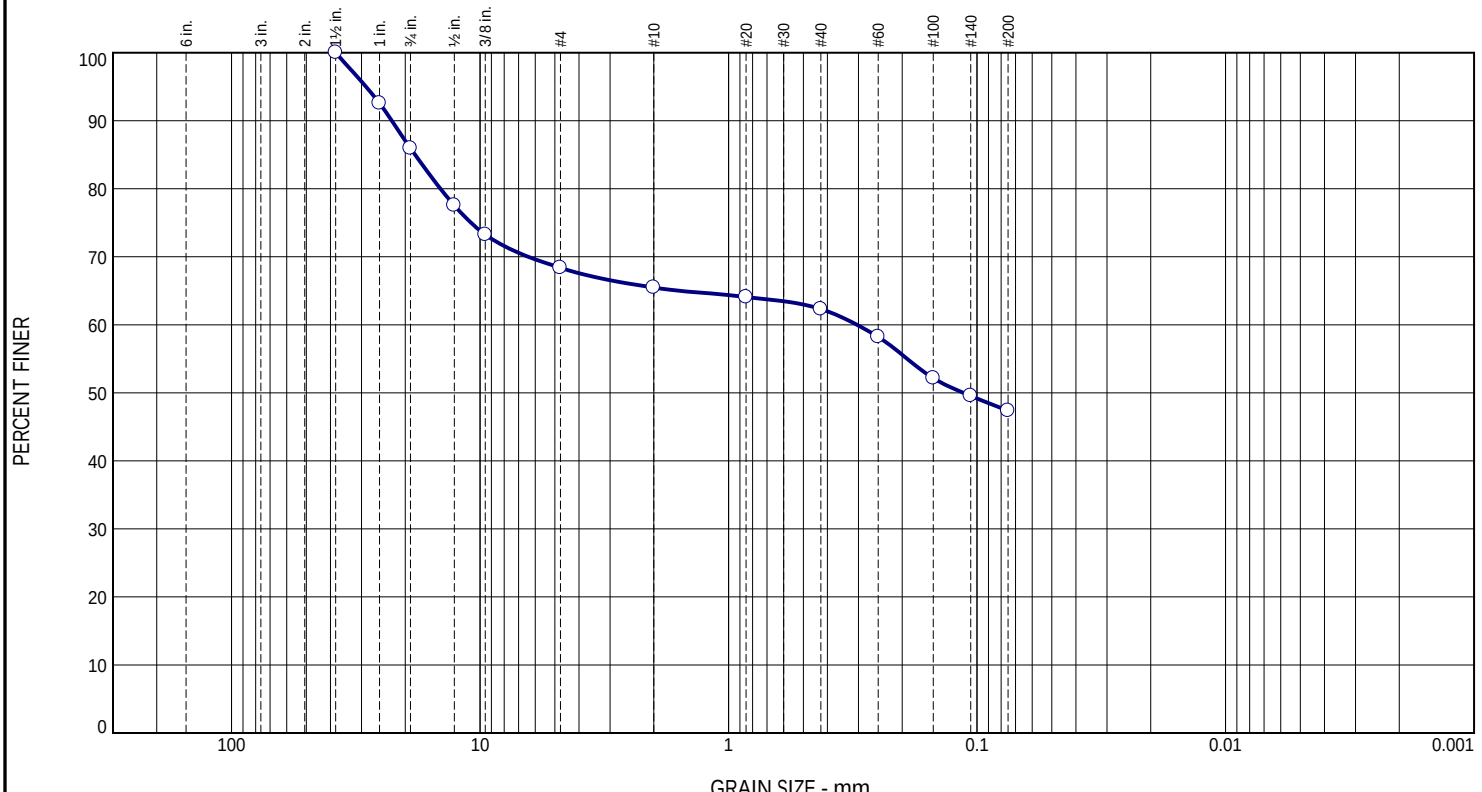
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 14.1 | 17.5 | 2.9 | 3.2 | 14.9 | 47.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 92.6 | | | |
| 0.75" | 85.9 | | | |
| 0.5" | 77.5 | | | |
| 0.375" | 73.2 | | | |
| #4 | 68.4 | | | |
| #10 | 65.5 | | | |
| #20 | 64.1 | | | 97.9 |
| #40 | 62.3 | | | 95.2 |
| #60 | 58.2 | | | 88.9 |
| #100 | 52.2 | | | 79.7 |
| #140 | 49.5 | | | 75.7 |
| #200 | 47.4 | | | 72.4 |

* (no specification provided)

**Material Description**

Light Brown silty clayey gravel with sand

**Atterberg Limits**

PL= 20 LL= 26 PI= 6

**Coefficients**

$D_{90}$= 22.6551 $D_{85}$= 18.2580 $D_{60}$= 0.3038
$D_{50}$= 0.1133 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= GC-GM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-12, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

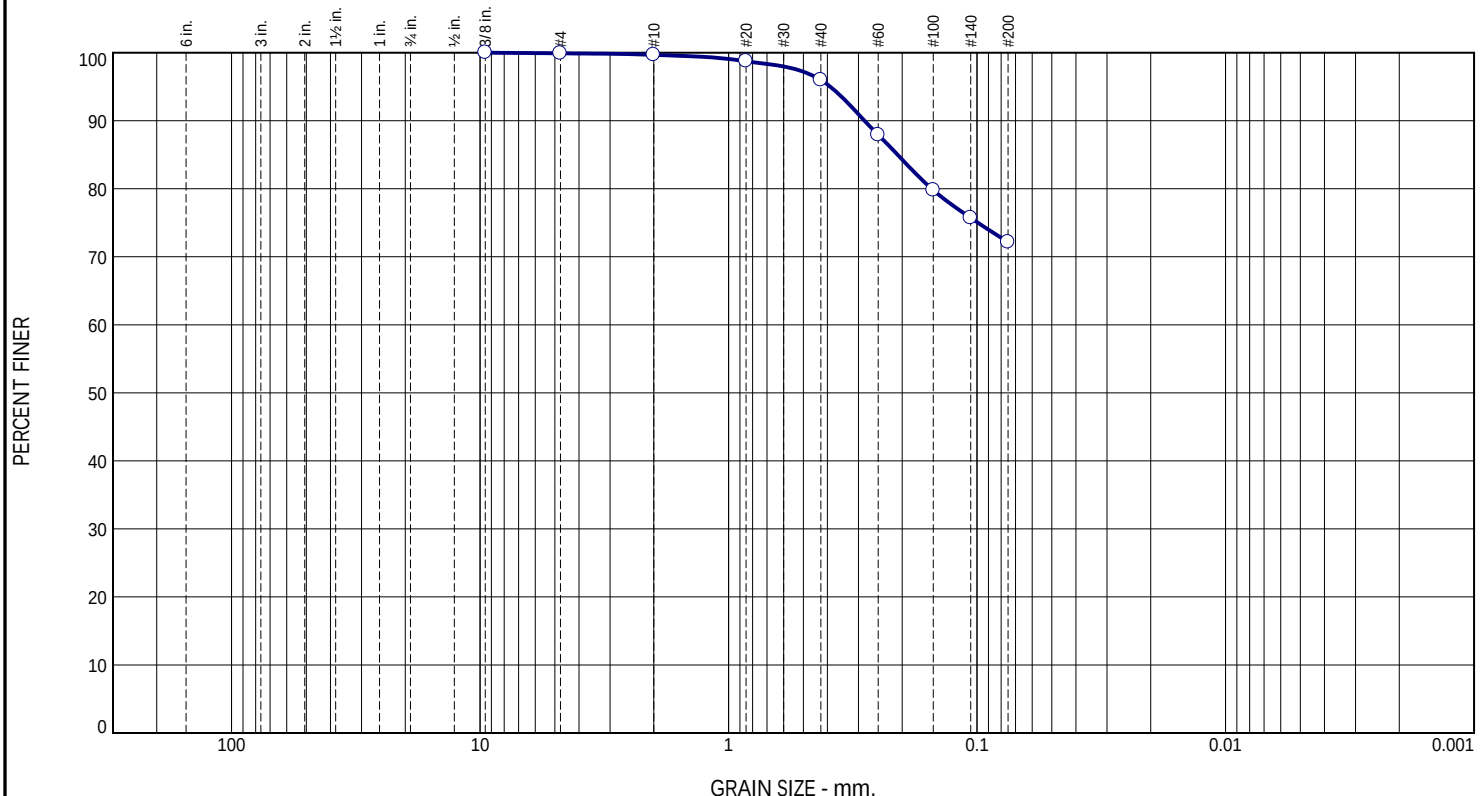
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.2 | 3.7 | 23.8 | 72.2 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.7 | | | |
| #20 | 98.7 | | | 99.1 |
| #40 | 96.0 | | | 96.3 |
| #60 | 87.9 | | | 88.2 |
| #100 | 79.8 | | | 80.0 |
| #140 | 75.7 | | | 76.0 |
| #200 | 72.2 | | | 72.4 |

* (no specification provided)

Material Description

Brown silty clay with sand

Atterberg Limits

PL= 17 LL= 22 PI= 5

Coefficients

$D_{90}$= 0.2837 $D_{85}$= 0.2089 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(1)

Test Remarks

Sample Number: PV-15, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

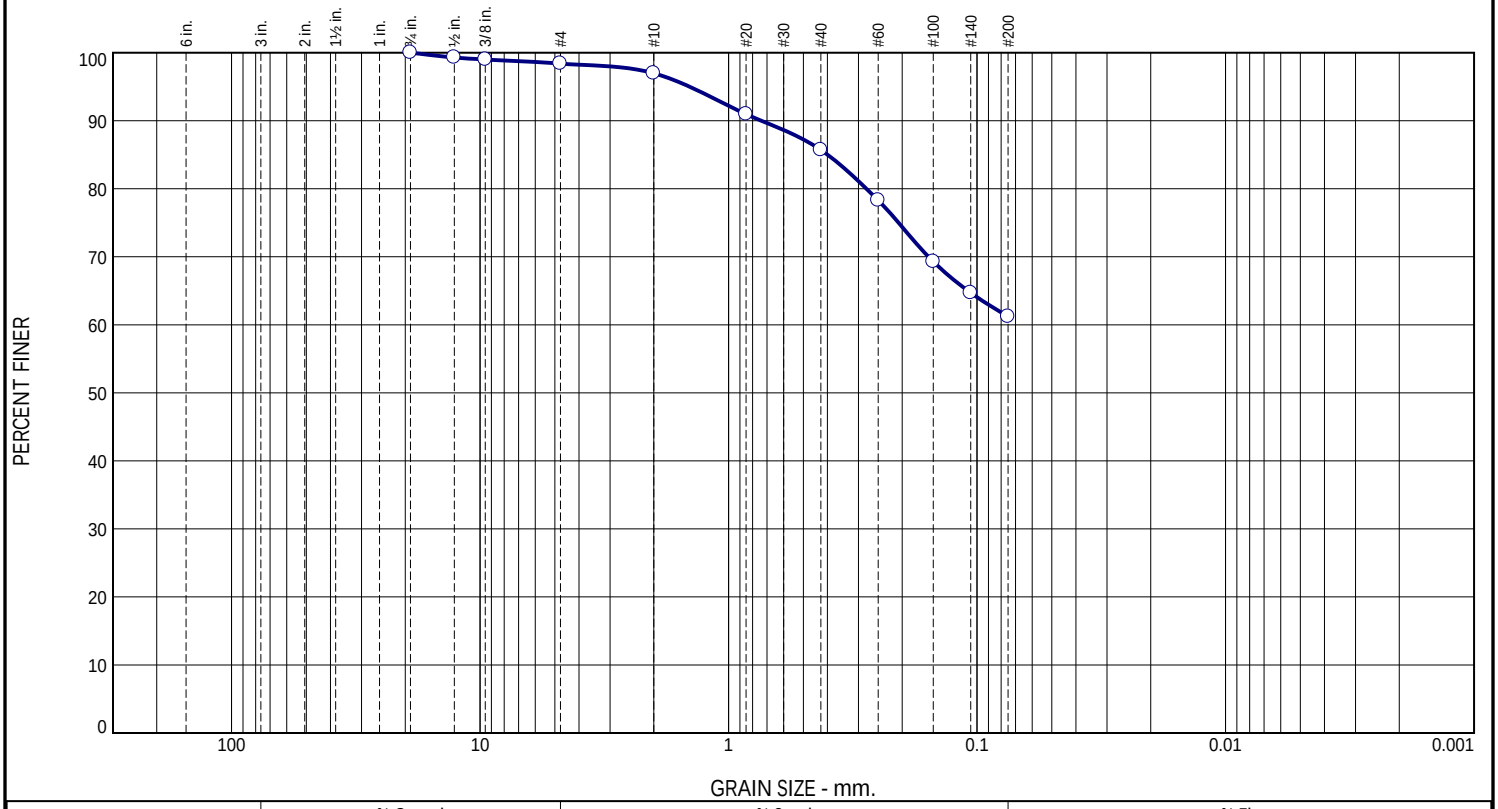
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 1.6 | 1.4 | 11.3 | 24.5 | 61.2 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.3 | | | |
| 0.375" | 99.0 | | | |
| #4 | 98.4 | | | |
| #10 | 97.0 | | | |
| #20 | 91.0 | | | 93.8 |
| #40 | 85.7 | | | 88.4 |
| #60 | 78.3 | | | 80.7 |
| #100 | 69.3 | | | 71.4 |
| #140 | 64.7 | | | 66.7 |
| #200 | 61.2 | | | 63.1 |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 16 LL= 22 PI= 6

**Coefficients**

$D_{90}$= 0.7389 $D_{85}$= 0.3991 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-16, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

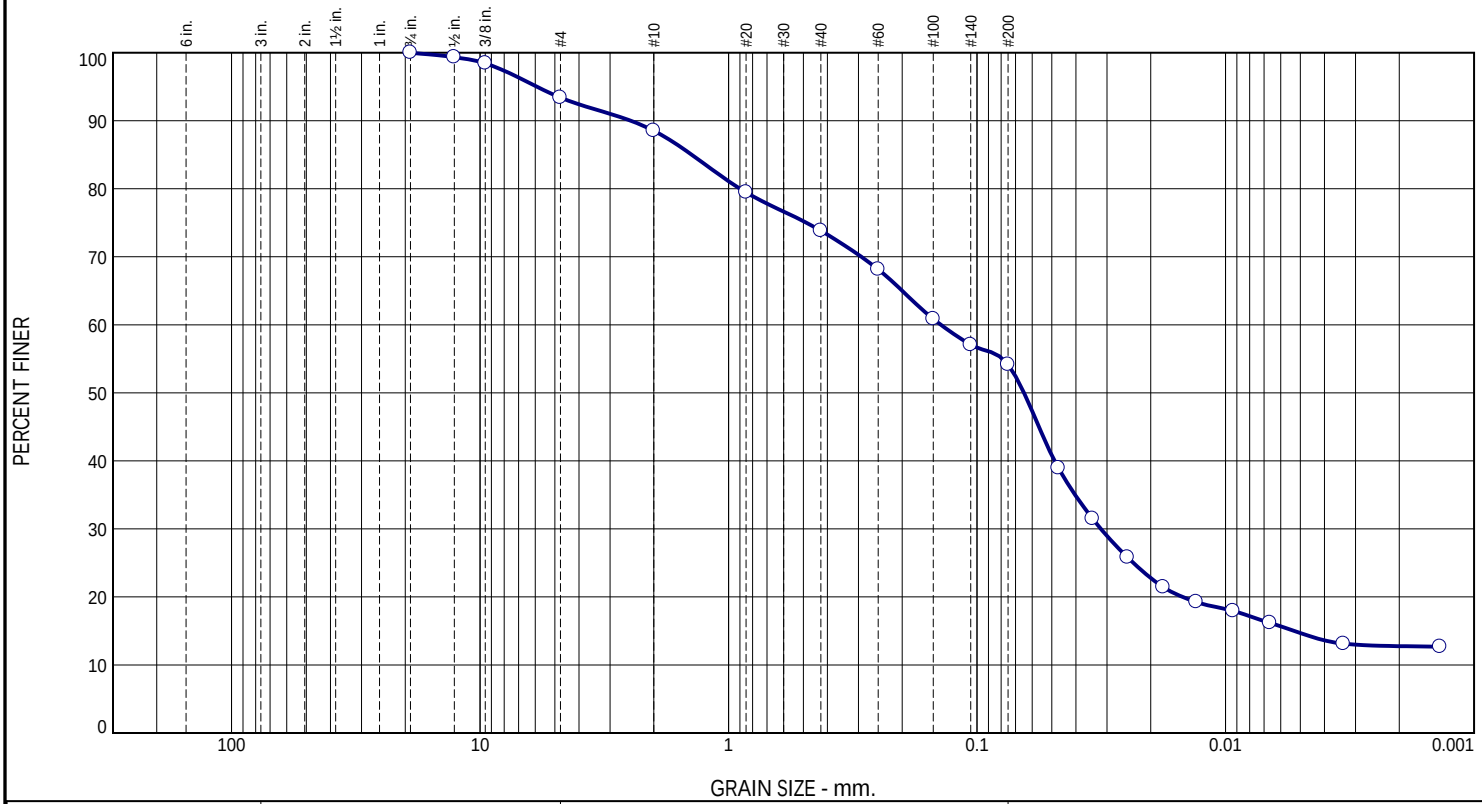
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 6.6 | 4.9 | 14.7 | 19.7 | 41.3 | 12.8 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.3 | | | |
| 0.375" | 98.4 | | | |
| #4 | 93.4 | | | |
| #10 | 88.5 | | | |
| #20 | 79.5 | | | 89.8 |
| #40 | 73.8 | | | 83.4 |
| #60 | 68.1 | | | 77.0 |
| #100 | 60.9 | | | 68.7 |
| #140 | 57.1 | | | 64.5 |
| #200 | 54.1 | | | 61.2 |
| 0.0471 mm. | 38.9 | | | |
| 0.0343 mm. | 31.5 | | | |
| 0.0248 mm. | 25.8 | | | |
| 0.0178 mm. | 21.4 | | | |
| 0.0131 mm. | 19.2 | | | |
| 0.0093 mm. | 17.9 | | | |
| 0.0066 mm. | 16.2 | | | |
| 0.0033 mm. | 13.1 | | | |
| 0.0014 mm. | 12.7 | | | |

* (no specification provided)

**Material Description**

Dark Brown sandy silty clay

**Atterberg Limits**

PL= 17 LL= 22 PI= 5

**Coefficients**

$D_{90}$= 2.4765 $D_{85}$= 1.4072 $D_{60}$= 0.1399
$D_{50}$= 0.0647 $D_{30}$= 0.0318 $D_{15}$= 0.0053
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: PV-21, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

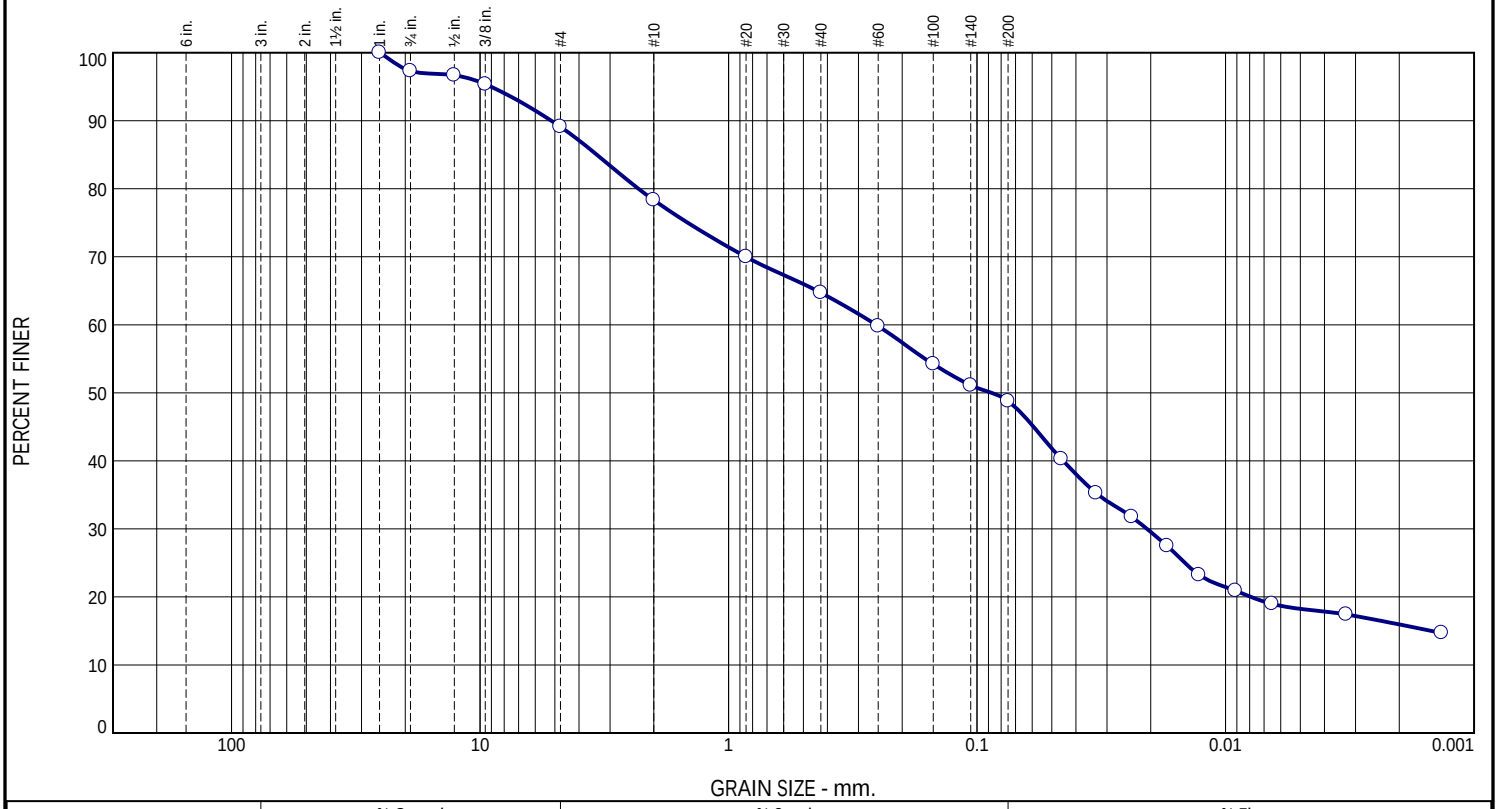
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 2.7 | 8.2 | 10.8 | 13.6 | 15.9 | 32.8 | 16.0 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 97.3 | | | |
| 0.5" | 96.7 | | | |
| 0.375" | 95.4 | | | |
| #4 | 89.1 | | | |
| #10 | 78.3 | | | |
| #20 | 70.0 | | | 89.3 |
| #40 | 64.7 | | | 82.6 |
| #60 | 59.8 | | | 76.4 |
| #100 | 54.2 | | | 69.2 |
| #140 | 51.1 | | | 65.2 |
| #200 | 48.8 | | | 62.3 |
| 0.0458 mm. | 40.3 | | | |
| 0.0332 mm. | 35.2 | | | |
| 0.0238 mm. | 31.7 | | | |
| 0.0172 mm. | 27.5 | | | |
| 0.0128 mm. | 23.2 | | | |
| 0.0091 mm. | 20.9 | | | |
| 0.0065 mm. | 19.0 | | | |
| 0.0033 mm. | 17.4 | | | |
| 0.0014 mm. | 14.7 | | | |

* (no specification provided)

**Material Description**

Light Brown silty, clayey sand

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 5.1704 $D_{85}$= 3.3869 $D_{60}$= 0.2547
$D_{50}$= 0.0871 $D_{30}$= 0.0207 $D_{15}$= 0.0015
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(1)

**Test Remarks**

SG Assumed

Sample Number: PV-24, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

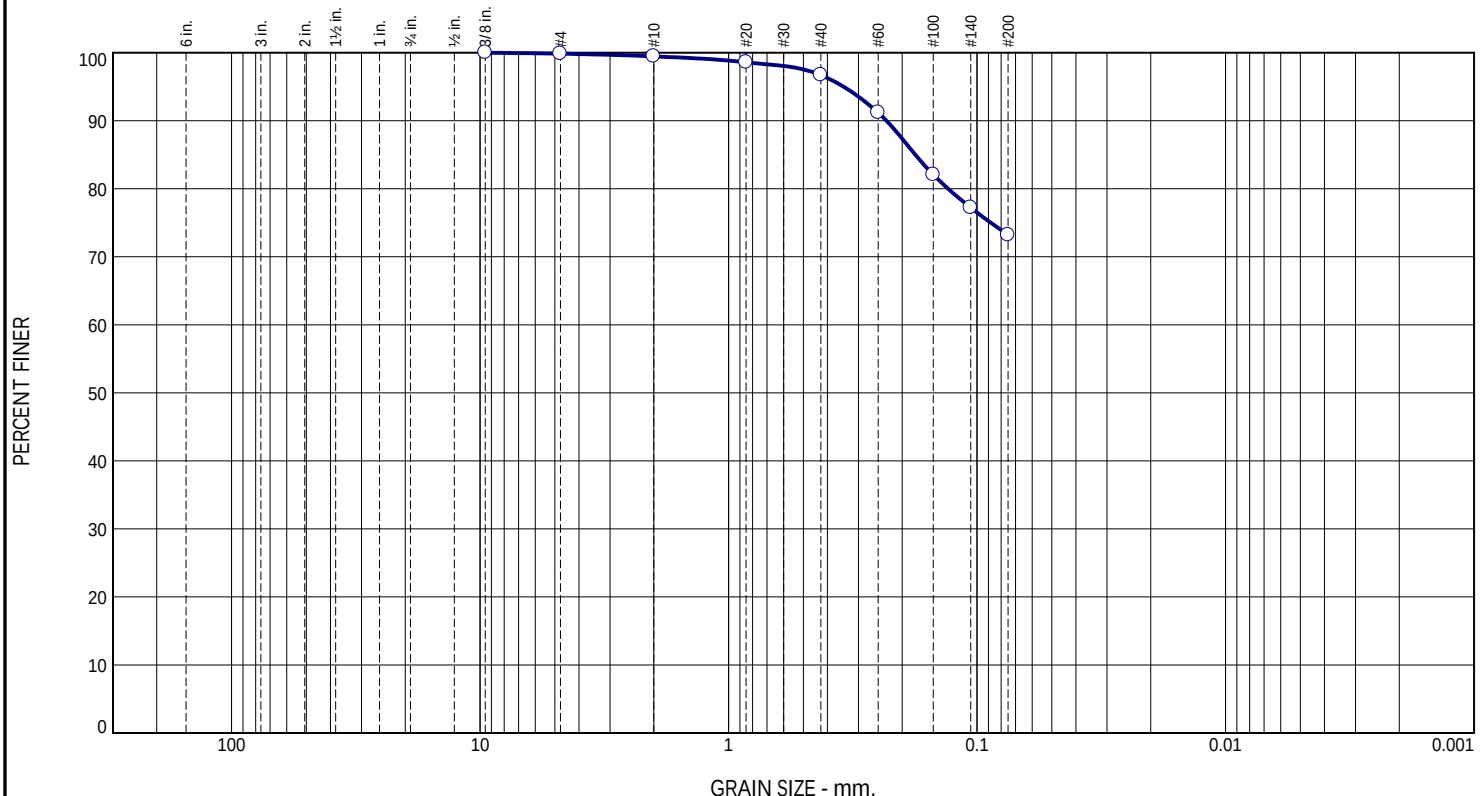
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.4 | 2.8 | 23.5 | 73.2 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.5 | | | |
| #20 | 98.6 | | | 99.1 |
| #40 | 96.7 | | | 97.2 |
| #60 | 91.2 | | | 91.7 |
| #100 | 82.1 | | | 82.5 |
| #140 | 77.2 | | | 77.6 |
| #200 | 73.2 | | | 73.6 |

* (no specification provided)

**Material Description**

Brown silty clay with sand

**Atterberg Limits**

PL= 18 LL= 23 PI= 5

**Coefficients**

$D_{90}$= 0.2315 $D_{85}$= 0.1770 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-26, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

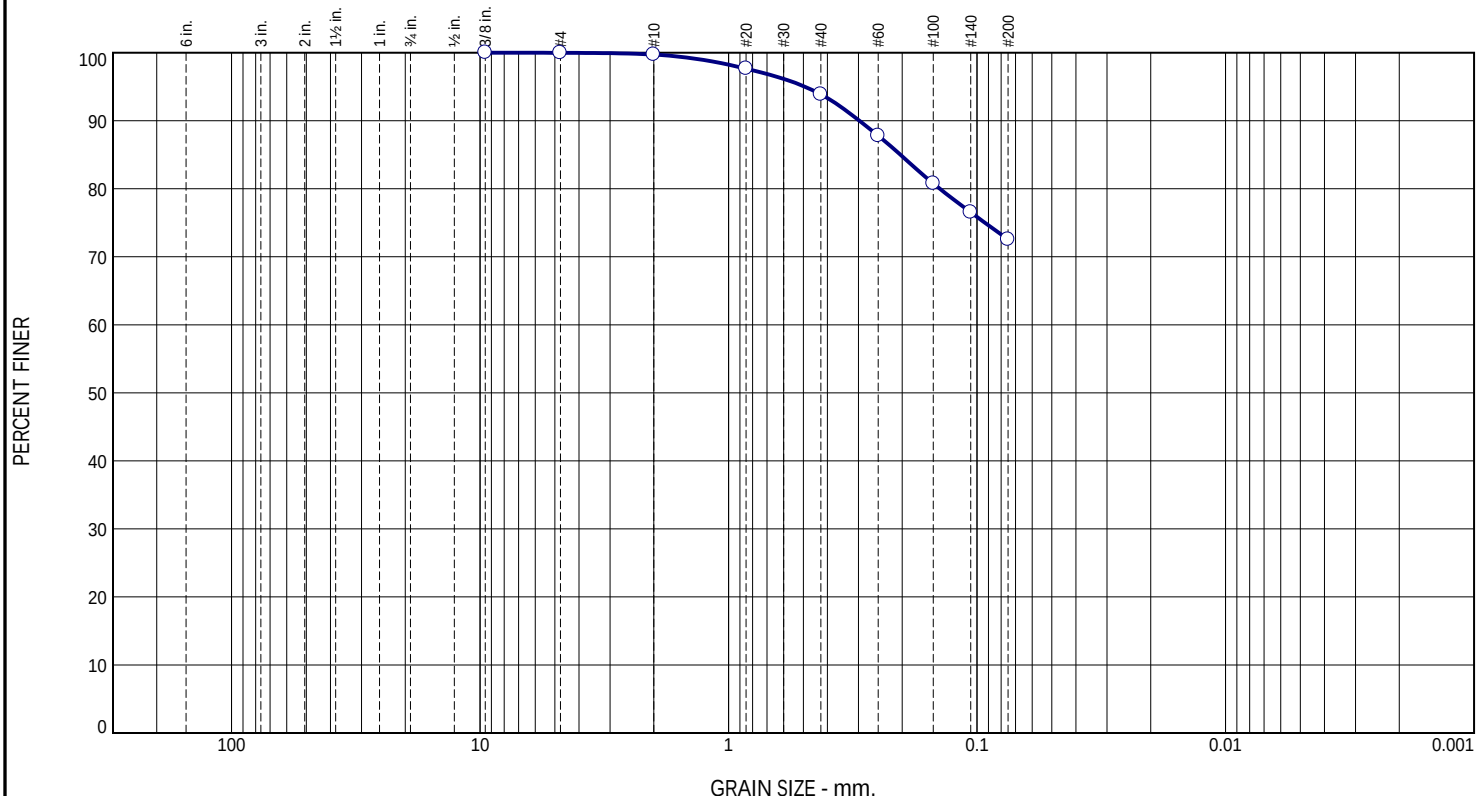
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.3 | 5.8 | 21.4 | 72.5 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 100.0 | | | |
| #10 | 99.7 | | | |
| #20 | 97.6 | | | 97.9 |
| #40 | 93.9 | | | 94.1 |
| #60 | 87.8 | | | 88.0 |
| #100 | 80.8 | | | 81.0 |
| #140 | 76.5 | | | 76.8 |
| #200 | 72.5 | | | 72.7 |

* (no specification provided)

Material Description

Brown silty clay with sand

Atterberg Limits

PL= 22 LL= 28 PI= 6

Coefficients

$D_{90}$= 0.2976 $D_{85}$= 0.2033 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(3)

Test Remarks

Sample Number: PV-29, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

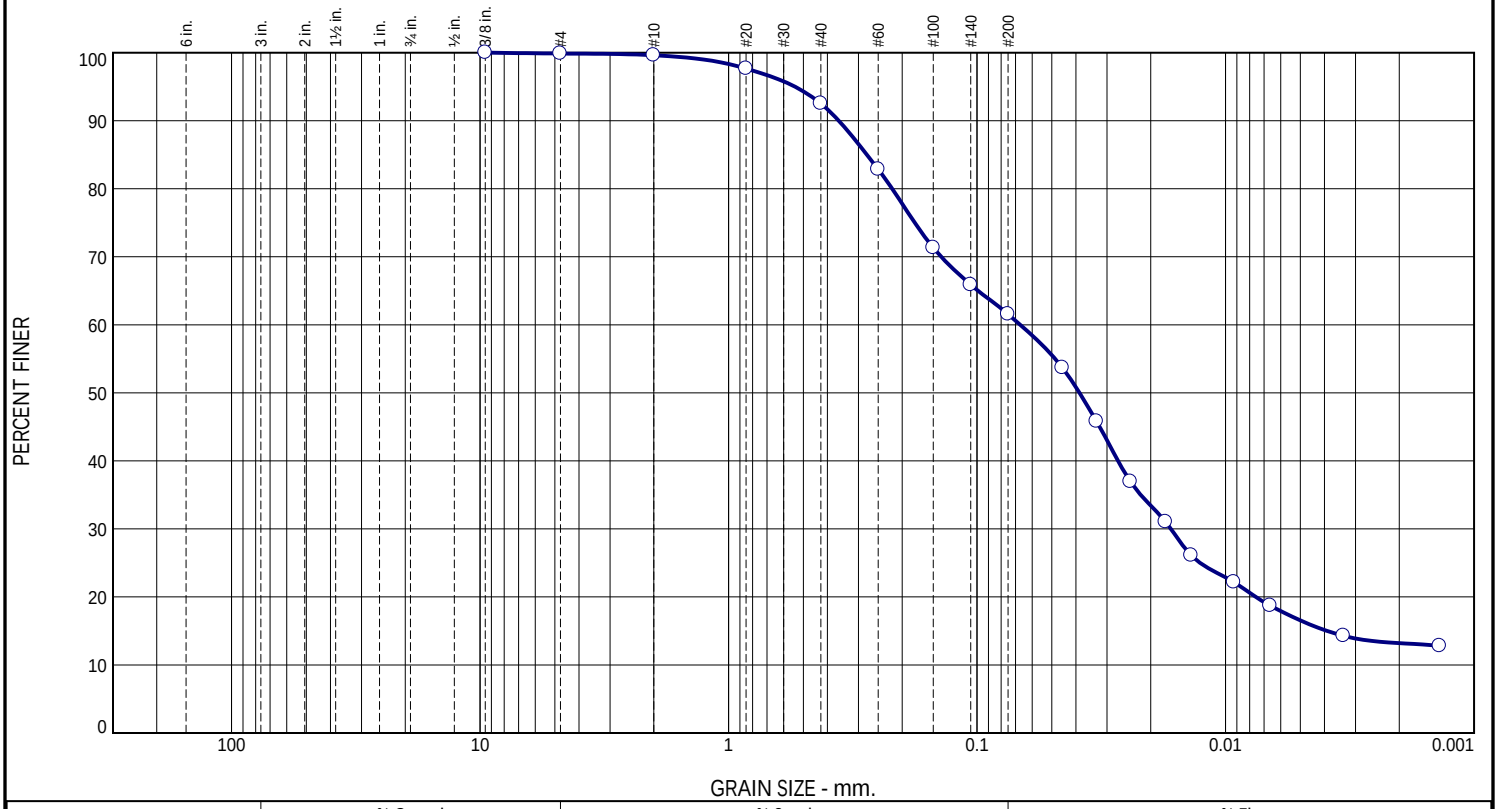
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.3 | 7.1 | 30.9 | 48.4 | 13.2 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.6 | | | |
| #20 | 97.7 | | | 98.0 |
| #40 | 92.5 | | | 92.9 |
| #60 | 82.8 | | | 83.2 |
| #100 | 71.3 | | | 71.6 |
| #140 | 65.9 | | | 66.1 |
| #200 | 61.6 | | | 61.8 |
| 0.0453 mm. | 53.7 | | | |
| 0.0331 mm. | 45.8 | | | |
| 0.0241 mm. | 36.9 | | | |
| 0.0174 mm. | 31.0 | | | |
| 0.0138 mm. | 26.1 | | | |
| 0.0093 mm. | 22.2 | | | |
| 0.0066 mm. | 18.7 | | | |
| 0.0034 mm. | 14.3 | | | |
| 0.0014 mm. | 12.8 | | | |

* (no specification provided)

**Material Description**

Light Brown sandy silty clay

**Atterberg Limits**

PL= 19 LL= 24 PI= 5

**Coefficients**

$D_{90}$= 0.3600 $D_{85}$= 0.2777 $D_{60}$= 0.0670
$D_{50}$= 0.0387 $D_{30}$= 0.0166 $D_{15}$= 0.0039
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

SG Assumed

Sample Number: PV-34, TRT/CBR Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: TetraTech

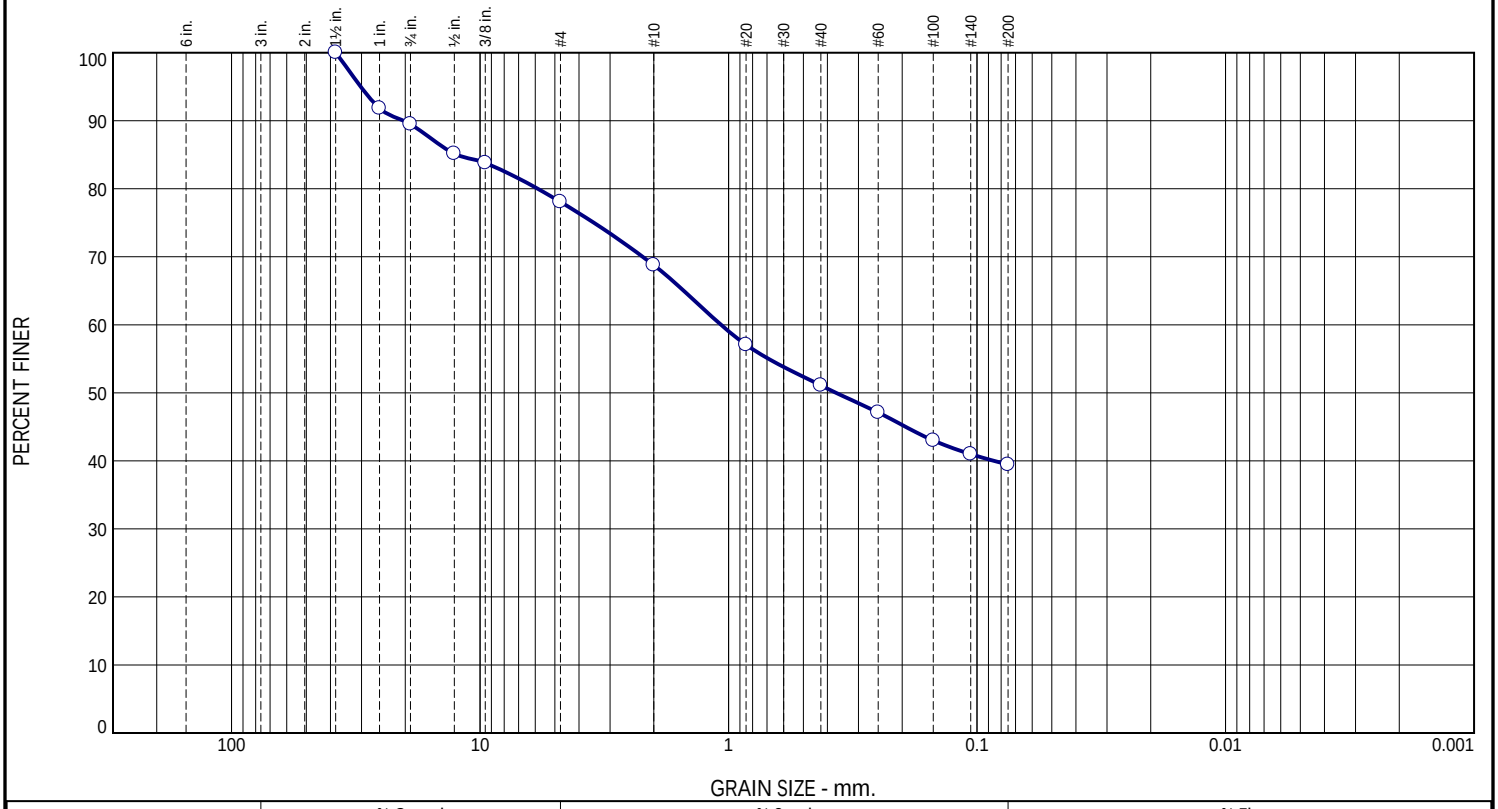
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 10.5 | 11.4 | 9.3 | 17.7 | 11.7 | 39.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 91.8 | | | |
| 0.75" | 89.5 | | | |
| 0.5" | 85.2 | | | |
| 0.375" | 83.8 | | | |
| #4 | 78.1 | | | |
| #10 | 68.8 | | | |
| #20 | 57.1 | | | 83.0 |
| #40 | 51.1 | | | 74.3 |
| #60 | 47.1 | | | 68.5 |
| #100 | 43.0 | | | 62.5 |
| #140 | 41.0 | | | 59.6 |
| #200 | 39.4 | | | 57.3 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 22 LL= 28 PI= 6

**Coefficients**

$D_{90}$= 20.3191 $D_{85}$= 12.4228 $D_{60}$= 1.0723
$D_{50}$= 0.3690 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-36, TRT Depth: 0.5'-2'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

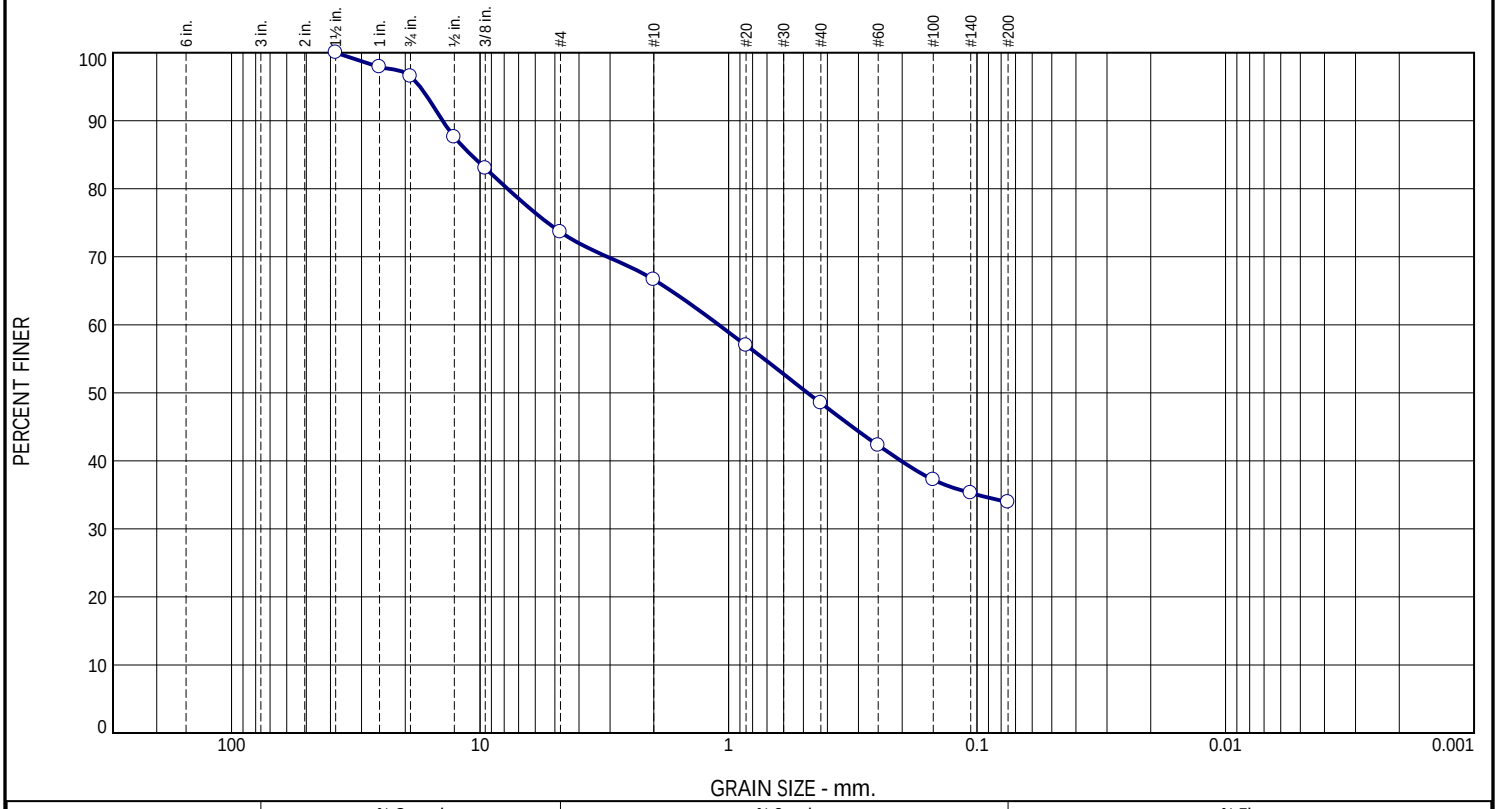
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 3.5 | 22.9 | 7.0 | 18.1 | 14.6 | 33.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 97.9 | | | |
| 0.75" | 96.5 | | | |
| 0.5" | 87.6 | | | |
| 0.375" | 83.0 | | | |
| #4 | 73.6 | | | |
| #10 | 66.6 | | | |
| #20 | 57.0 | | | 85.5 |
| #40 | 48.5 | | | 72.8 |
| #60 | 42.3 | | | 63.5 |
| #100 | 37.2 | | | 55.8 |
| #140 | 35.3 | | | 52.9 |
| #200 | 33.9 | | | 50.9 |

* (no specification provided)

**Material Description**

Dark Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 22 LL= 28 PI= 6

**Coefficients**

$D_{90}$= 14.1549 $D_{85}$= 10.8858 $D_{60}$= 1.0961
$D_{50}$= 0.4810 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-2-4(0)

**Test Remarks**

Sample Number: PV-40, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

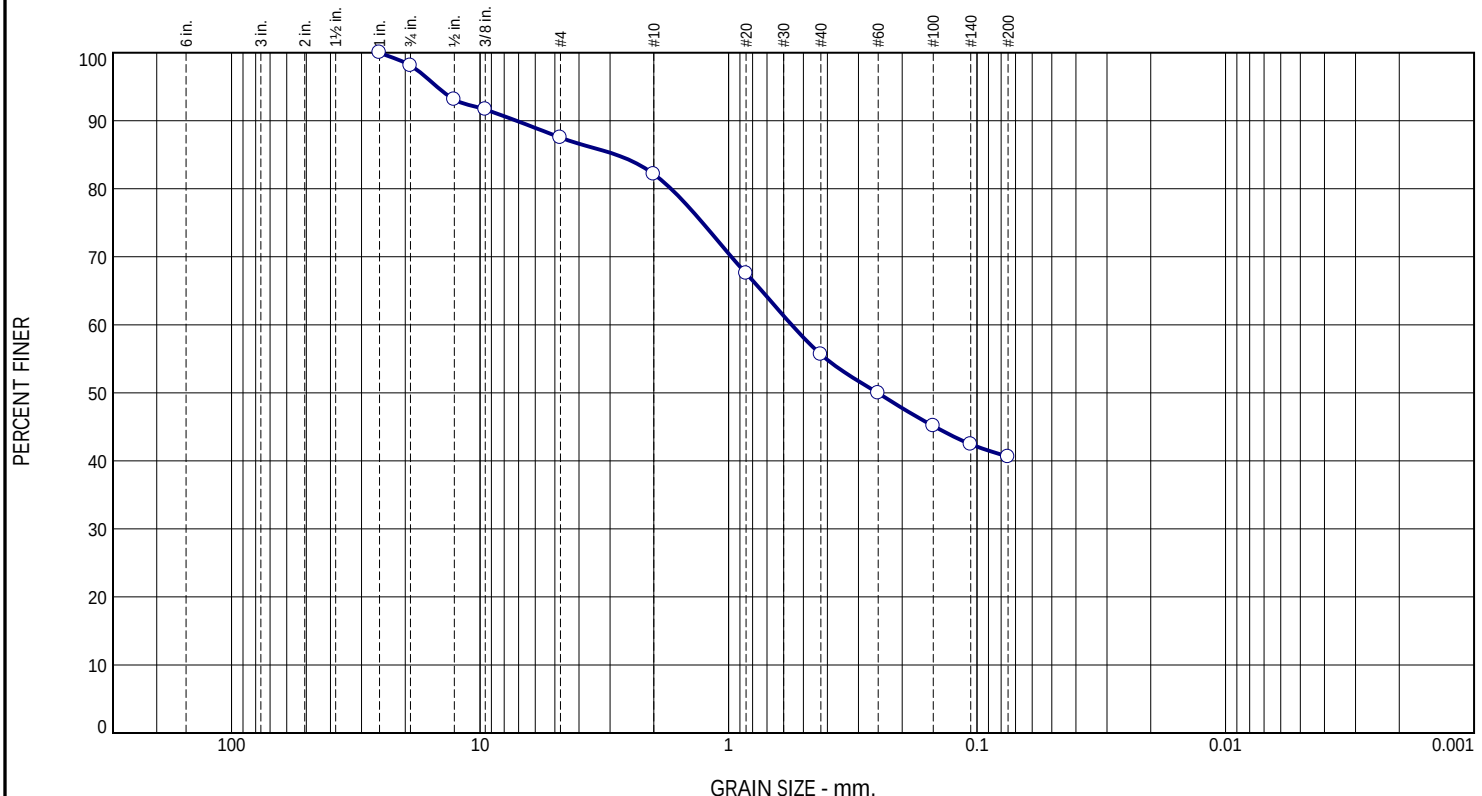
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 1.9 | 10.6 | 5.3 | 26.5 | 15.1 | 40.6 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 98.1 | | | |
| 0.5" | 93.1 | | | |
| 0.375" | 91.7 | | | |
| #4 | 87.5 | | | |
| #10 | 82.2 | | | |
| #20 | 67.6 | | | 82.2 |
| #40 | 55.7 | | | 67.7 |
| #60 | 49.9 | | | 60.8 |
| #100 | 45.1 | | | 54.9 |
| #140 | 42.4 | | | 51.7 |
| #200 | 40.6 | | | 49.4 |

* (no specification provided)

**Material Description**

Brown clayey sand

**Atterberg Limits**

PL= 21 LL= 31 PI= 10

**Coefficients**

$D_{90}$= 7.1493 $D_{85}$= 2.8330 $D_{60}$= 0.5576
$D_{50}$= 0.2513 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-043, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

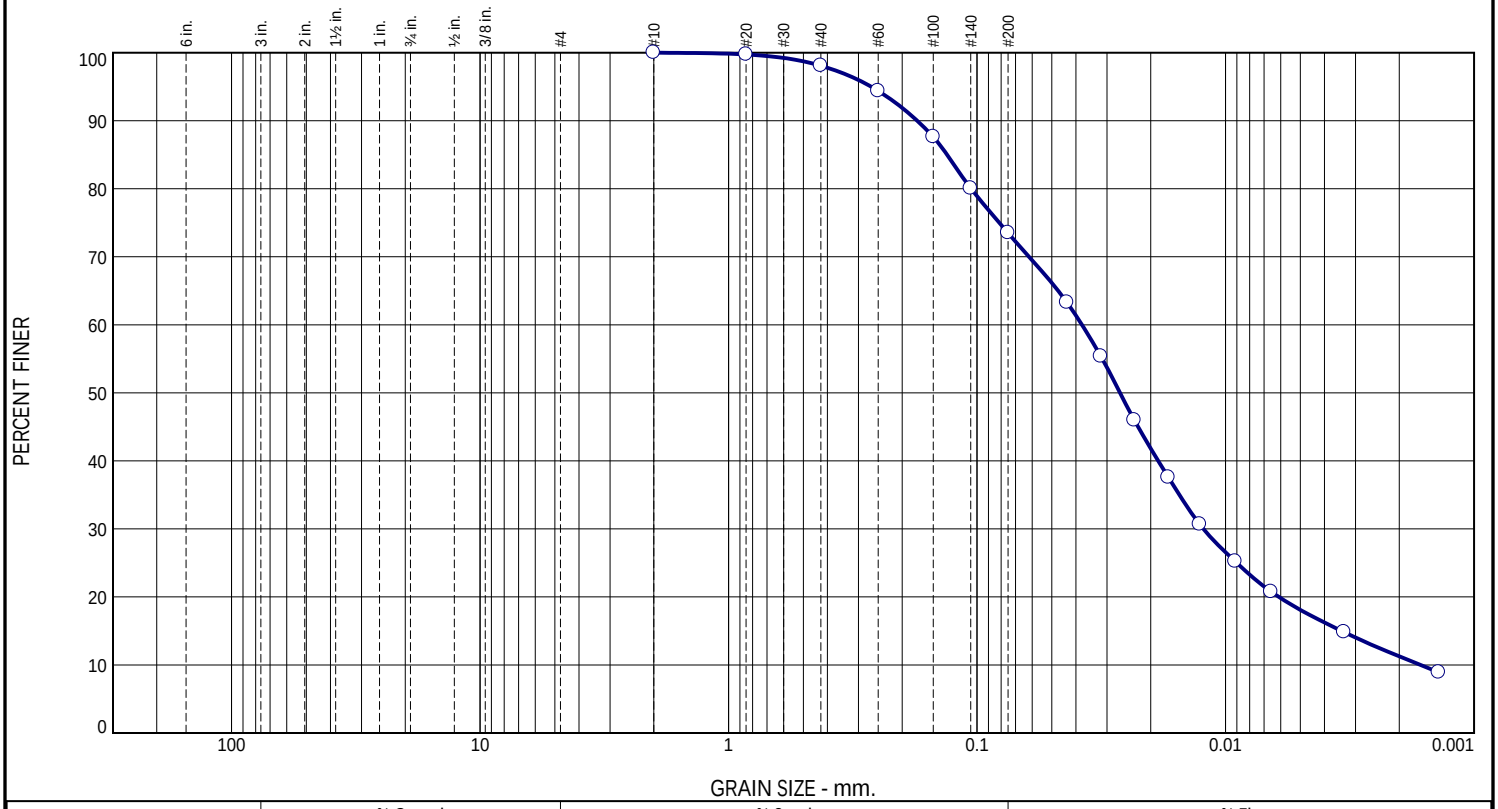
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 24.6 | 62.2 | 11.3 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| #10 | 100.0 | | | |
| #20 | 99.7 | | | 99.7 |
| #40 | 98.1 | | | 98.1 |
| #60 | 94.4 | | | 94.4 |
| #100 | 87.6 | | | 87.6 |
| #140 | 80.1 | | | 80.1 |
| #200 | 73.5 | | | 73.5 |
| 0.0434 mm. | 63.3 | | | |
| 0.0317 mm. | 55.4 | | | |
| 0.0233 mm. | 46.0 | | | |
| 0.0170 mm. | 37.6 | | | |
| 0.0127 mm. | 30.7 | | | |
| 0.0091 mm. | 25.2 | | | |
| 0.0066 mm. | 20.8 | | | |
| 0.0033 mm. | 14.8 | | | |
| 0.0014 mm. | 8.9 | | | |

* (no specification provided)

**Material Description**

Brown silty clay with sand

**Atterberg Limits**

PL= 20 LL= 26 PI= 6

**Coefficients**

$D_{90}$= 0.1740 $D_{85}$= 0.1319 $D_{60}$= 0.0378
$D_{50}$= 0.0266 $D_{30}$= 0.0123 $D_{15}$= 0.0034
$D_{10}$= 0.0016 $C_u$= 23.06 $C_c$= 2.43

**Classification**

USCS= CL-ML AASHTO= A-4(3)

**Test Remarks**

SG Assumed

Sample Number: PV-045, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

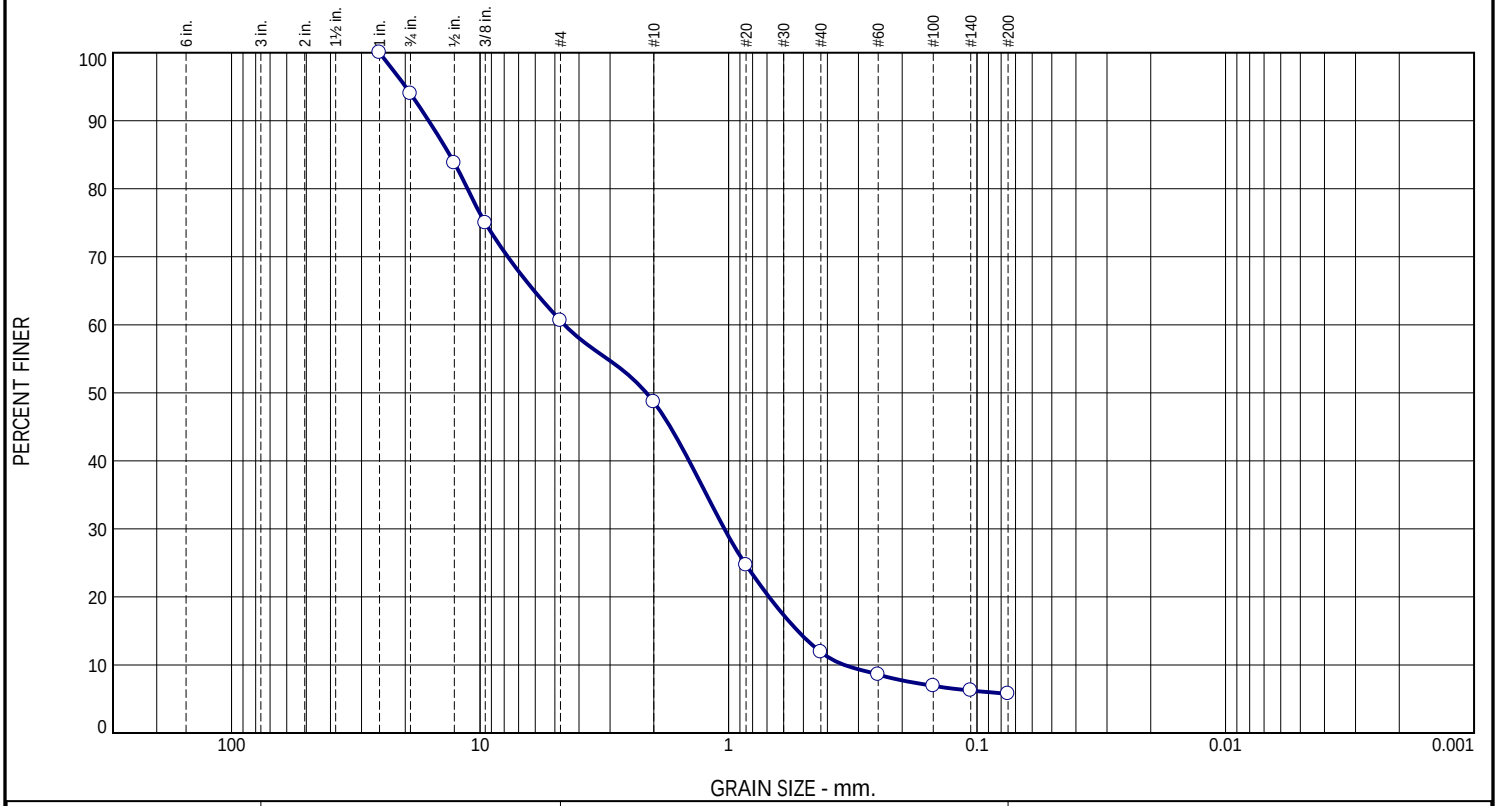
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 6.0 | 33.4 | 11.9 | 36.8 | 6.1 | 5.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 94.0 | | | |
| 0.5" | 83.8 | | | |
| 0.375" | 75.0 | | | |
| #4 | 60.6 | | | |
| #10 | 48.7 | | | |
| #20 | 24.7 | | | 50.7 |
| #40 | 11.9 | | | 24.4 |
| #60 | 8.6 | | | 17.6 |
| #100 | 6.9 | | | 14.2 |
| #140 | 6.2 | | | 12.8 |
| #200 | 5.8 | | | 11.8 |

* (no specification provided)

**Material Description**

Dark Brown poorly graded sand with silty clay and gravel

**Atterberg Limits**

PL= 19 LL= 24 PI= 5

**Coefficients**

$D_{90}$= 16.1032 $D_{85}$= 13.2632 $D_{60}$= 4.5794
$D_{50}$= 2.1425 $D_{30}$= 1.0389 $D_{15}$= 0.5265
$D_{10}$= 0.3423 $C_u$= 13.38 $C_c$= 0.69

**Classification**

USCS= SP-SC AASHTO= A-1-a

**Test Remarks**

Sample Number: PV-47, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

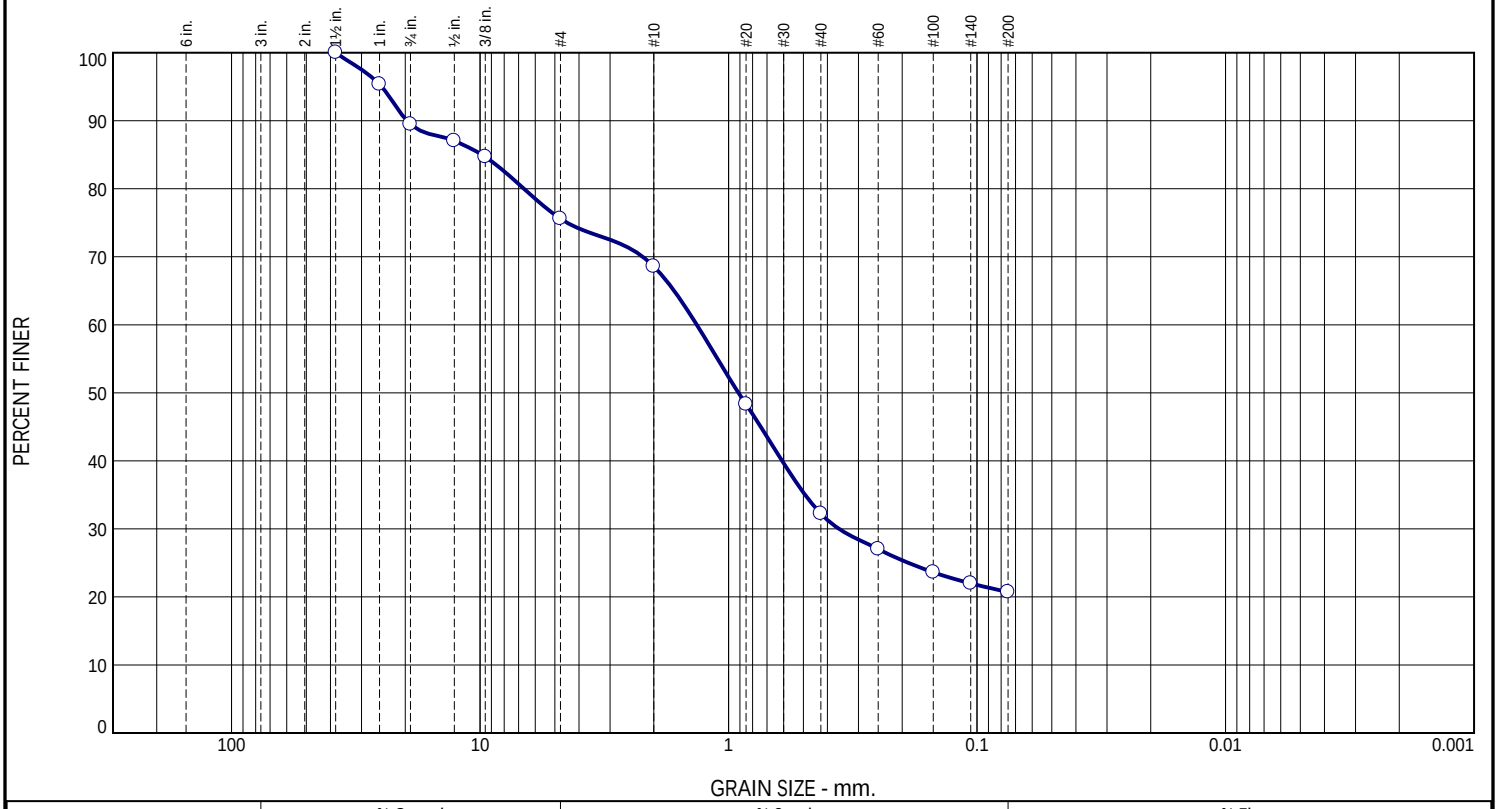
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 10.5 | 13.9 | 7.0 | 36.4 | 11.5 | 20.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 95.4 | | | |
| 0.75" | 89.5 | | | |
| 0.5" | 87.0 | | | |
| 0.375" | 84.7 | | | |
| #4 | 75.6 | | | |
| #10 | 68.6 | | | |
| #20 | 48.3 | | | 70.4 |
| #40 | 32.2 | | | 47.0 |
| #60 | 27.0 | | | 39.4 |
| #100 | 23.6 | | | 34.4 |
| #140 | 22.0 | | | 32.1 |
| #200 | 20.7 | | | 30.2 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 21 LL= 26 PI= 5

**Coefficients**

$D_{90}$= 19.7240 $D_{85}$= 9.8206 $D_{60}$= 1.3427
$D_{50}$= 0.9119 $D_{30}$= 0.3591 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-1-b

**Test Remarks**

Sample Number: PV-49, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

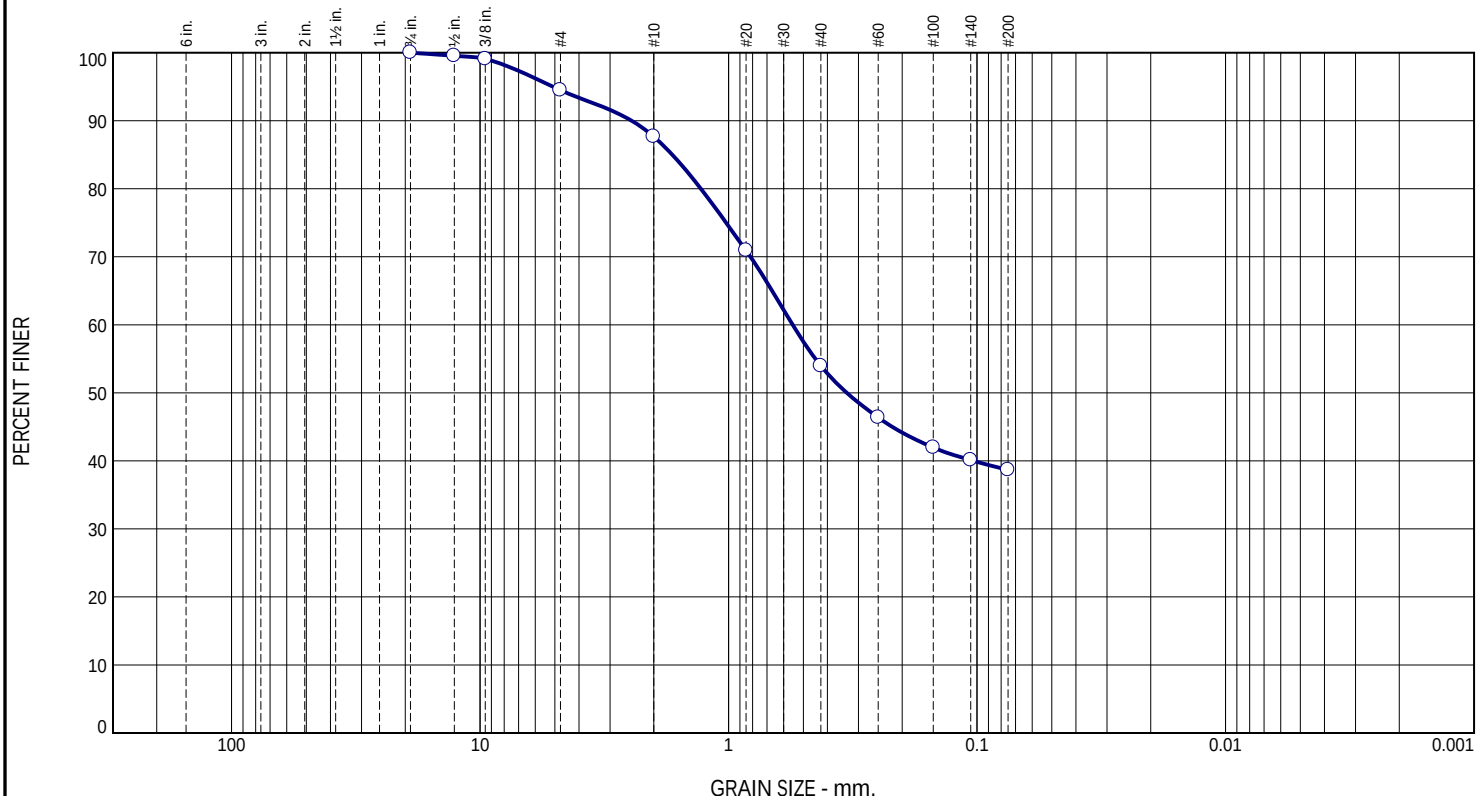
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: DS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 5.5 | 6.8 | 33.7 | 15.3 | 38.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.5 | | | |
| 0.375" | 99.1 | | | |
| #4 | 94.5 | | | |
| #10 | 87.7 | | | |
| #20 | 70.9 | | | 80.9 |
| #40 | 54.0 | | | 61.6 |
| #60 | 46.4 | | | 52.9 |
| #100 | 42.0 | | | 47.9 |
| #140 | 40.1 | | | 45.8 |
| #200 | 38.7 | | | 44.1 |

* (no specification provided)

**Material Description**

Grayish Brown silty, clayey sand

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 2.4542 $D_{85}$= 1.6836 $D_{60}$= 0.5521
$D_{50}$= 0.3344 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-52, TRT Depth: 2'-5'

Sample Date: 10/21/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

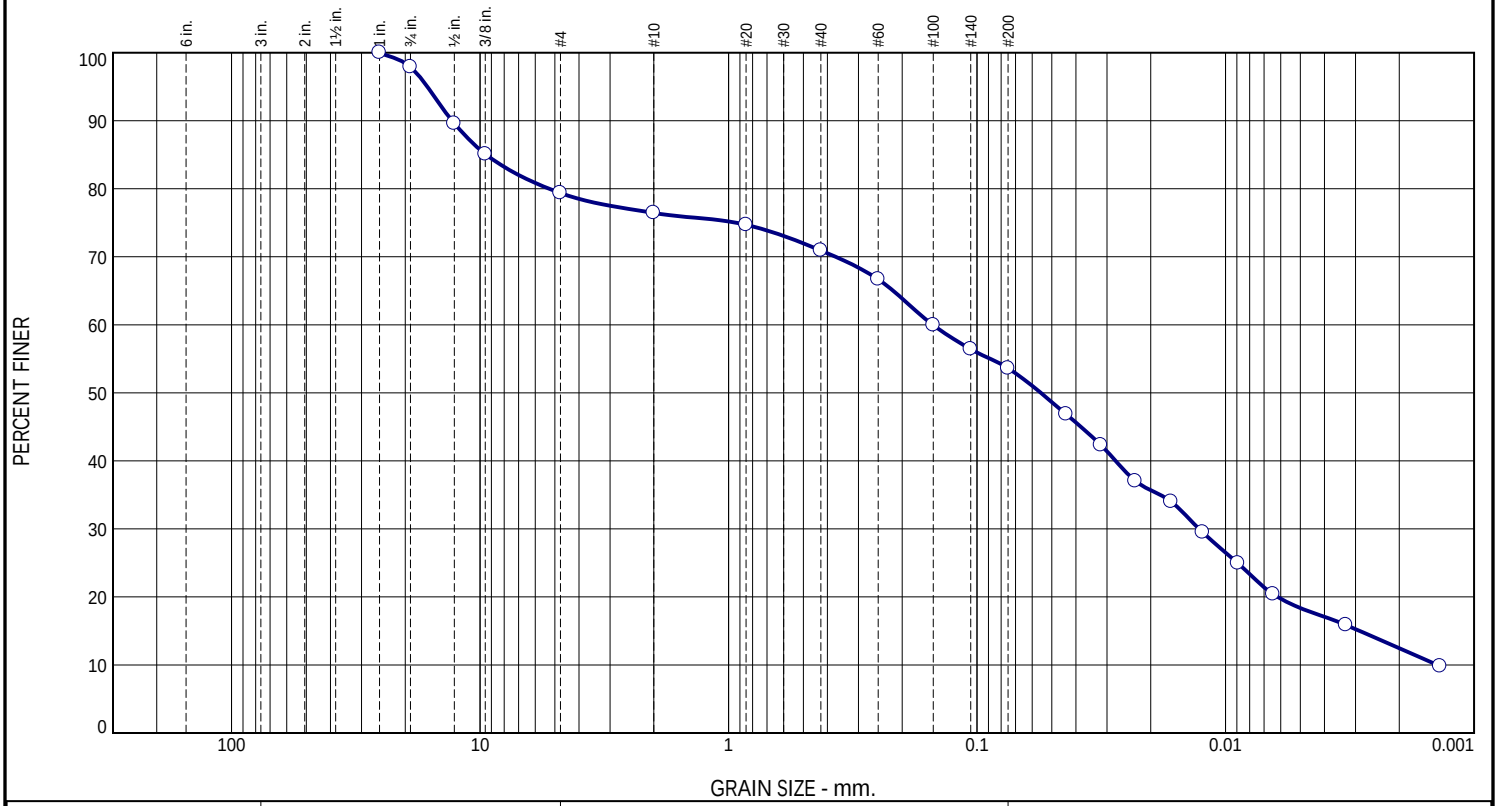
Client: TetraTech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-570 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 2.1 | 18.5 | 3.0 | 5.5 | 17.3 | 41.1 | 12.5 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 97.9 | | | |
| 0.5" | 89.6 | | | |
| 0.375" | 85.1 | | | |
| #4 | 79.4 | | | |
| #10 | 76.4 | | | |
| #20 | 74.7 | | | 97.7 |
| #40 | 70.9 | | | 92.8 |
| #60 | 66.7 | | | 87.2 |
| #100 | 59.9 | | | 78.4 |
| #140 | 56.4 | | | 73.8 |
| #200 | 53.6 | | | 70.1 |
| 0.0438 mm. | 46.8 | | | |
| 0.0317 mm. | 42.3 | | | |
| 0.0231 mm. | 37.0 | | | |
| 0.0166 mm. | 34.0 | | | |
| 0.0124 mm. | 29.5 | | | |
| 0.0089 mm. | 24.9 | | | |
| 0.0064 mm. | 20.4 | | | |
| 0.0033 mm. | 15.9 | | | |
| 0.0014 mm. | 9.8 | | | |

* (no specification provided)

**Material Description**

Light Brown sandy silt with gravel

**Atterberg Limits**

PL= 26 LL= 36 PI= 10

**Coefficients**

$D_{90}$= 12.9750 $D_{85}$= 9.4498 $D_{60}$= 0.1507
$D_{50}$= 0.0554 $D_{30}$= 0.0128 $D_{15}$= 0.0029
$D_{10}$= 0.0014 $C_u$= 107.20 $C_c$= 0.77

**Classification**

USCS= ML AASHTO= A-4(3)

**Test Remarks**

SG Assumed

Sample Number: PV-058, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

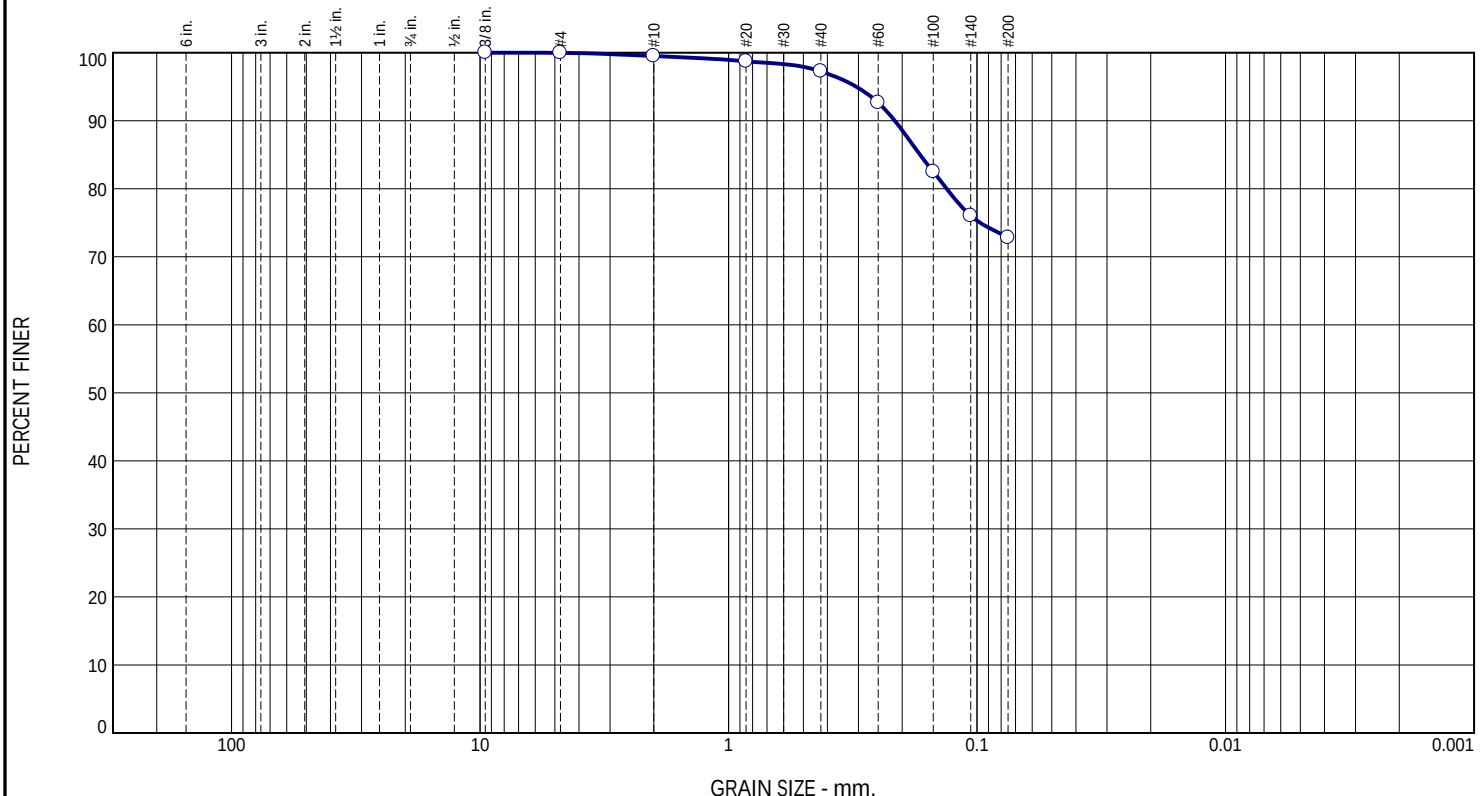
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.5 | 2.2 | 24.5 | 72.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 100.0 | | | |
| #10 | 99.5 | | | |
| #20 | 98.7 | | | 99.2 |
| #40 | 97.3 | | | 97.7 |
| #60 | 92.7 | | | 93.1 |
| #100 | 82.5 | | | 82.9 |
| #140 | 76.0 | | | 76.4 |
| #200 | 72.8 | | | 73.2 |

* (no specification provided)

Material Description

Light Brown silty clay with sand

Atterberg Limits

PL= 18 LL= 24 PI= 6

Coefficients

$D_{90}$= 0.2144 $D_{85}$= 0.1695 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(2)

Test Remarks

Sample Number: PV-064, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

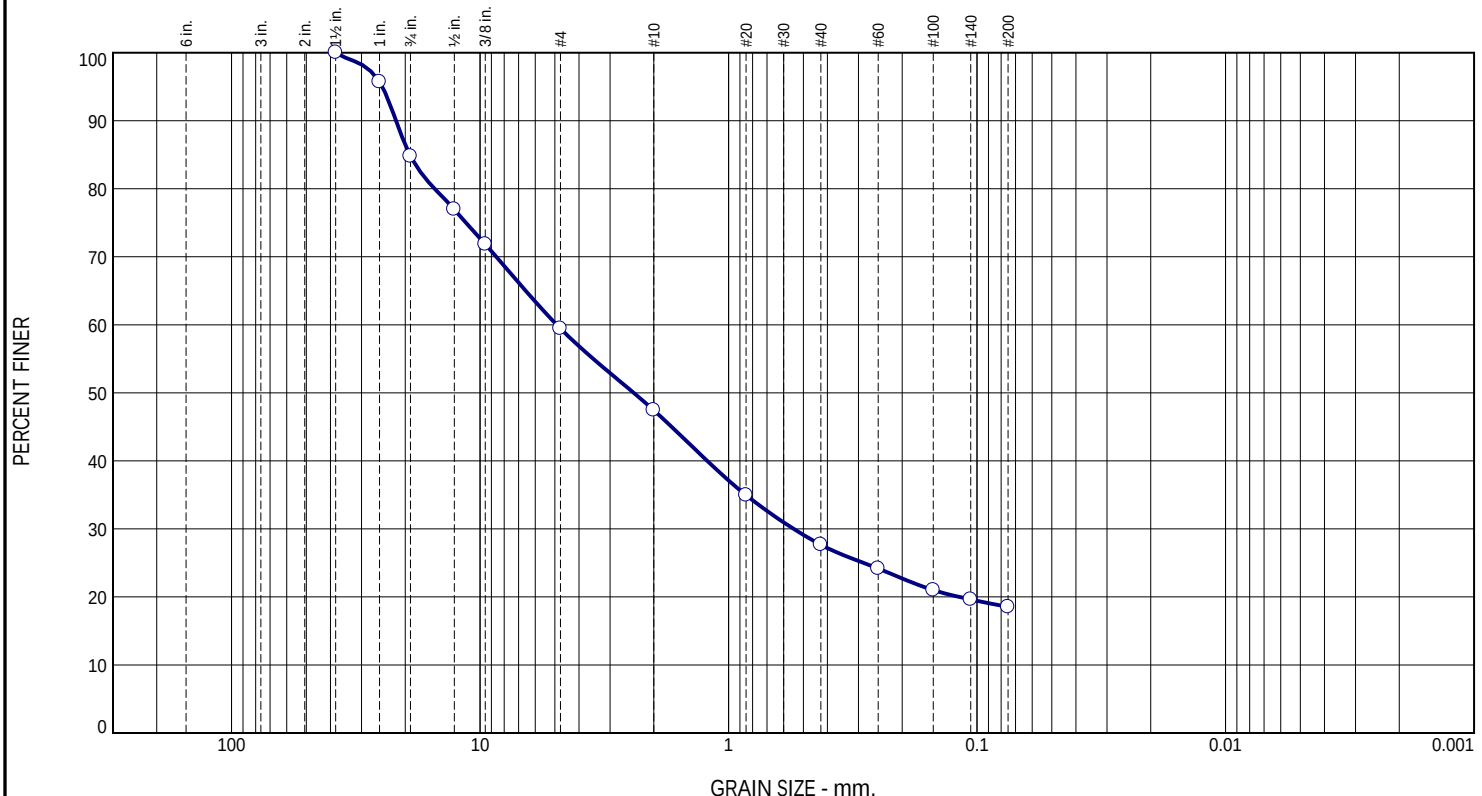
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 15.2 | 25.3 | 12.1 | 19.7 | 9.2 | 18.5 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 95.7 | | | |
| 0.75" | 84.8 | | | |
| 0.5" | 77.0 | | | |
| 0.375" | 71.8 | | | |
| #4 | 59.5 | | | |
| #10 | 47.4 | | | |
| #20 | 35.0 | | | 73.7 |
| #40 | 27.7 | | | 58.3 |
| #60 | 24.2 | | | 51.0 |
| #100 | 21.0 | | | 44.3 |
| #140 | 19.6 | | | 41.4 |
| #200 | 18.5 | | | 39.0 |

* (no specification provided)

**Material Description**

Brown silty sand with gravel

**Atterberg Limits**

PL= 27 LL= 42 PI= 15

**Coefficients**

$D_{90}$= 21.7978 $D_{85}$= 19.1983 $D_{60}$= 4.9128
$D_{50}$= 2.4092 $D_{30}$= 0.5466 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SM AASHTO= A-2-7(0)

**Test Remarks**

Sample Number: PV-068, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

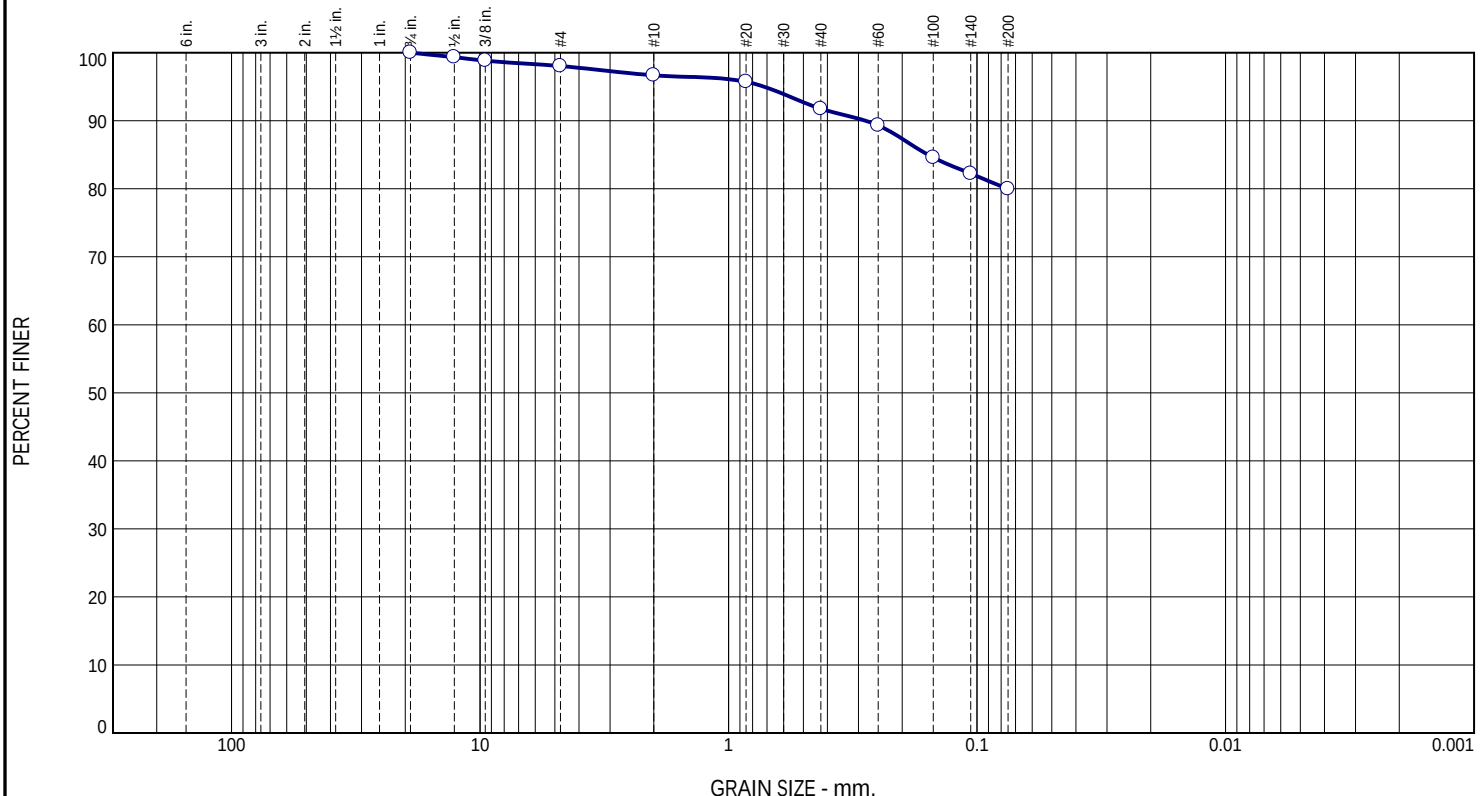
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 2.0 | 1.3 | 4.9 | 11.8 | 80.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.3 | | | |
| 0.375" | 98.8 | | | |
| #4 | 98.0 | | | |
| #10 | 96.7 | | | |
| #20 | 95.7 | | | 99.0 |
| #40 | 91.8 | | | 94.9 |
| #60 | 89.3 | | | 92.4 |
| #100 | 84.6 | | | 87.5 |
| #140 | 82.2 | | | 85.1 |
| #200 | 80.0 | | | 82.7 |

* (no specification provided)

Material Description

Light Brown silty clay with sand

Atterberg Limits

PL= 20 LL= 26 PI= 6

Coefficients

$D_{90}$= 0.2811 $D_{85}$= 0.1575 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(3)

Test Remarks

Sample Number: PV-071, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

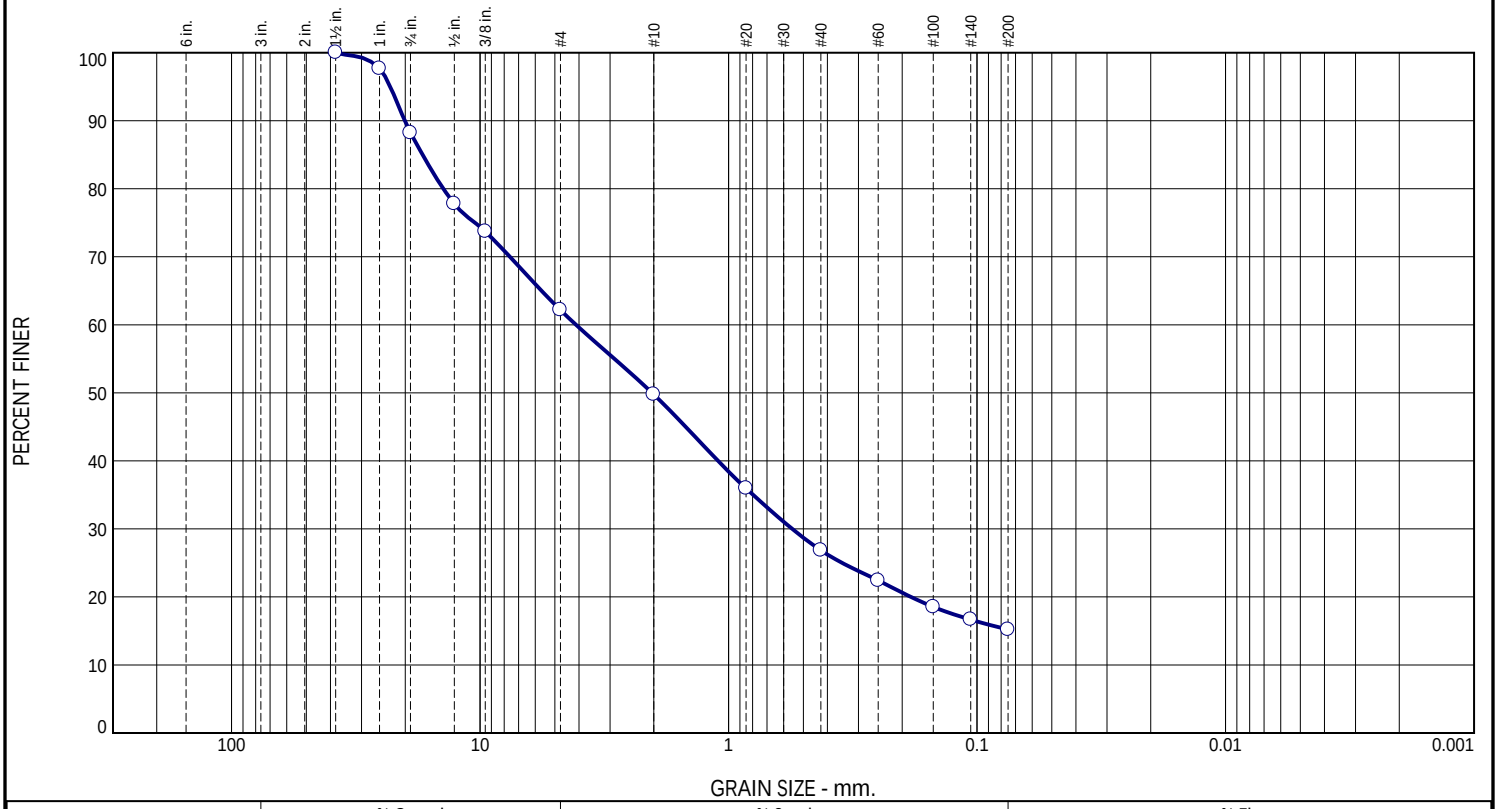
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 11.8 | 26.0 | 12.4 | 23.0 | 11.6 | 15.2 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 97.7 | | | |
| 0.75" | 88.2 | | | |
| 0.5" | 77.8 | | | |
| 0.375" | 73.7 | | | |
| #4 | 62.2 | | | |
| #10 | 49.8 | | | |
| #20 | 35.9 | | | 72.2 |
| #40 | 26.8 | | | 54.0 |
| #60 | 22.4 | | | 45.0 |
| #100 | 18.5 | | | 37.2 |
| #140 | 16.7 | | | 33.5 |
| #200 | 15.2 | | | 30.5 |

* (no specification provided)

**Material Description**

Dark Brown clayey sand with gravel

**Atterberg Limits**

PL= 22 LL= 37 PI= 15

**Coefficients**

$D_{90}$= 20.1098 $D_{85}$= 17.0392 $D_{60}$= 4.1091
$D_{50}$= 2.0320 $D_{30}$= 0.5543 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC AASHTO= A-2-6(0)

**Test Remarks**

Sample Number: PV-074, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

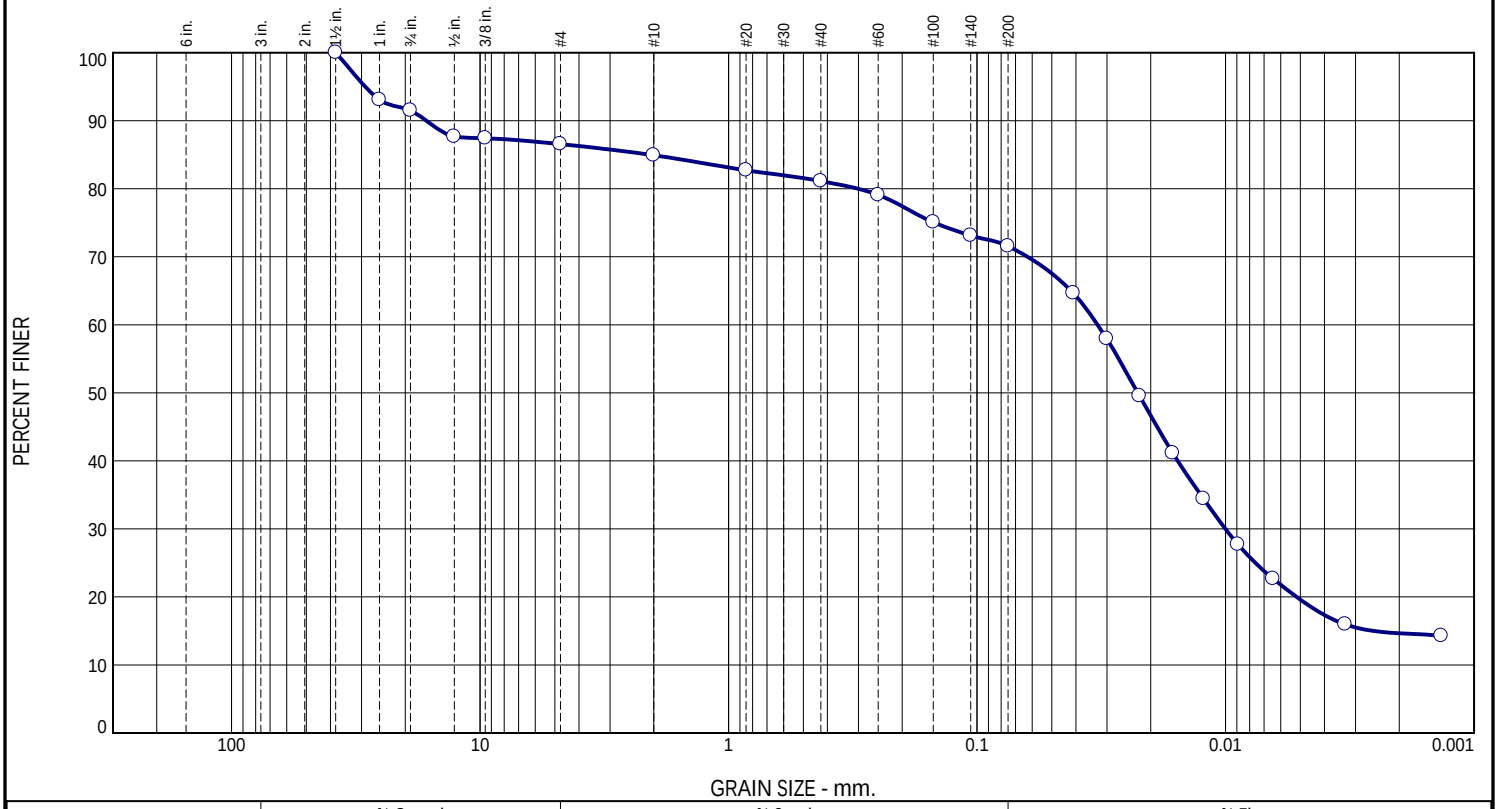
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 8.5 | 4.9 | 1.7 | 3.8 | 9.5 | 56.9 | 14.7 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 93.1 | | | |
| 0.75" | 91.5 | | | |
| 0.5" | 87.7 | | | |
| 0.375" | 87.4 | | | |
| #4 | 86.6 | | | |
| #10 | 84.9 | | | |
| #20 | 82.7 | | | 97.4 |
| #40 | 81.1 | | | 95.5 |
| #60 | 79.1 | | | 93.1 |
| #100 | 75.1 | | | 88.4 |
| #140 | 73.1 | | | 86.1 |
| #200 | 71.6 | | | 84.3 |
| 0.0410 mm. | 64.6 | | | |
| 0.0301 mm. | 57.9 | | | |
| 0.0222 mm. | 49.5 | | | |
| 0.0163 mm. | 41.1 | | | |
| 0.0123 mm. | 34.4 | | | |
| 0.0089 mm. | 27.7 | | | |
| 0.0064 mm. | 22.7 | | | |
| 0.0033 mm. | 16.0 | | | |
| 0.0014 mm. | 14.3 | | | |

* (no specification provided)

**Material Description**

Dark Brown lean clay with sand

**Atterberg Limits**

PL= 19 LL= 32 PI= 13

**Coefficients**

$D_{90}$= 16.4423 $D_{85}$= 2.0673 $D_{60}$= 0.0327
$D_{50}$= 0.0225 $D_{30}$= 0.0100 $D_{15}$= 0.0025
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(8)

**Test Remarks**

SG Assumed

Sample Number: PV-079, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

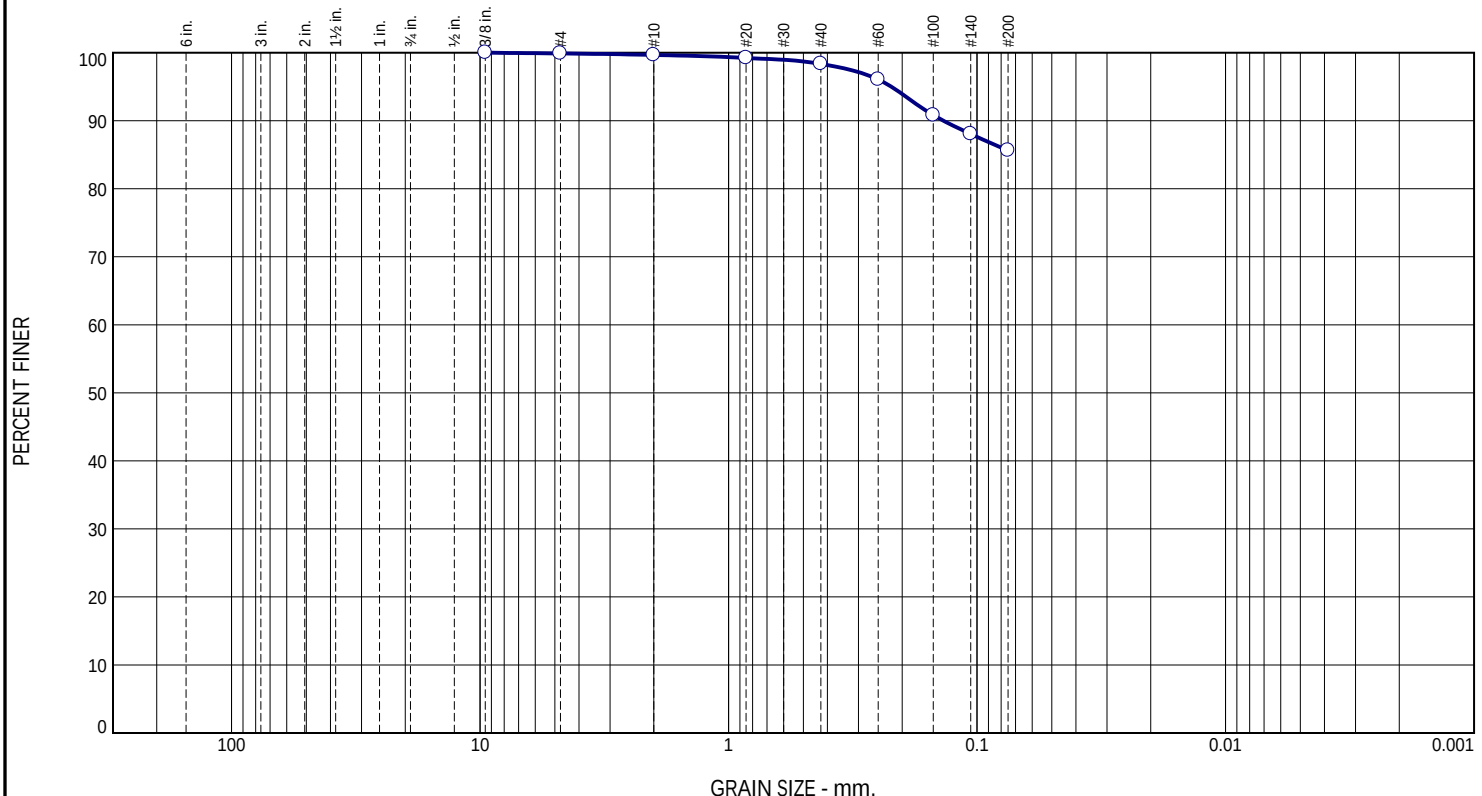
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.2 | 1.3 | 12.8 | 85.6 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.7 | | | |
| #20 | 99.2 | | | 99.6 |
| #40 | 98.4 | | | 98.7 |
| #60 | 96.1 | | | 96.4 |
| #100 | 90.8 | | | 91.1 |
| #140 | 88.1 | | | 88.3 |
| #200 | 85.6 | | | 85.9 |

* (no specification provided)

**Material Description**

Brown lean clay

**Atterberg Limits**

PL= 21 LL= 30 PI= 9

**Coefficients**

$D_{90}$= 0.1364 $D_{85}$= $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-4(7)

**Test Remarks**

Sample Number: PV-081, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

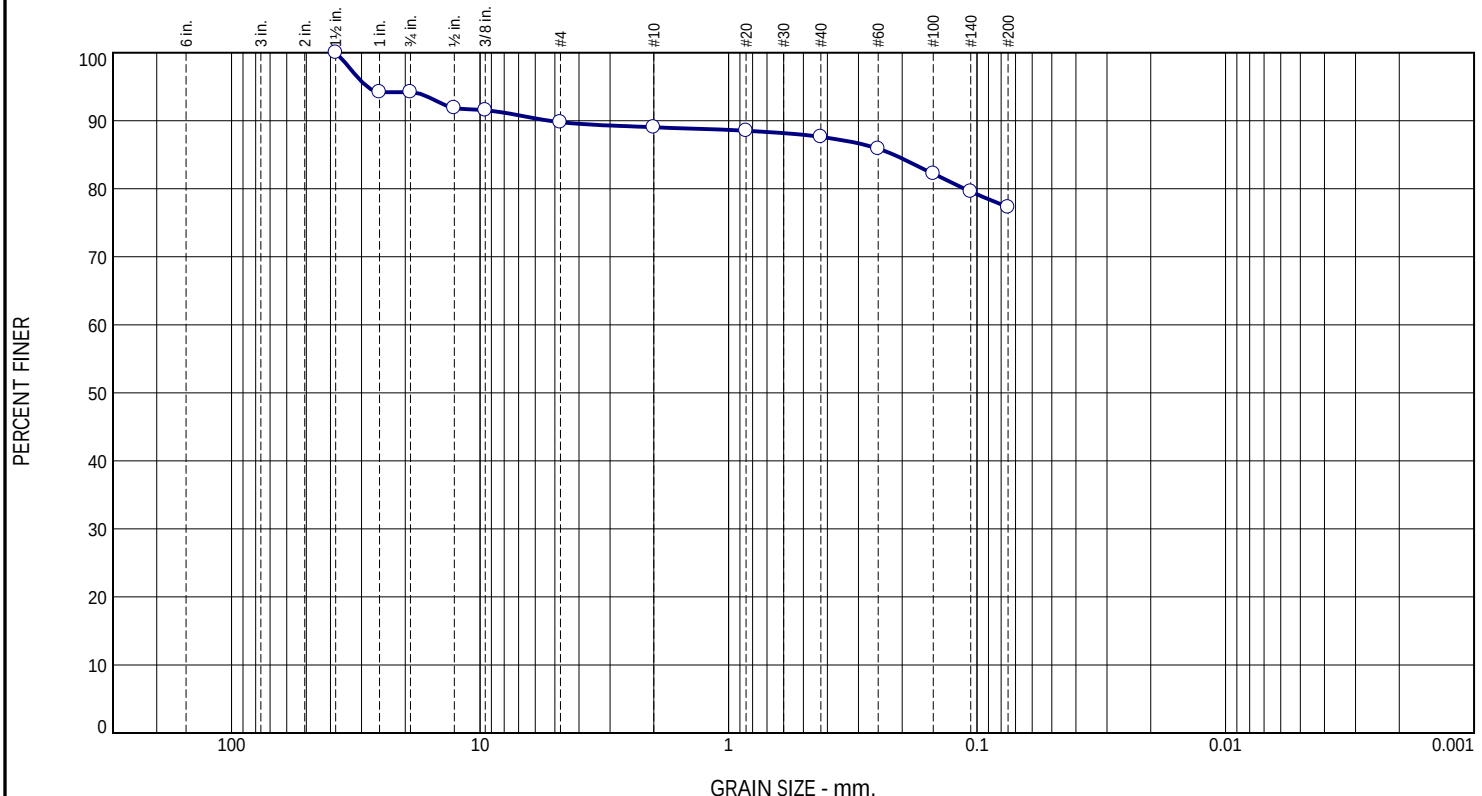
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 5.8 | 4.4 | 0.8 | 1.4 | 10.3 | 77.3 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 94.2 | | | |
| 0.75" | 94.2 | | | |
| 0.5" | 91.9 | | | |
| 0.375" | 91.6 | | | |
| #4 | 89.8 | | | |
| #10 | 89.0 | | | |
| #20 | 88.5 | | | 99.4 |
| #40 | 87.6 | | | 98.4 |
| #60 | 85.9 | | | 96.5 |
| #100 | 82.2 | | | 92.3 |
| #140 | 79.6 | | | 89.4 |
| #200 | 77.3 | | | 86.8 |

* (no specification provided)

Material Description

Gray fat clay with sand

Atterberg Limits

PL= 30 LL= 68 PI= 38

Coefficients

$D_{90}$= 5.2490 $D_{85}$= 0.2164 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CH AASHTO= A-7-5(32)

Test Remarks

Sample Number: PV-084, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

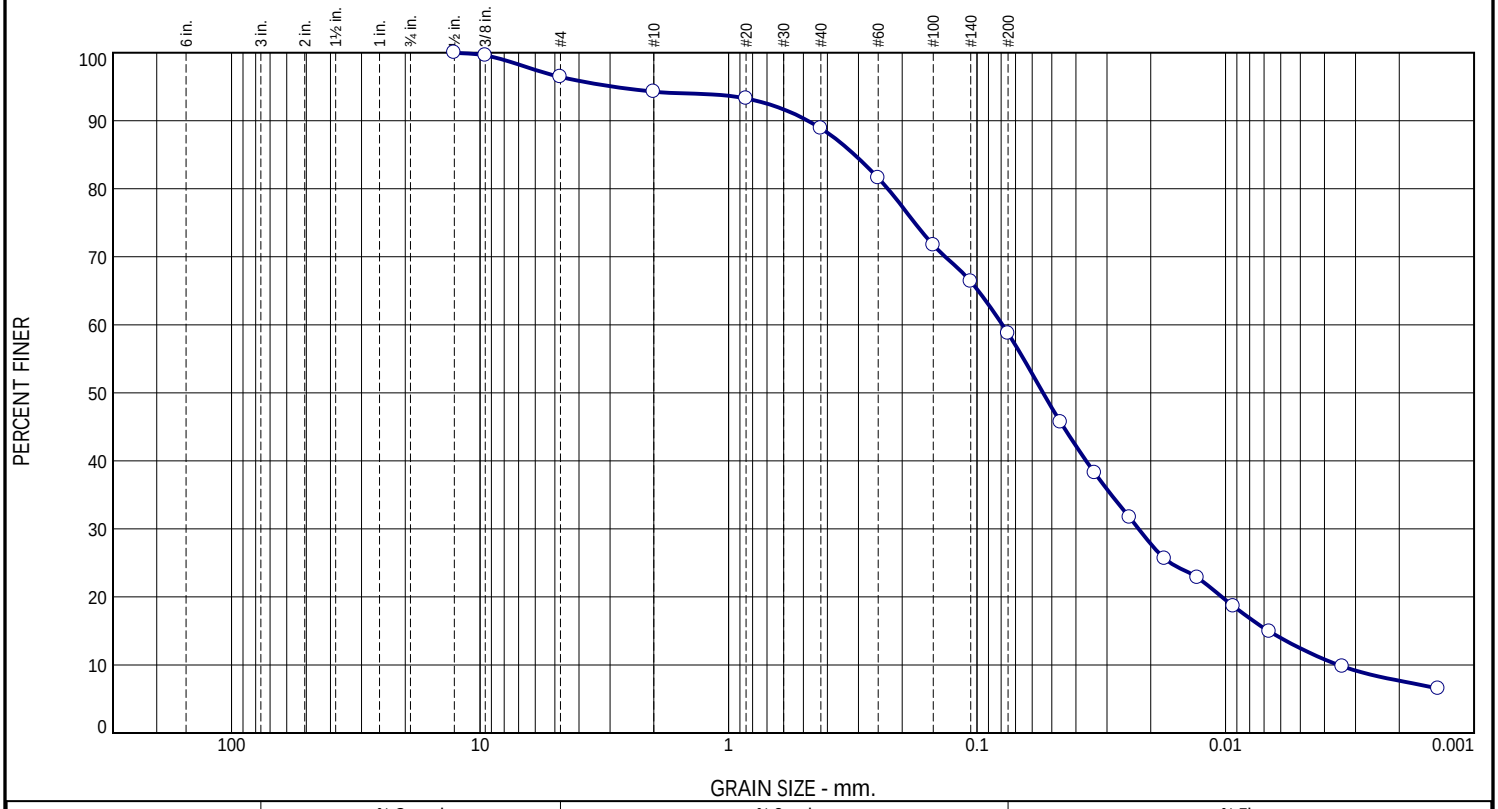
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 3.6 | 2.1 | 5.4 | 30.2 | 51.0 | 7.7 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.5" | 100.0 | | | |
| 0.375" | 99.6 | | | |
| #4 | 96.4 | | | |
| #10 | 94.3 | | | |
| #20 | 93.3 | | | 98.9 |
| #40 | 88.9 | | | 94.3 |
| #60 | 81.6 | | | 86.5 |
| #100 | 71.7 | | | 76.1 |
| #140 | 66.4 | | | 70.4 |
| #200 | 58.7 | | | 62.3 |
| 0.0461 mm. | 45.7 | | | |
| 0.0336 mm. | 38.2 | | | |
| 0.0243 mm. | 31.7 | | | |
| 0.0176 mm. | 25.6 | | | |
| 0.0130 mm. | 22.8 | | | |
| 0.0093 mm. | 18.6 | | | |
| 0.0067 mm. | 14.9 | | | |
| 0.0034 mm. | 9.8 | | | |
| 0.0014 mm. | 6.5 | | | |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 19 LL= 24 PI= 5

**Coefficients**

$D_{90}$= 0.4792 $D_{85}$= 0.3112 $D_{60}$= 0.0790
$D_{50}$= 0.0543 $D_{30}$= 0.0224 $D_{15}$= 0.0067
$D_{10}$= 0.0035 $C_u$= 22.51 $C_c$= 1.80

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

SG Assumed

Sample Number: PV-089, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

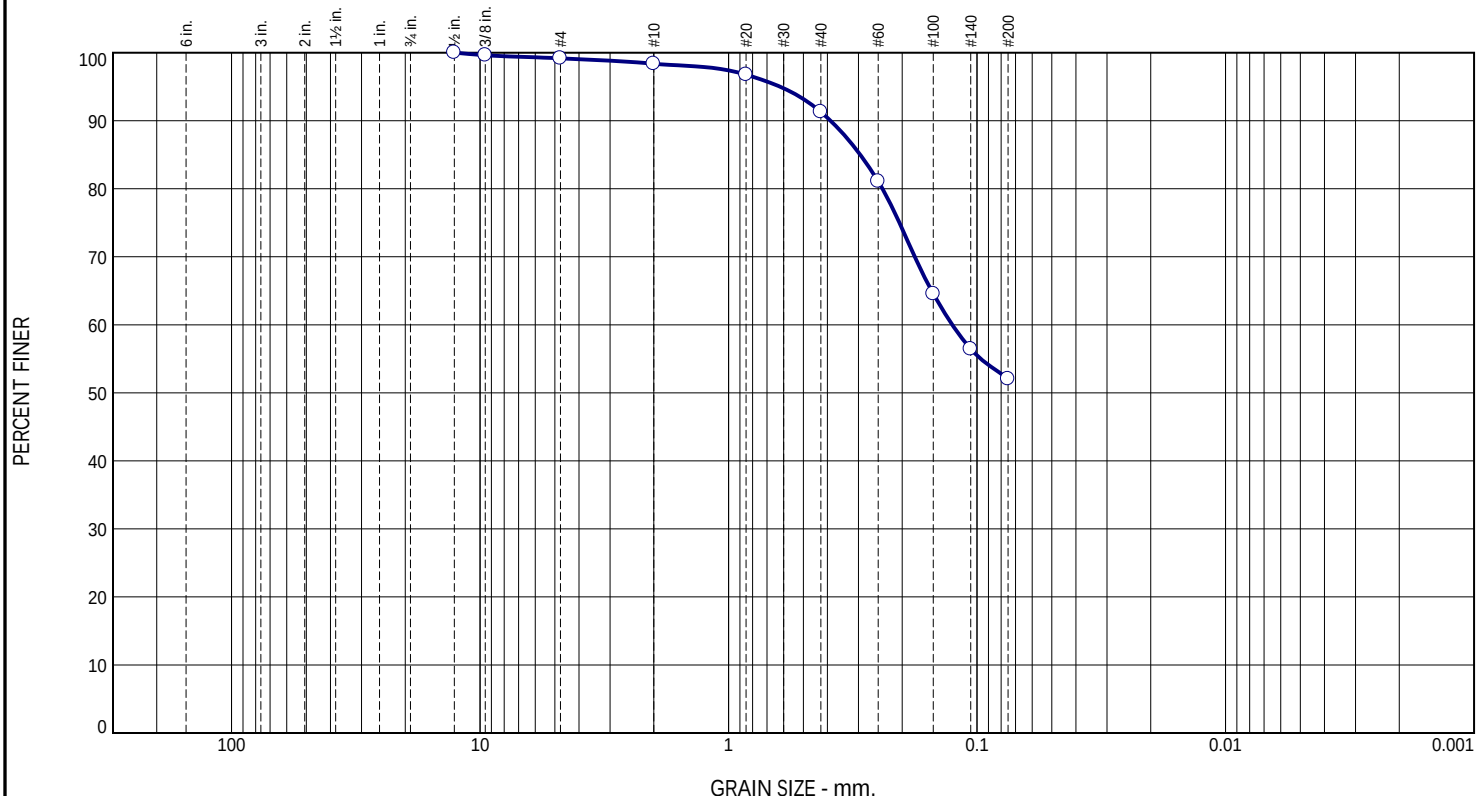
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.8 | 0.8 | 7.1 | 39.3 | 52.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.5" | 100.0 | | | |
| 0.375" | 99.6 | | | |
| #4 | 99.2 | | | |
| #10 | 98.4 | | | |
| #20 | 96.8 | | | 98.4 |
| #40 | 91.3 | | | 92.8 |
| #60 | 81.1 | | | 82.4 |
| #100 | 64.6 | | | 65.6 |
| #140 | 56.4 | | | 57.4 |
| #200 | 52.0 | | | 52.9 |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 14 LL= 19 PI= 5

**Coefficients**

$D_{90}$= 0.3884 $D_{85}$= 0.2952 $D_{60}$= 0.1257
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-090, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

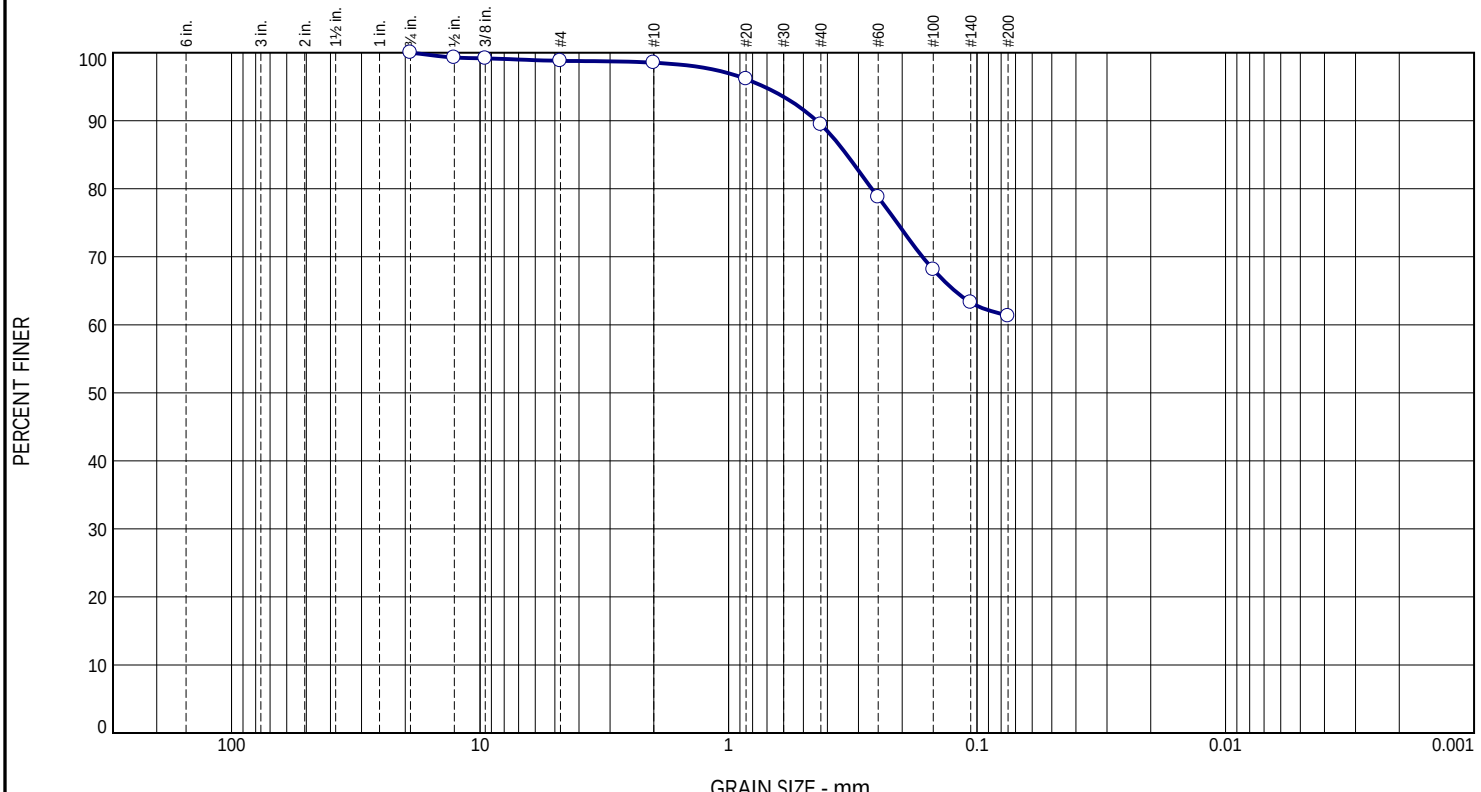
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 1.2 | 0.3 | 9.1 | 28.1 | 61.3 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.3 | | | |
| 0.375" | 99.2 | | | |
| #4 | 98.8 | | | |
| #10 | 98.5 | | | |
| #20 | 96.1 | | | 97.6 |
| #40 | 89.4 | | | 90.8 |
| #60 | 78.8 | | | 79.9 |
| #100 | 68.1 | | | 69.1 |
| #140 | 63.3 | | | 64.2 |
| #200 | 61.3 | | | 62.2 |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 20 LL= 25 PI= 5

**Coefficients**

$D_{90}$= 0.4417 $D_{85}$= 0.3342 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-095, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

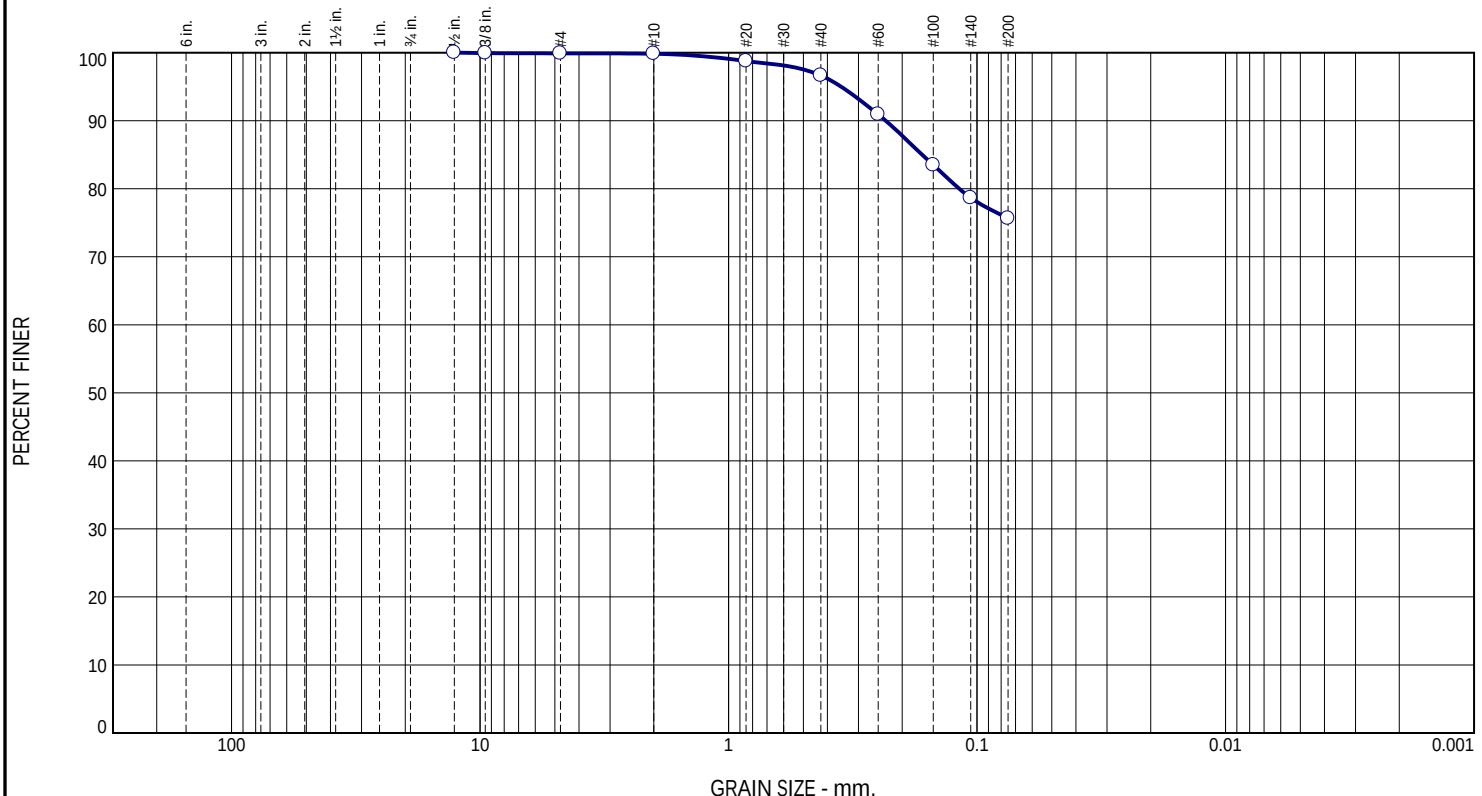
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.1 | 3.1 | 21.1 | 75.6 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.5" | 100.0 | | | |
| 0.375" | 99.9 | | | |
| #4 | 99.9 | | | |
| #10 | 99.8 | | | |
| #20 | 98.8 | | | 98.9 |
| #40 | 96.7 | | | 96.8 |
| #60 | 90.9 | | | 91.1 |
| #100 | 83.5 | | | 83.6 |
| #140 | 78.7 | | | 78.8 |
| #200 | 75.6 | | | 75.7 |

* (no specification provided)

**Material Description**

Brown silty clay with sand

**Atterberg Limits**

PL= 20 LL= 27 PI= 7

**Coefficients**

$D_{90}$= 0.2331 $D_{85}$= 0.1663 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(4)

**Test Remarks**

Sample Number: PV-097, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

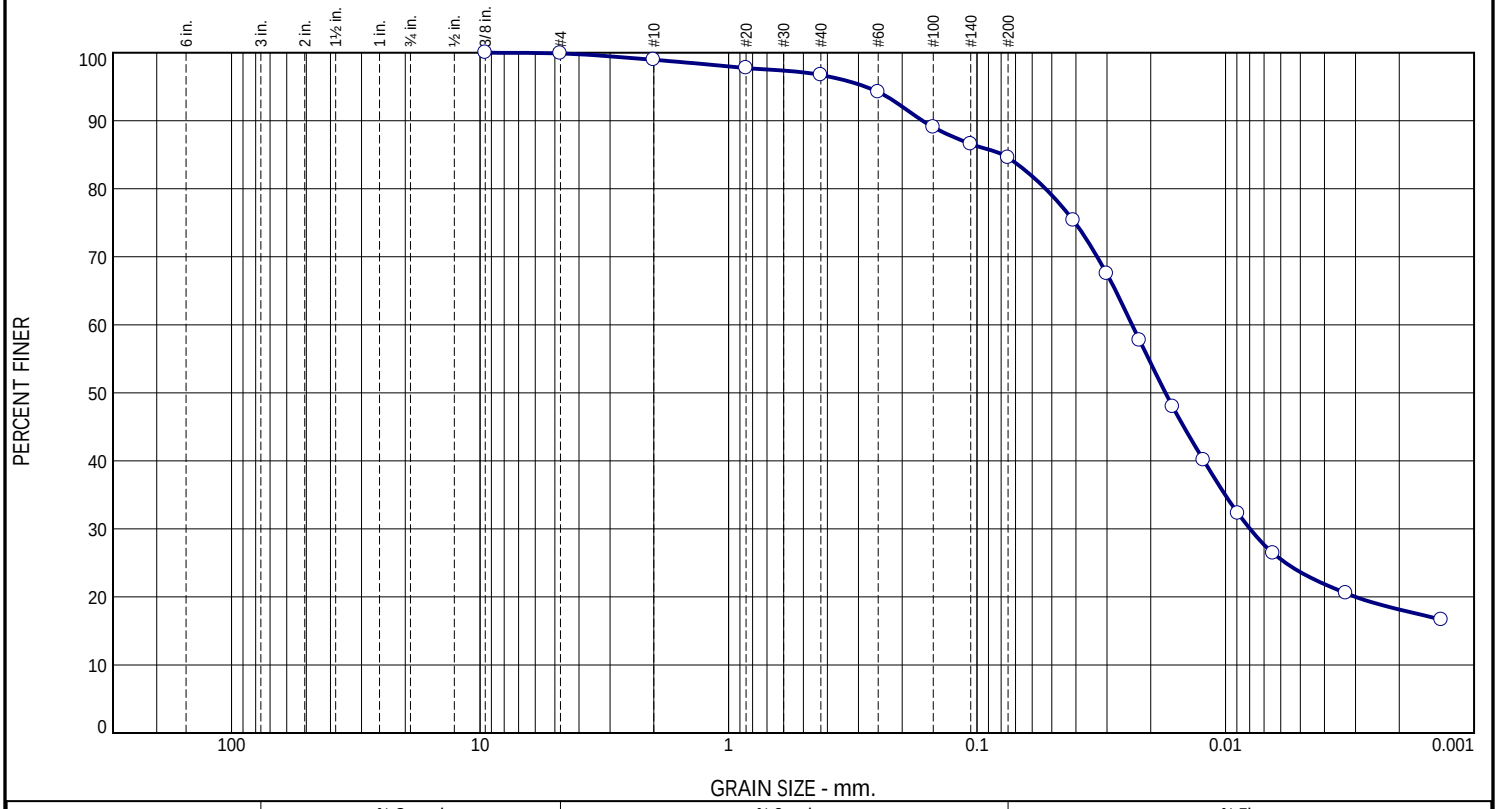
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.9 | 2.3 | 12.1 | 66.4 | 18.2 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.0 | | | |
| #20 | 97.7 | | | 98.8 |
| #40 | 96.7 | | | 97.7 |
| #60 | 94.2 | | | 95.2 |
| #100 | 89.0 | | | 90.0 |
| #140 | 86.6 | | | 87.5 |
| #200 | 84.6 | | | 85.5 |
| 0.0410 mm. | 75.4 | | | |
| 0.0301 mm. | 67.5 | | | |
| 0.0222 mm. | 57.8 | | | |
| 0.0163 mm. | 48.0 | | | |
| 0.0123 mm. | 40.1 | | | |
| 0.0089 mm. | 32.3 | | | |
| 0.0064 mm. | 26.4 | | | |
| 0.0033 mm. | 20.6 | | | |
| 0.0014 mm. | 16.6 | | | |

* (no specification provided)

**Material Description**

Brown lean clay with sand

**Atterberg Limits**

PL= 21 LL= 32 PI= 11

**Coefficients**

$D_{90}$= 0.1658 $D_{85}$= 0.0786 $D_{60}$= 0.0238
$D_{50}$= 0.0174 $D_{30}$= 0.0080 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(9)

**Test Remarks**

SG Assumed

Sample Number: PV-100, TRT Depth: 2'-5'

Sample Date: 11/10/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

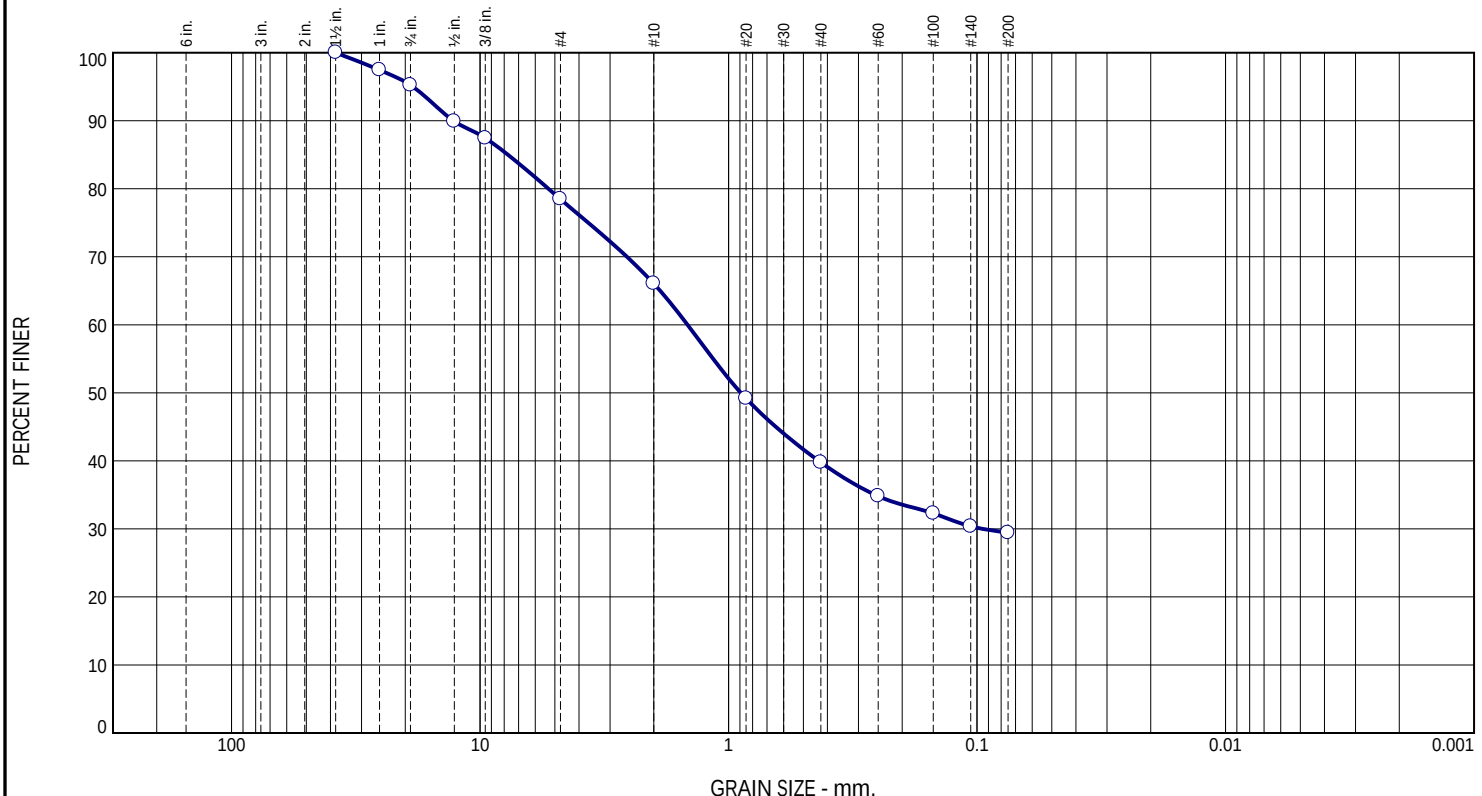
Project: Speedway, Sherman County, OR

Project No: IRN 25-T-215 Figure

Tested By: ES Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.8 | 16.7 | 12.4 | 26.3 | 10.4 | 29.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 97.5 | | | |
| 0.75" | 95.2 | | | |
| 0.5" | 89.9 | | | |
| 0.375" | 87.4 | | | |
| #4 | 78.5 | | | |
| #10 | 66.1 | | | |
| #20 | 49.2 | | | 74.4 |
| #40 | 39.8 | | | 60.2 |
| #60 | 34.8 | | | 52.7 |
| #100 | 32.3 | | | 48.9 |
| #140 | 30.4 | | | 46.0 |
| #200 | 29.4 | | | 44.5 |

* (no specification provided)

Material Description

Brown silty sand with gravel

Atterberg Limits

PL= 23 LL= 27 PI= 4

Coefficients

$D_{90}$= 12.8012 $D_{85}$= 7.7227 $D_{60}$= 1.4632
$D_{50}$= 0.8923 $D_{30}$= 0.0950 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= SM AASHTO= A-2-4(0)

Test Remarks

Sample Number: PV-105, TRT Depth: 1'-2'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

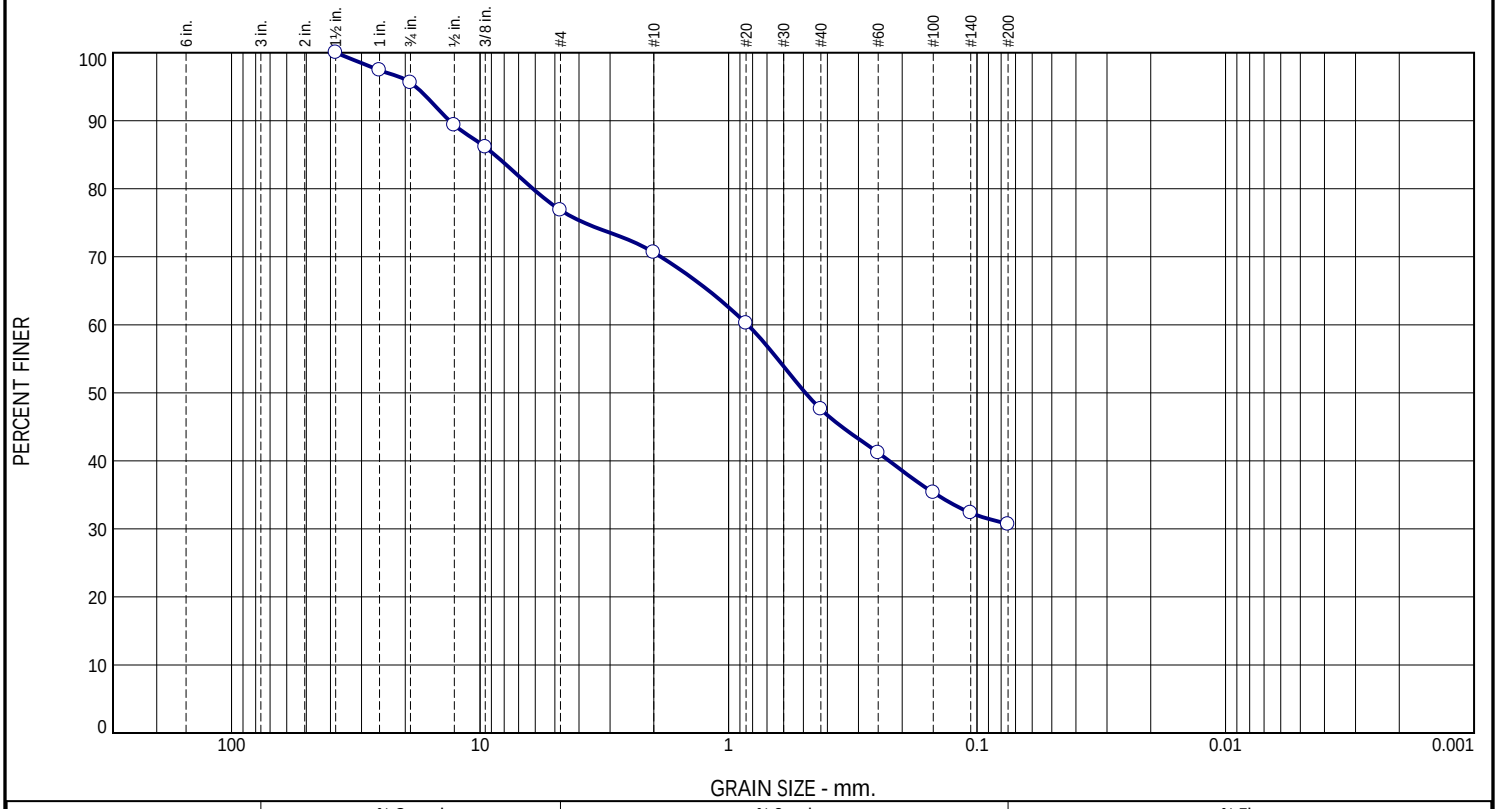
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.4 | 18.7 | 6.3 | 23.0 | 16.9 | 30.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 97.4 | | | |
| 0.75" | 95.6 | | | |
| 0.5" | 89.4 | | | |
| 0.375" | 86.1 | | | |
| #4 | 76.9 | | | |
| #10 | 70.6 | | | |
| #20 | 60.2 | | | 85.3 |
| #40 | 47.6 | | | 67.4 |
| #60 | 41.2 | | | 58.3 |
| #100 | 35.3 | | | 50.0 |
| #140 | 32.4 | | | 45.8 |
| #200 | 30.7 | | | 43.4 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 21 LL= 25 PI= 4

**Coefficients**

$D_{90}$= 13.2833 $D_{85}$= 8.7311 $D_{60}$= 0.8377
$D_{50}$= 0.4905 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-2-4(0)

**Test Remarks**

Sample Number: PV-109, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

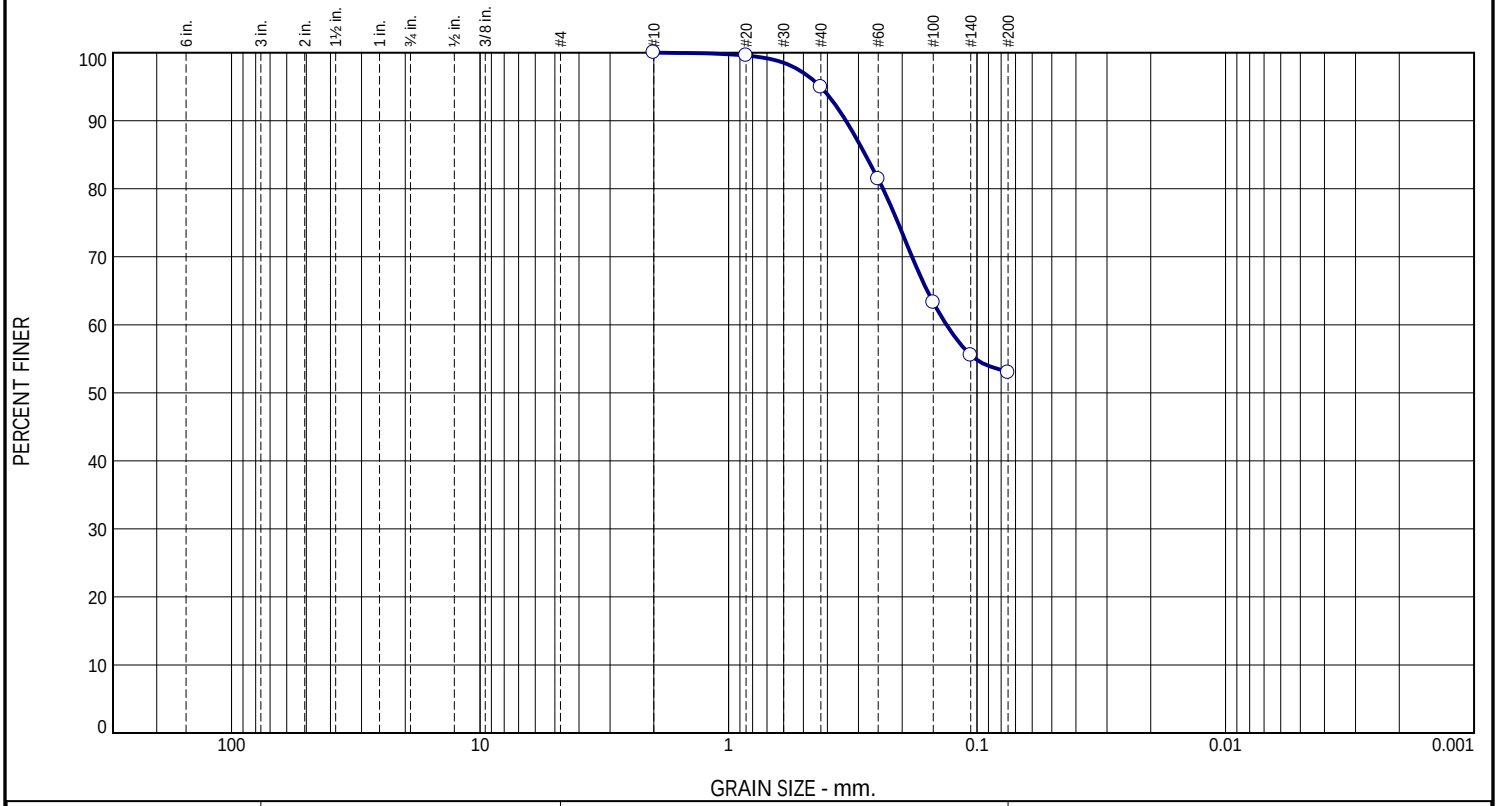
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.0 | 5.1 | 41.9 | 53.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| #10 | 100.0 | | | |
| #20 | 99.6 | | | 99.6 |
| #40 | 94.9 | | | 94.9 |
| #60 | 81.4 | | | 81.4 |
| #100 | 63.3 | | | 63.3 |
| #140 | 55.5 | | | 55.5 |
| #200 | 53.0 | | | 53.0 |

* (no specification provided)

Material Description

Brown sandy silty clay

Atterberg Limits

PL= 18 LL= 23 PI= 5

Coefficients

$D_{90}$= 0.3369 $D_{85}$= 0.2815 $D_{60}$= 0.1327
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(0)

Test Remarks

Sample Number: PV-111, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

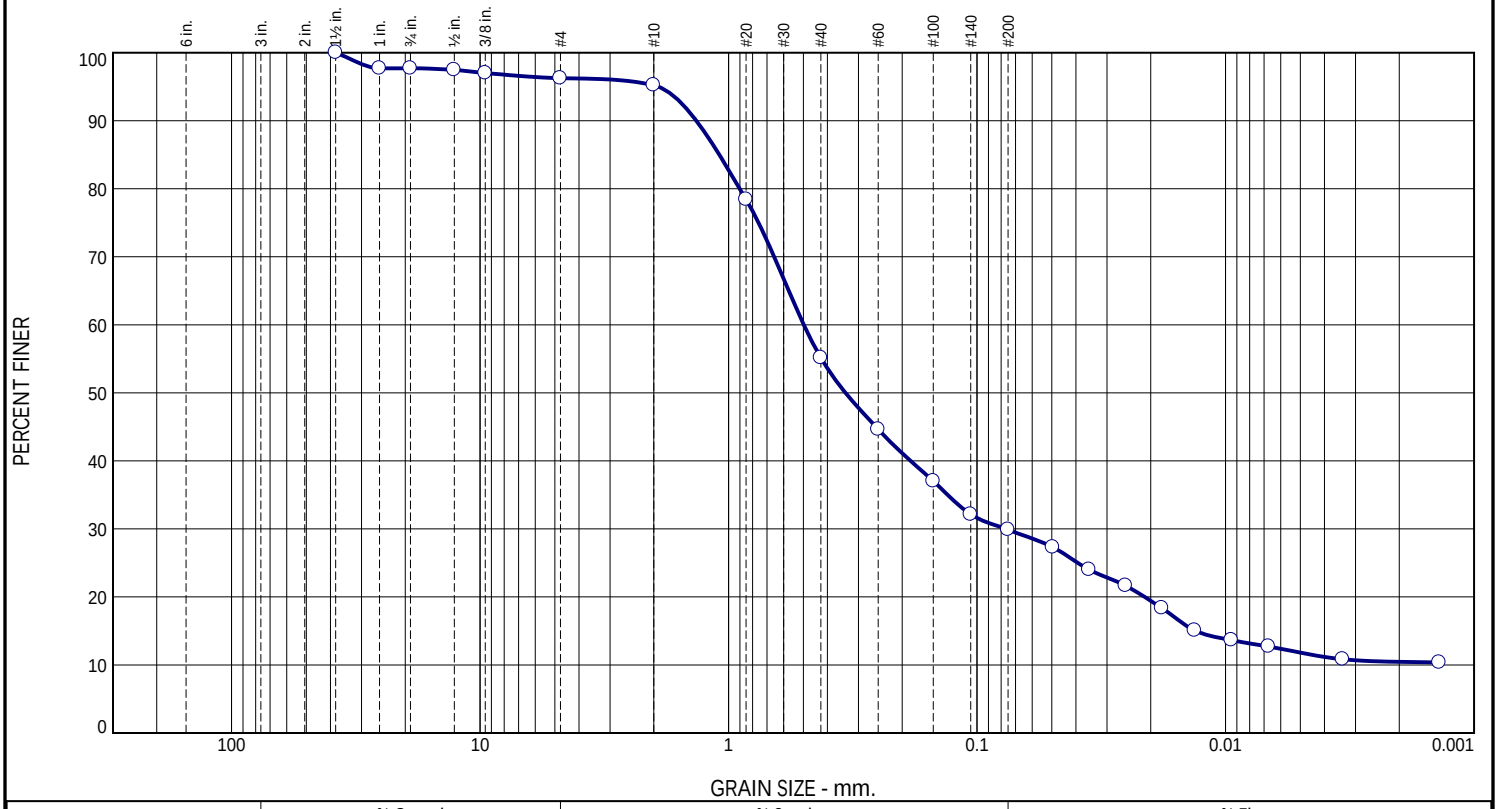
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 2.3 | 1.4 | 1.1 | 40.0 | 25.3 | 19.4 | 10.5 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 97.7 | | | |
| 0.75" | 97.7 | | | |
| 0.5" | 97.5 | | | |
| 0.375" | 97.0 | | | |
| #4 | 96.3 | | | |
| #10 | 95.2 | | | |
| #20 | 78.4 | | | 82.4 |
| #40 | 55.2 | | | 57.9 |
| #60 | 44.6 | | | 46.9 |
| #100 | 37.0 | | | 38.9 |
| #140 | 32.1 | | | 33.7 |
| #200 | 29.9 | | | 31.4 |
| 0.0495 mm. | 27.3 | | | |
| 0.0354 mm. | 24.0 | | | |
| 0.0252 mm. | 21.6 | | | |
| 0.0180 mm. | 18.3 | | | |
| 0.0133 mm. | 15.1 | | | |
| 0.0095 mm. | 13.6 | | | |
| 0.0067 mm. | 12.7 | | | |
| 0.0034 mm. | 10.8 | | | |
| 0.0014 mm. | 10.4 | | | |

* (no specification provided)

**Material Description**

Brown silty sand

**Atterberg Limits**

PL= 25 LL= 31 PI= 6

**Coefficients**

$D_{90}$= 1.3480 $D_{85}$= 1.0899 $D_{60}$= 0.4977

$D_{50}$= 0.3386 $D_{30}$= 0.0765 $D_{15}$= 0.0132

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SM AASHTO= A-2-4(0)

**Test Remarks**

SG Assumed

Sample Number: PV-114, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

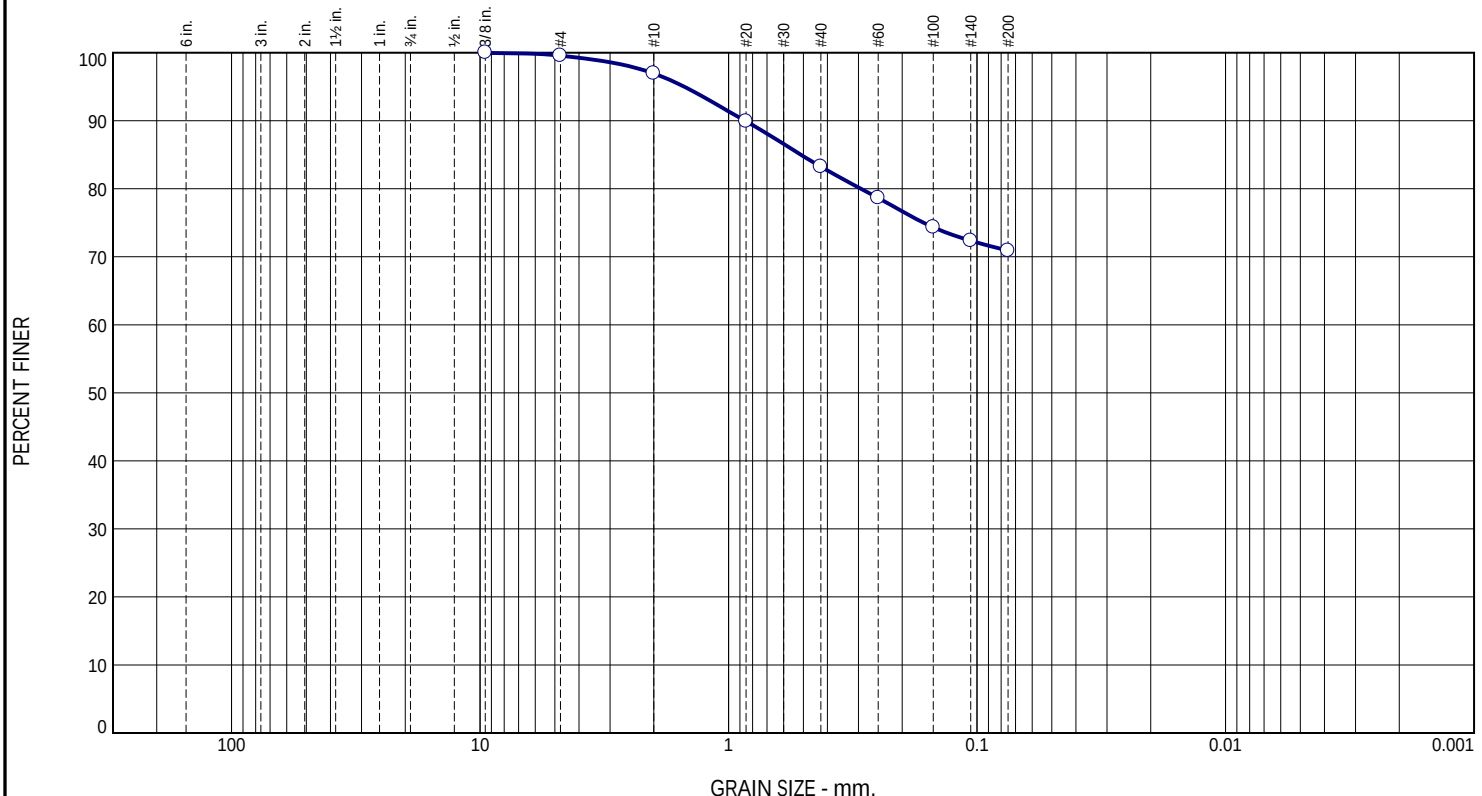
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.4 | 2.7 | 13.7 | 12.3 | 70.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.6 | | | |
| #10 | 96.9 | | | |
| #20 | 89.9 | | | 92.7 |
| #40 | 83.2 | | | 85.9 |
| #60 | 78.6 | | | 81.1 |
| #100 | 74.3 | | | 76.7 |
| #140 | 72.4 | | | 74.6 |
| #200 | 70.9 | | | 73.1 |

* (no specification provided)

**Material Description**

Brown silty clay with sand

**Atterberg Limits**

PL= 20 LL= 27 PI= 7

**Coefficients**

$D_{90}$= 0.8587 $D_{85}$= 0.5115 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(3)

**Test Remarks**

Sample Number: PV-119, TRT Depth: 1'-2'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

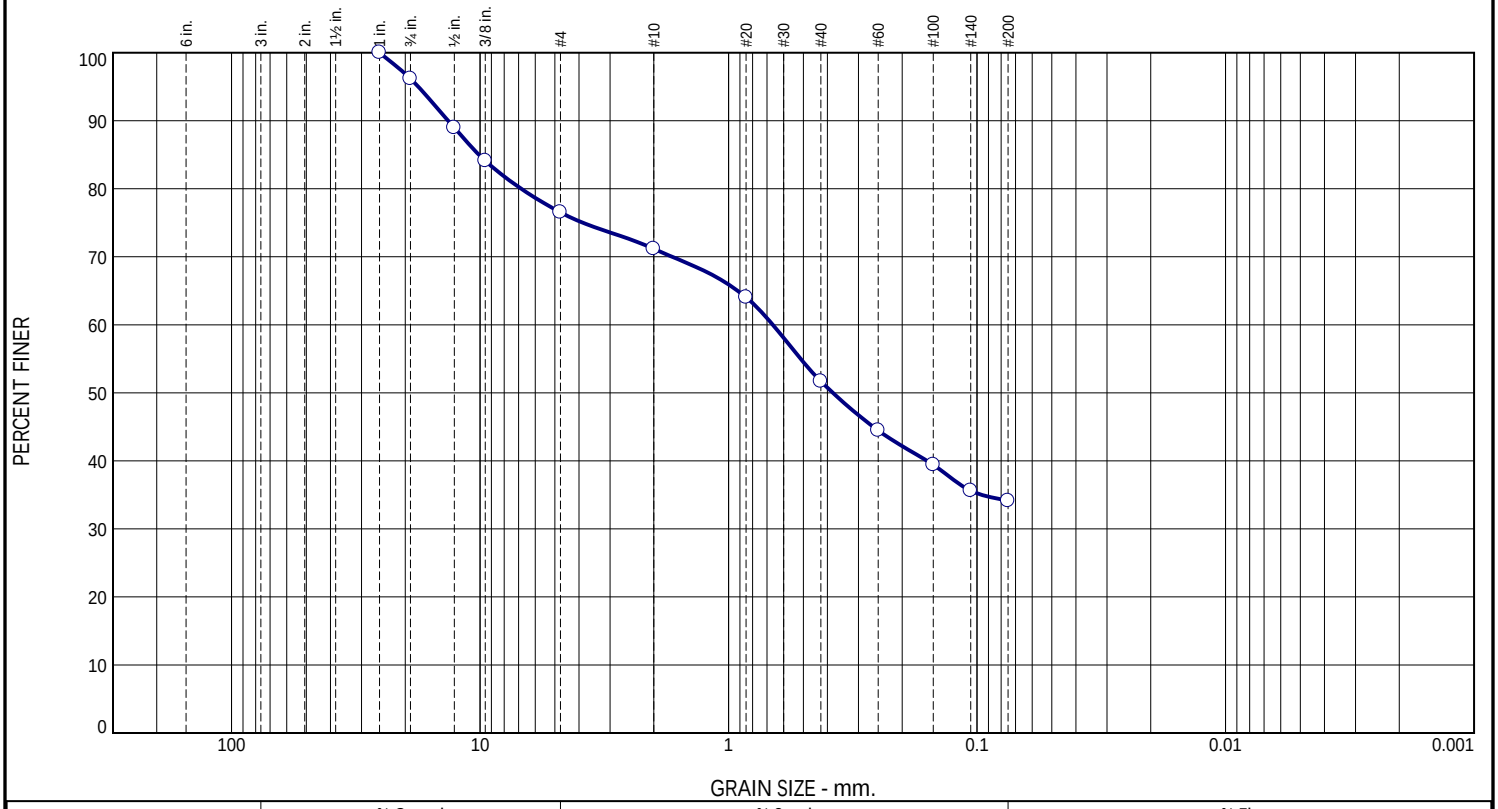
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 3.8 | 19.7 | 5.3 | 19.5 | 17.6 | 34.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 96.2 | | | |
| 0.5" | 89.0 | | | |
| 0.375" | 84.1 | | | |
| #4 | 76.5 | | | |
| #10 | 71.2 | | | |
| #20 | 64.0 | | | 90.0 |
| #40 | 51.7 | | | 72.6 |
| #60 | 44.5 | | | 62.5 |
| #100 | 39.4 | | | 55.4 |
| #140 | 35.6 | | | 50.0 |
| #200 | 34.1 | | | 47.9 |

* (no specification provided)

**Material Description**

Brown clayey sand with gravel

**Atterberg Limits**

PL= 22 LL= 33 PI= 11

**Coefficients**

$D_{90}$= 13.4550 $D_{85}$= 10.1235 $D_{60}$= 0.6637
$D_{50}$= 0.3804 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC AASHTO= A-2-6(0)

**Test Remarks**

Sample Number: PV-121, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

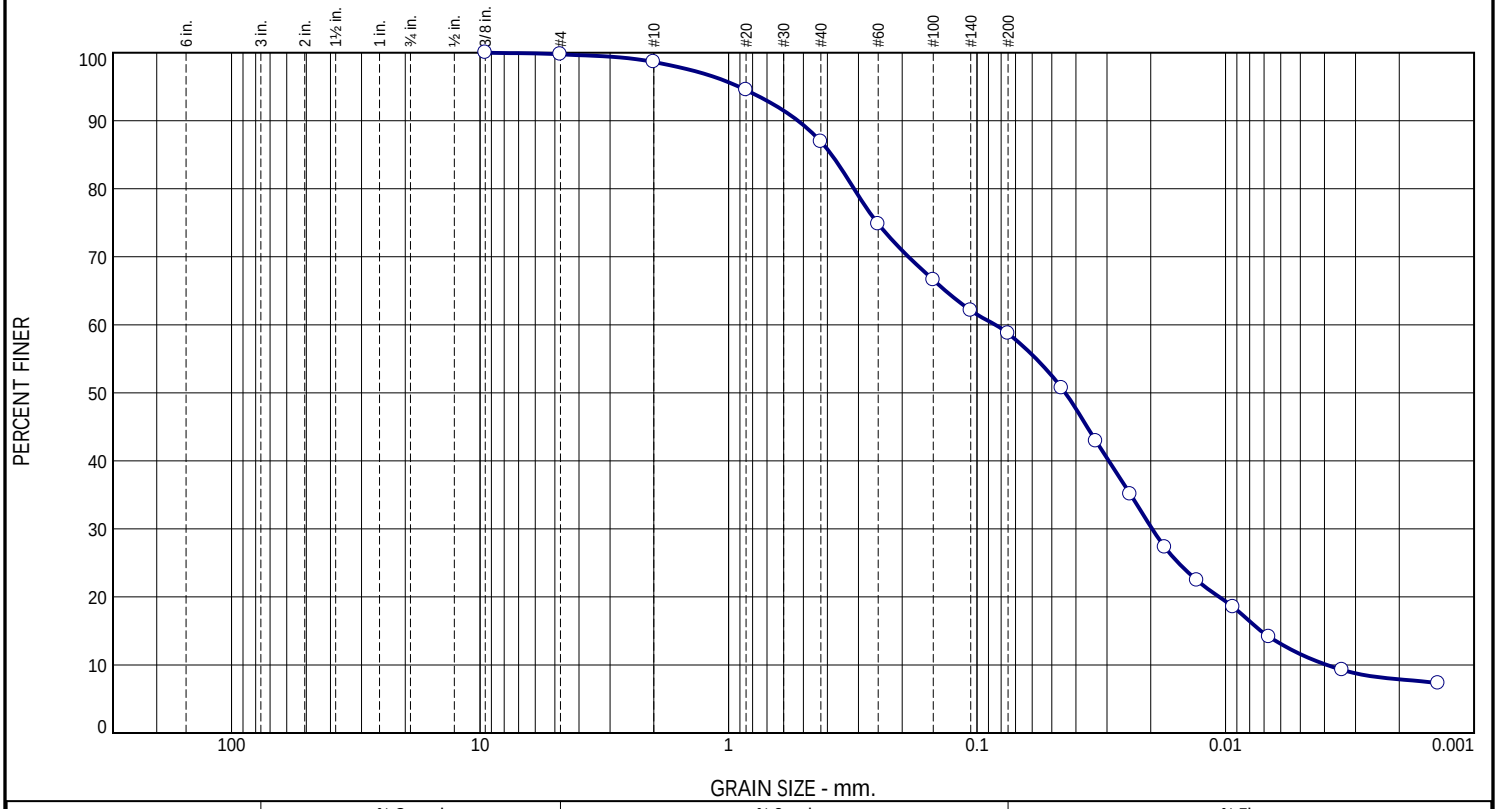
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.2 | 1.2 | 11.7 | 28.2 | 50.8 | 7.9 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.8 | | | |
| #10 | 98.6 | | | |
| #20 | 94.5 | | | 95.8 |
| #40 | 86.9 | | | 88.1 |
| #60 | 74.8 | | | 75.9 |
| #100 | 66.6 | | | 67.5 |
| #140 | 62.1 | | | 63.0 |
| #200 | 58.7 | | | 59.6 |
| 0.0456 mm. | 50.7 | | | |
| 0.0332 mm. | 42.9 | | | |
| 0.0242 mm. | 35.1 | | | |
| 0.0176 mm. | 27.3 | | | |
| 0.0130 mm. | 22.4 | | | |
| 0.0093 mm. | 18.5 | | | |
| 0.0067 mm. | 14.1 | | | |
| 0.0034 mm. | 9.3 | | | |
| 0.0014 mm. | 7.3 | | | |

* (no specification provided)

**Material Description**

Brown sandy silt

**Atterberg Limits**

PL= NP LL= NV PI= NP

**Coefficients**

$D_{90}$= 0.5254 $D_{85}$= 0.3847 $D_{60}$= 0.0843
$D_{50}$= 0.0441 $D_{30}$= 0.0198 $D_{15}$= 0.0072
$D_{10}$= 0.0039 $C_u$= 21.53 $C_c$= 1.18

**Classification**

USCS= ML AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: PV-123, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

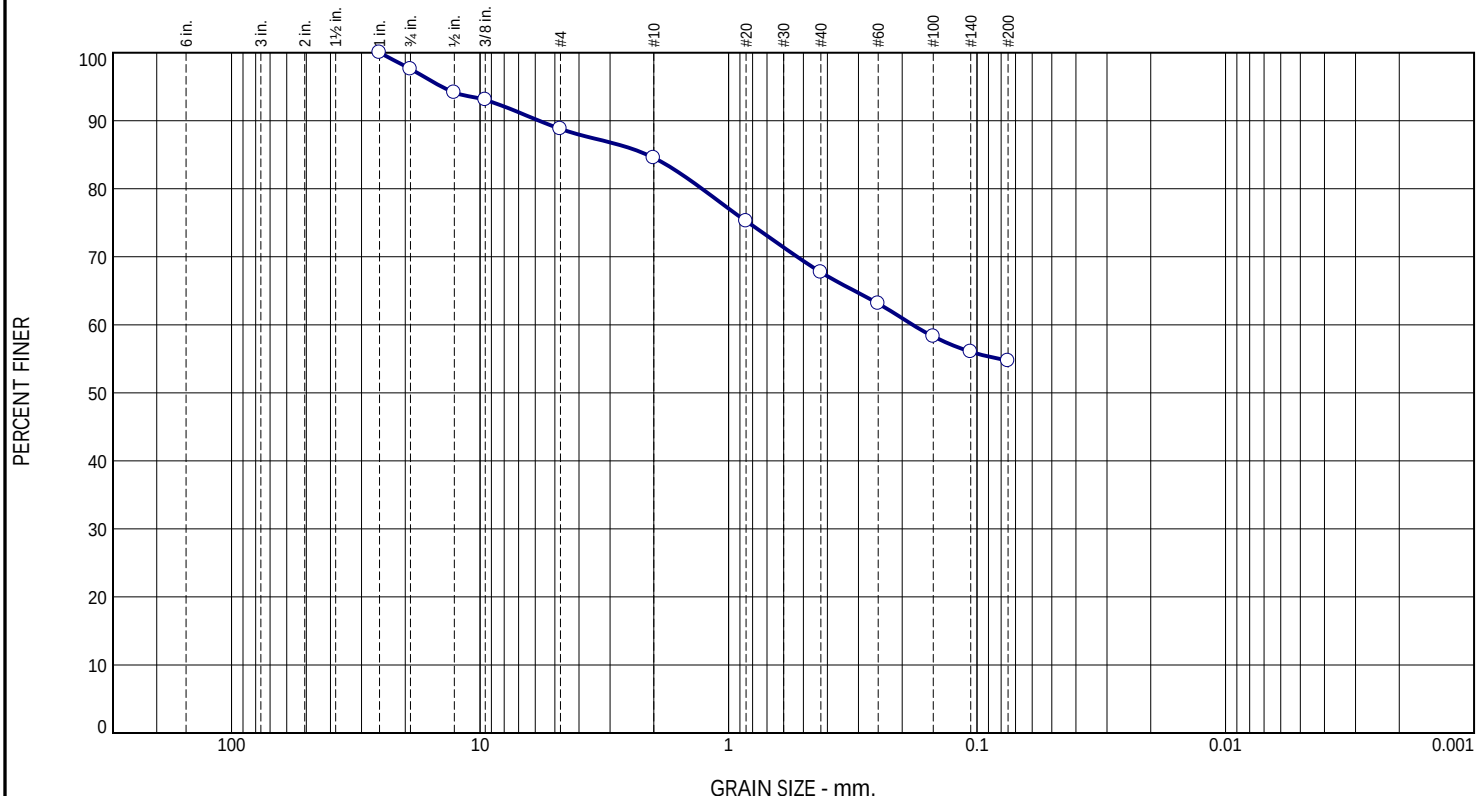
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 2.4 | 8.8 | 4.2 | 16.9 | 13.0 | 54.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 97.6 | | | |
| 0.5" | 94.2 | | | |
| 0.375" | 93.1 | | | |
| #4 | 88.8 | | | |
| #10 | 84.6 | | | |
| #20 | 75.2 | | | 89.0 |
| #40 | 67.7 | | | 80.1 |
| #60 | 63.1 | | | 74.7 |
| #100 | 58.3 | | | 68.9 |
| #140 | 56.0 | | | 66.3 |
| #200 | 54.7 | | | 64.7 |

* (no specification provided)

**Material Description**

Brown sandy silt

**Atterberg Limits**

PL= 25 LL= 34 PI= 9

**Coefficients**

$D_{90}$= 5.7941 $D_{85}$= 2.1246 $D_{60}$= 0.1815
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= ML AASHTO= A-4(3)

**Test Remarks**

Sample Number: PV-126, TRT Depth: 1'-2'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

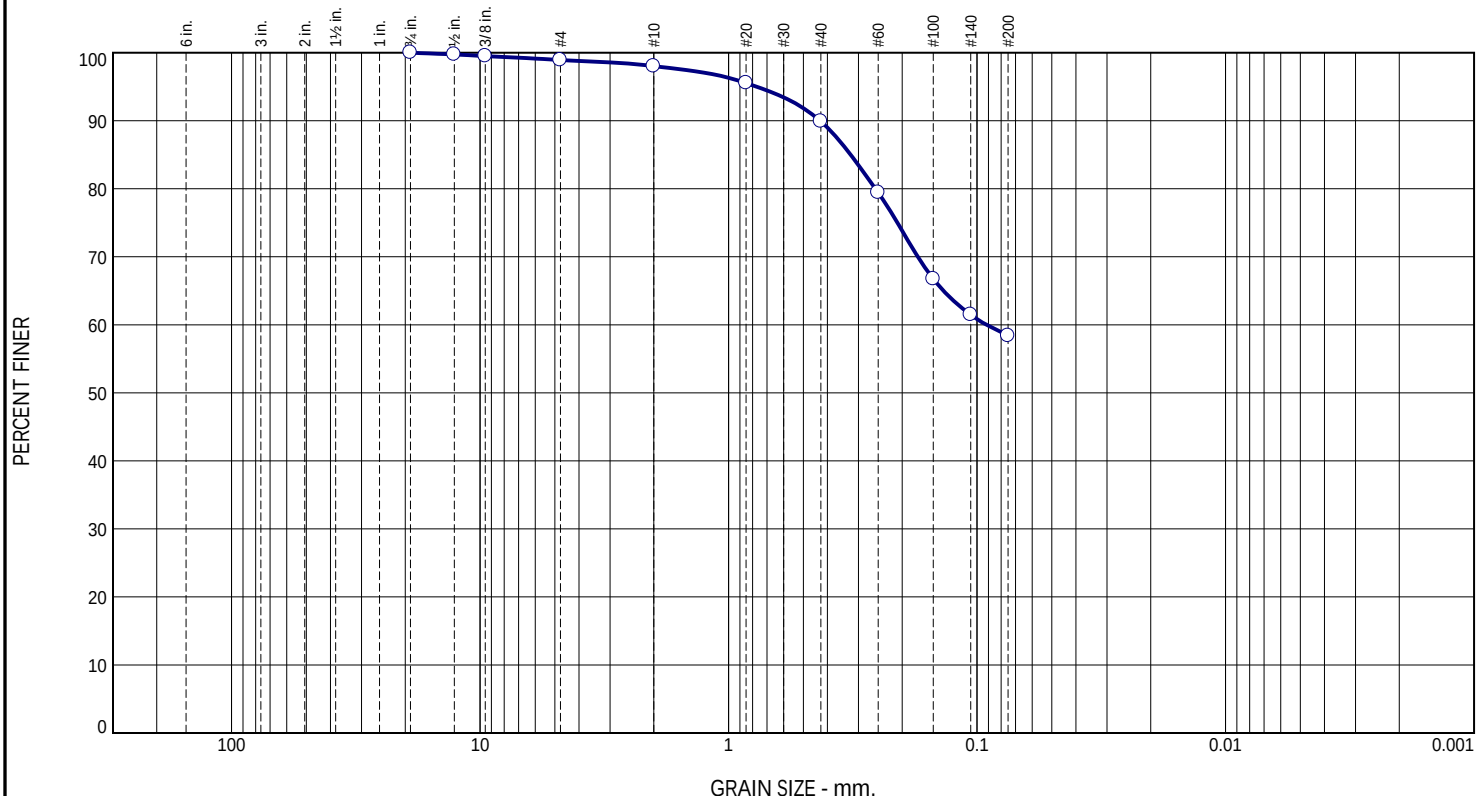
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 1.1 | 0.9 | 8.1 | 31.5 | 58.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.7 | | | |
| 0.375" | 99.5 | | | |
| #4 | 98.9 | | | |
| #10 | 98.0 | | | |
| #20 | 95.5 | | | 97.5 |
| #40 | 89.9 | | | 91.7 |
| #60 | 79.4 | | | 81.0 |
| #100 | 66.7 | | | 68.1 |
| #140 | 61.5 | | | 62.7 |
| #200 | 58.4 | | | 59.6 |

* (no specification provided)

Material Description

Brown sandy silty clay

Atterberg Limits

PL= 15 LL= 20 PI= 5

Coefficients

$D_{90}$= 0.4282 $D_{85}$= 0.3226 $D_{60}$= 0.0915
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(0)

Test Remarks

Sample Number: PV-127, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

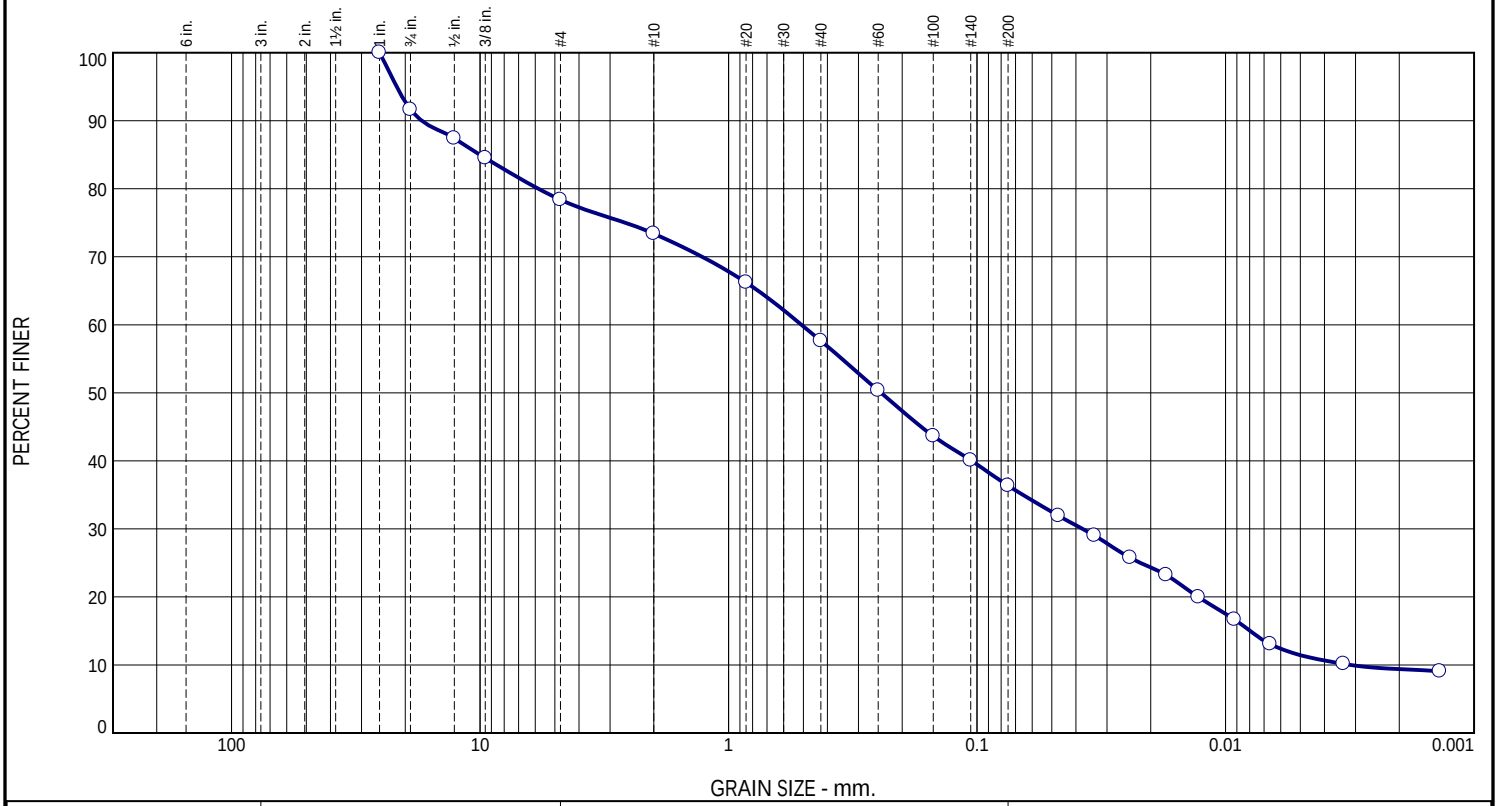
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 8.4 | 13.2 | 5.0 | 15.8 | 21.2 | 27.0 | 9.4 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 91.6 | | | |
| 0.5" | 87.4 | | | |
| 0.375" | 84.5 | | | |
| #4 | 78.4 | | | |
| #10 | 73.4 | | | |
| #20 | 66.2 | | | 90.2 |
| #40 | 57.6 | | | 78.5 |
| #60 | 50.4 | | | 68.6 |
| #100 | 43.6 | | | 59.5 |
| #140 | 40.1 | | | 54.6 |
| #200 | 36.4 | | | 49.5 |
| 0.0470 mm. | 31.9 | | | |
| 0.0337 mm. | 29.0 | | | |
| 0.0242 mm. | 25.8 | | | |
| 0.0173 mm. | 23.2 | | | |
| 0.0128 mm. | 20.0 | | | |
| 0.0092 mm. | 16.7 | | | |
| 0.0066 mm. | 13.1 | | | |
| 0.0033 mm. | 10.2 | | | |
| 0.0014 mm. | 9.1 | | | |

* (no specification provided)

**Material Description**

Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 20 LL= 27 PI= 7

**Coefficients**

$D_{90}$= 17.1733 $D_{85}$= 10.0187 $D_{60}$= 0.5088
$D_{50}$= 0.2435 $D_{30}$= 0.0376 $D_{15}$= 0.0080
$D_{10}$= 0.0031 $C_u$= 161.70 $C_c$= 0.88

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

SG Assumed

Sample Number: PV-132, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

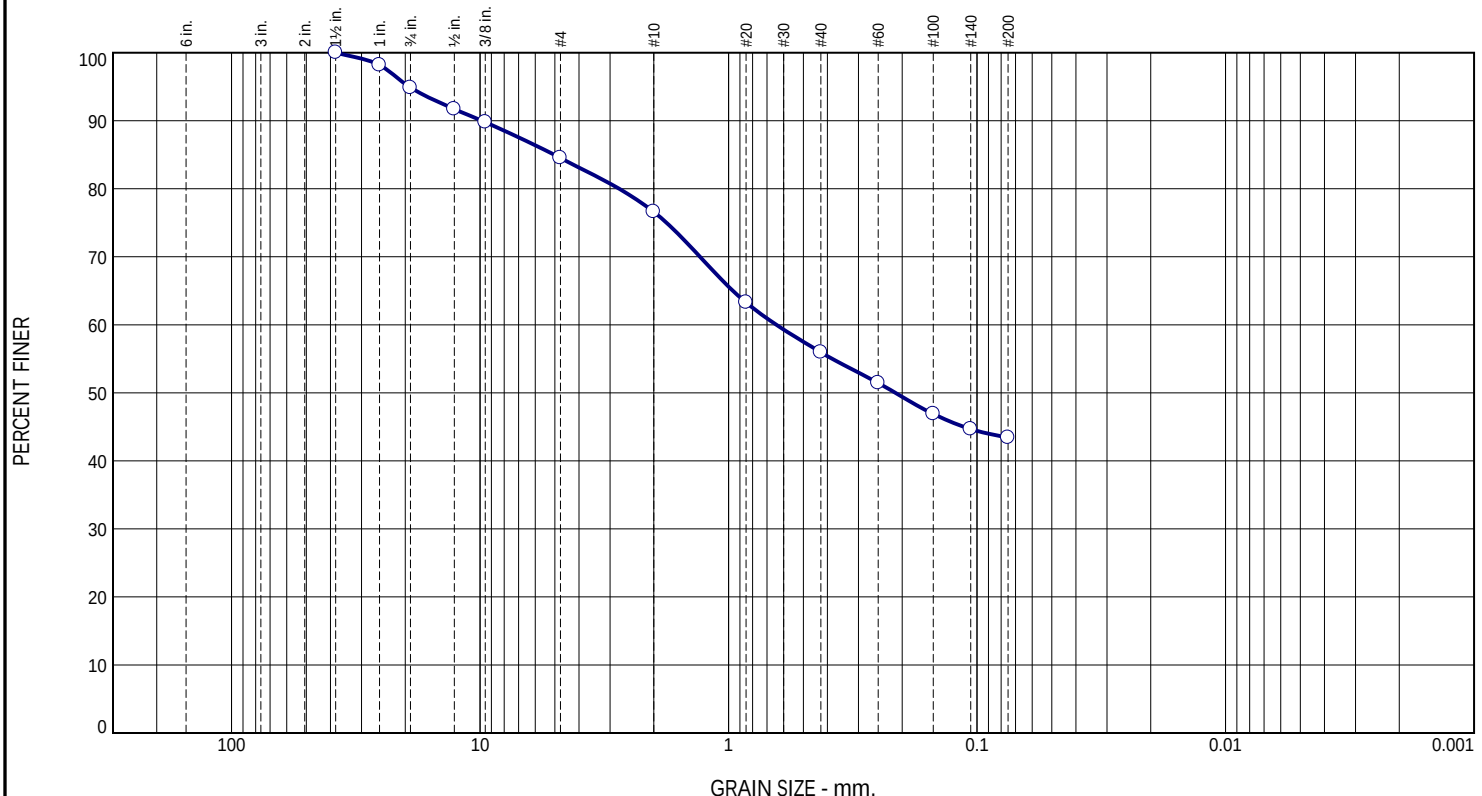
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 5.1 | 10.4 | 7.9 | 20.6 | 12.6 | 43.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 98.2 | | | |
| 0.75" | 94.9 | | | |
| 0.5" | 91.7 | | | |
| 0.375" | 89.8 | | | |
| #4 | 84.5 | | | |
| #10 | 76.6 | | | |
| #20 | 63.3 | | | 82.6 |
| #40 | 56.0 | | | 73.1 |
| #60 | 51.4 | | | 67.2 |
| #100 | 46.9 | | | 61.2 |
| #140 | 44.7 | | | 58.3 |
| #200 | 43.4 | | | 56.7 |

* (no specification provided)

**Material Description**

Brown silty sand with gravel

**Atterberg Limits**

PL= 24 LL= 29 PI= 5

**Coefficients**

$D_{90}$= 9.8213 $D_{85}$= 5.0328 $D_{60}$= 0.6424
$D_{50}$= 0.2132 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-137, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

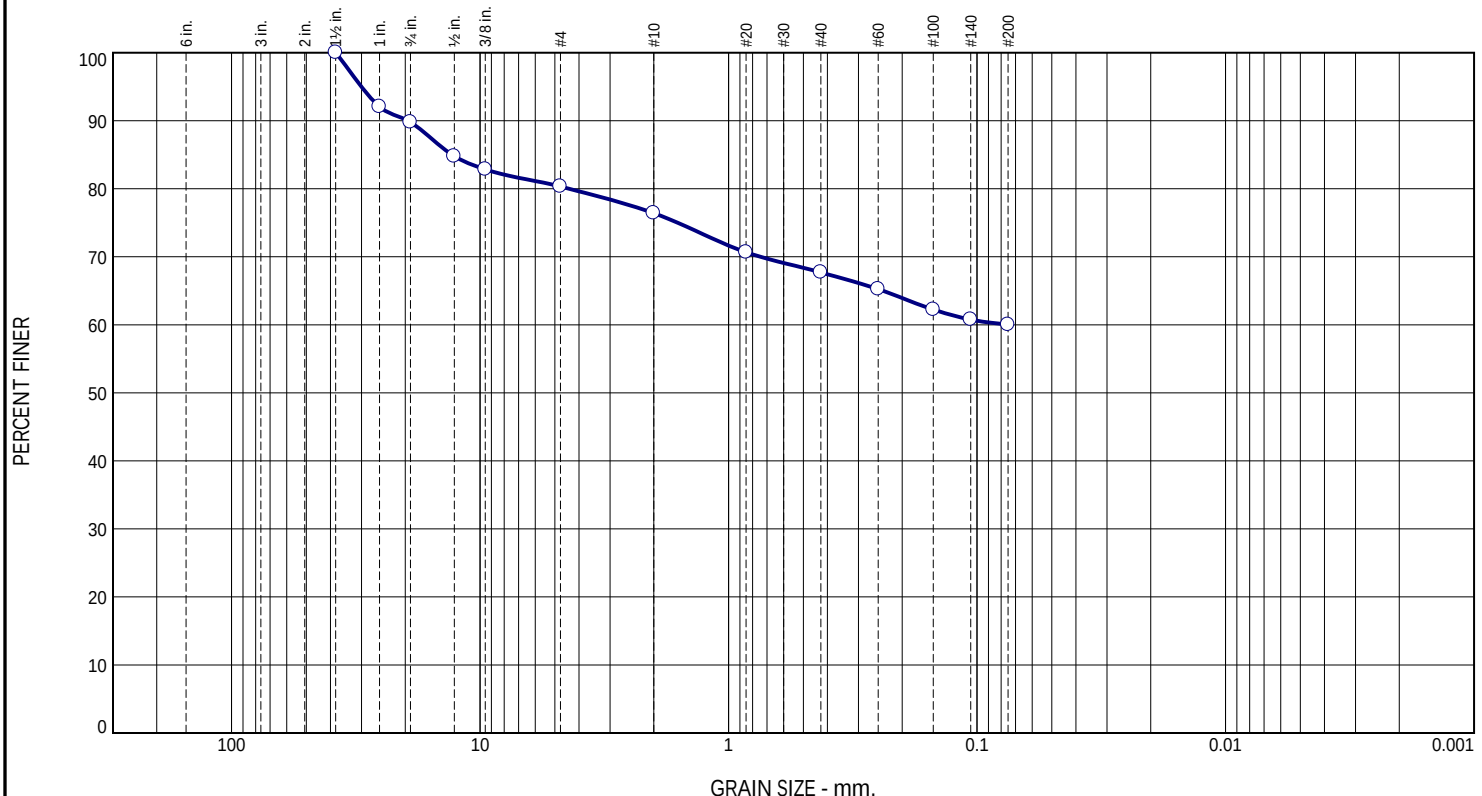
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 10.2 | 9.5 | 3.9 | 8.7 | 7.7 | 60.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 92.1 | | | |
| 0.75" | 89.8 | | | |
| 0.5" | 84.8 | | | |
| 0.375" | 82.9 | | | |
| #4 | 80.3 | | | |
| #10 | 76.4 | | | |
| #20 | 70.7 | | | 92.5 |
| #40 | 67.7 | | | 88.6 |
| #60 | 65.2 | | | 85.4 |
| #100 | 62.2 | | | 81.5 |
| #140 | 60.8 | | | 79.5 |
| #200 | 60.0 | | | 78.5 |

* (no specification provided)

**Material Description**

Brown sandy silt with gravel

**Atterberg Limits**

PL= 23 LL= 29 PI= 6

**Coefficients**

$D_{90}$= 19.4792 $D_{85}$= 12.9815 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= ML AASHTO= A-4(2)

**Test Remarks**

Sample Number: PV-142, TRT Depth: 1'-2'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

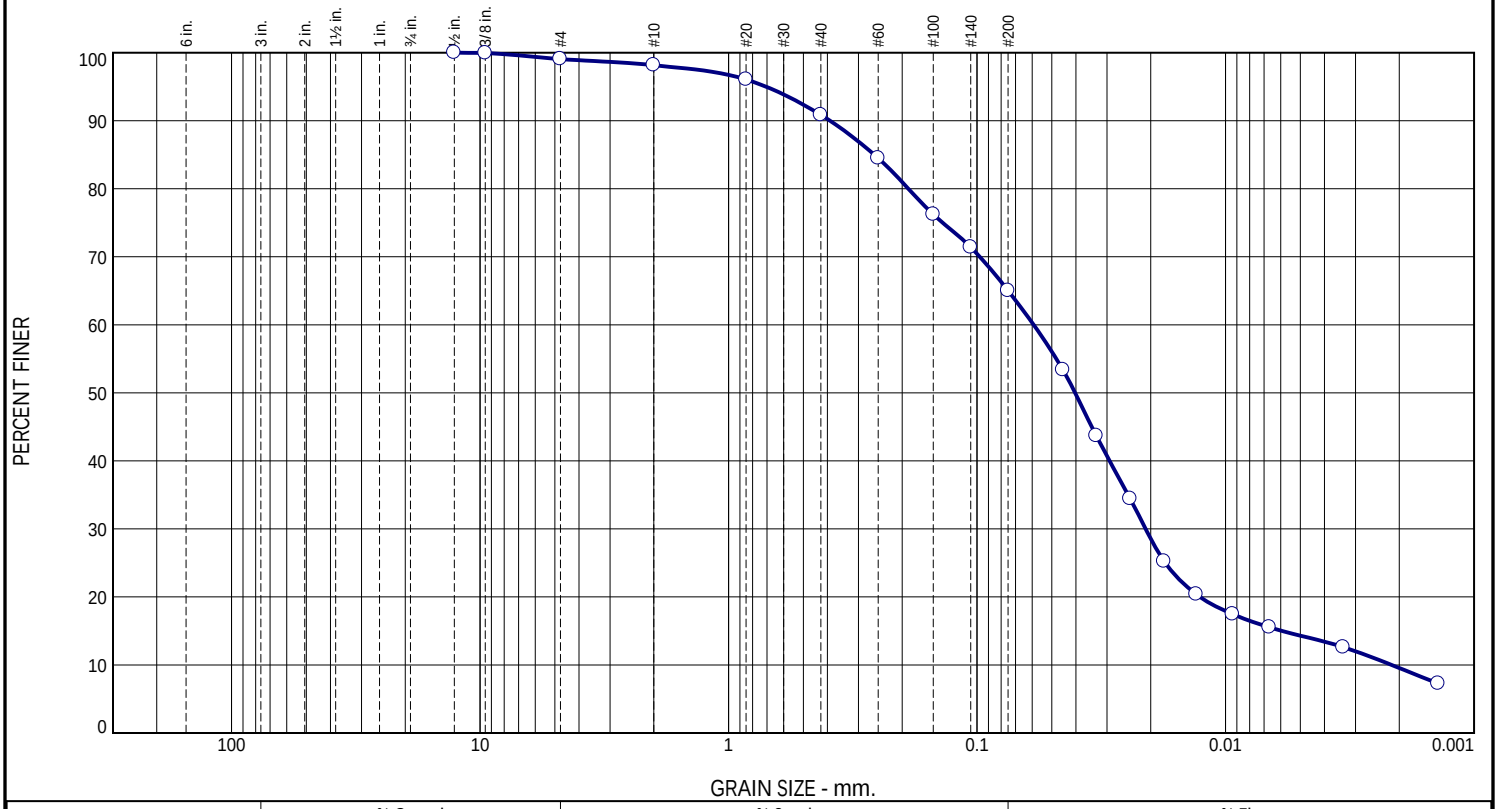
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.9 | 0.9 | 7.3 | 25.9 | 55.4 | 9.6 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.5" | 100.0 | | | |
| 0.375" | 99.9 | | | |
| #4 | 99.1 | | | |
| #10 | 98.2 | | | |
| #20 | 96.1 | | | 97.9 |
| #40 | 90.9 | | | 92.6 |
| #60 | 84.5 | | | 86.1 |
| #100 | 76.2 | | | 77.7 |
| #140 | 71.4 | | | 72.7 |
| #200 | 65.0 | | | 66.2 |
| 0.0451 mm. | 53.4 | | | |
| 0.0331 mm. | 43.7 | | | |
| 0.0242 mm. | 34.5 | | | |
| 0.0177 mm. | 25.2 | | | |
| 0.0131 mm. | 20.4 | | | |
| 0.0094 mm. | 17.5 | | | |
| 0.0067 mm. | 15.5 | | | |
| 0.0034 mm. | 12.6 | | | |
| 0.0014 mm. | 7.3 | | | |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 19 LL= 24 PI= 5

**Coefficients**

$D_{90}$= 0.3905 $D_{85}$= 0.2592 $D_{60}$= 0.0592
$D_{50}$= 0.0403 $D_{30}$= 0.0210 $D_{15}$= 0.0059
$D_{10}$= 0.0021 $C_u$= 27.56 $C_c$= 3.46

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

SG Assumed

Sample Number: PV-144, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

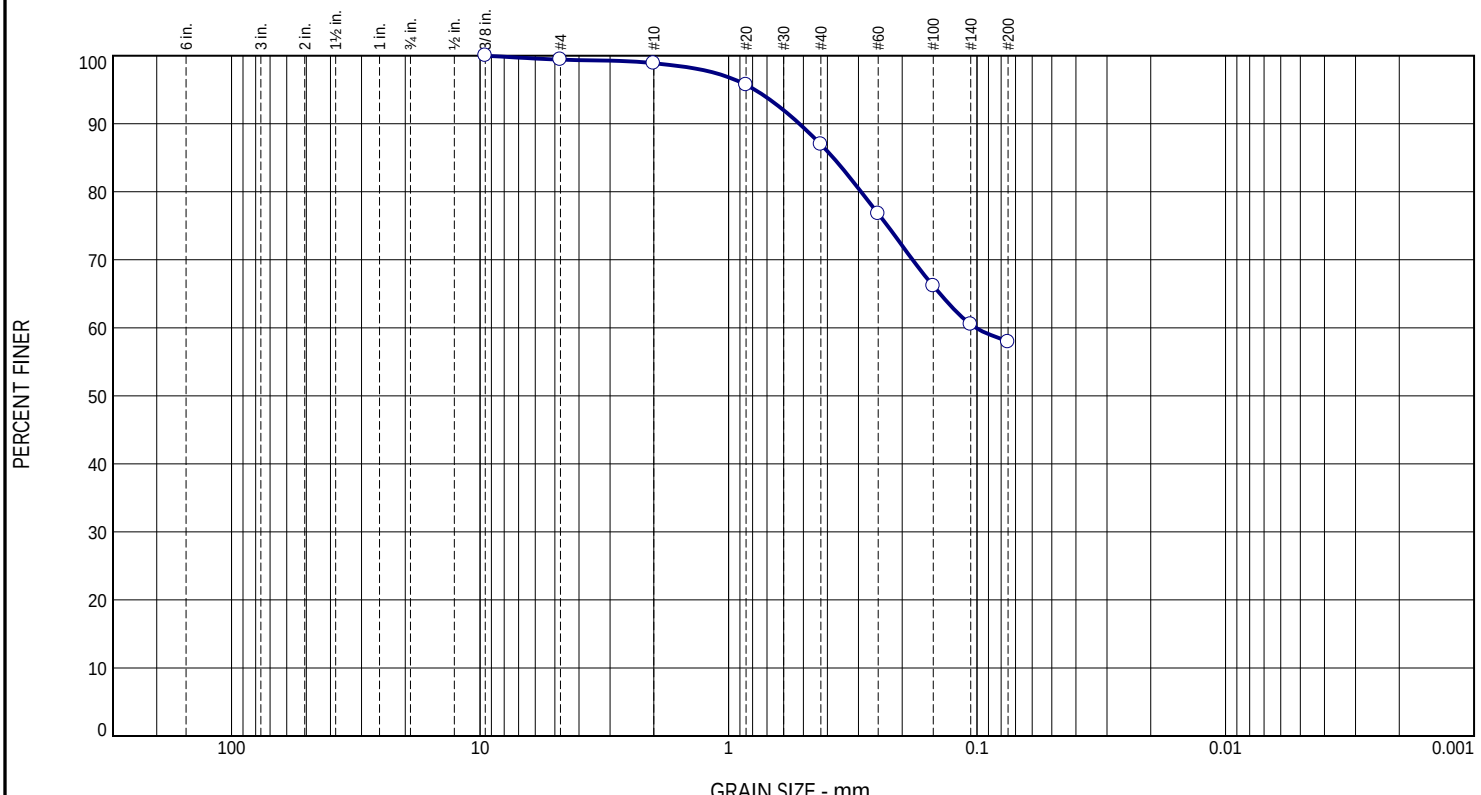
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.6 | 0.5 | 11.9 | 29.1 | 57.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.4 | | | |
| #10 | 98.9 | | | |
| #20 | 95.7 | | | 96.8 |
| #40 | 87.0 | | | 87.9 |
| #60 | 76.8 | | | 77.6 |
| #100 | 66.2 | | | 66.9 |
| #140 | 60.5 | | | 61.2 |
| #200 | 57.9 | | | 58.6 |

* (no specification provided)

Material Description

Brown sandy silty clay

Atterberg Limits

PL= 14 LL= 20 PI= 6

Coefficients

$D_{90}$= 0.5190 $D_{85}$= 0.3787 $D_{60}$= 0.1012
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(1)

Test Remarks

Sample Number: PV-145, TRT Depth: 2'-5'

Sample Date: 10/22/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

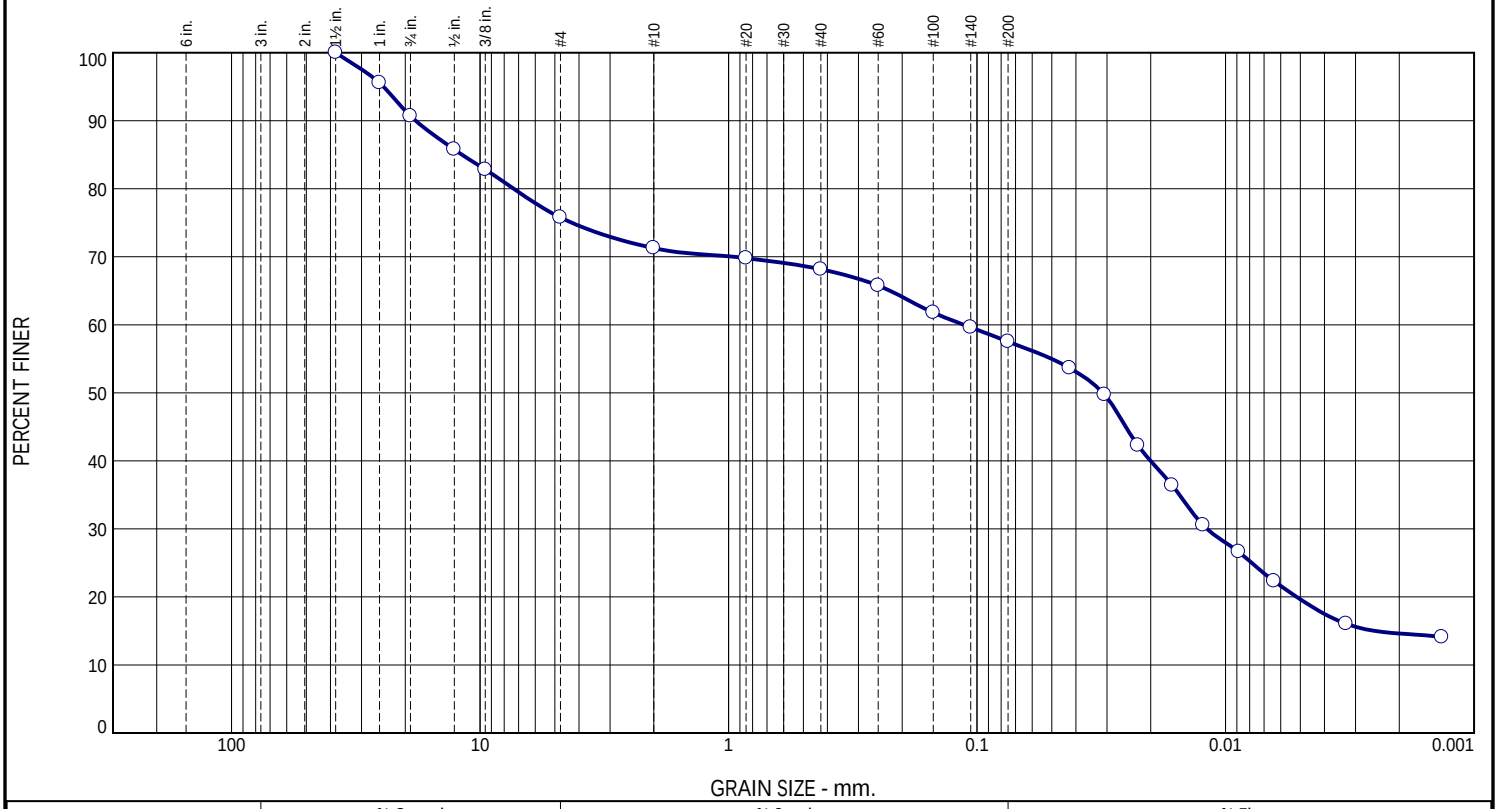
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-597 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 9.3 | 14.9 | 4.5 | 3.1 | 10.7 | 42.9 | 14.6 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 95.6 | | | |
| 0.75" | 90.7 | | | |
| 0.5" | 85.8 | | | |
| 0.375" | 82.8 | | | |
| #4 | 75.8 | | | |
| #10 | 71.3 | | | |
| #20 | 69.8 | | | 97.9 |
| #40 | 68.2 | | | 95.6 |
| #60 | 65.8 | | | 92.3 |
| #100 | 61.8 | | | 86.7 |
| #140 | 59.6 | | | 83.7 |
| #200 | 57.5 | | | 80.7 |
| 0.0424 mm. | 53.7 | | | |
| 0.0307 mm. | 49.7 | | | |
| 0.0225 mm. | 42.3 | | | |
| 0.0164 mm. | 36.4 | | | |
| 0.0123 mm. | 30.6 | | | |
| 0.0089 mm. | 26.6 | | | |
| 0.0064 mm. | 22.3 | | | |
| 0.0033 mm. | 16.1 | | | |
| 0.0013 mm. | 14.1 | | | |

* (no specification provided)

**Material Description**

Brown gravelly lean clay with sand

**Atterberg Limits**

PL= 19 LL= 31 PI= 12

**Coefficients**

$D_{90}$= 18.1646 $D_{85}$= 11.8205 $D_{60}$= 0.1128
$D_{50}$= 0.0311 $D_{30}$= 0.0119 $D_{15}$= 0.0025
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(4)

**Test Remarks**

Undersized Specimen
SG Assumed

Sample Number: PV-151, CBR/TRT Depth: 1'-2'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

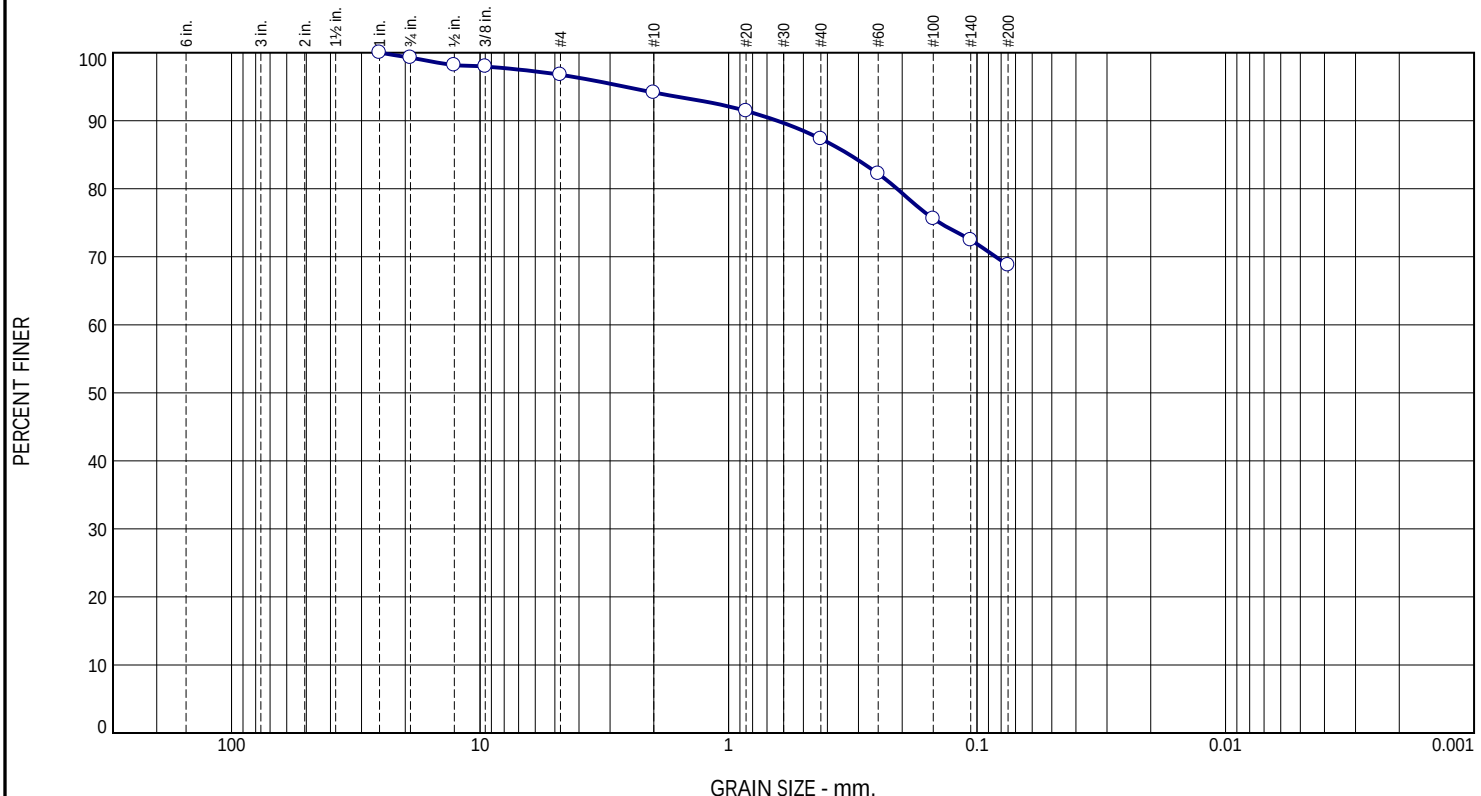
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST / MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.7 | 2.5 | 2.6 | 6.9 | 18.5 | 68.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 99.3 | | | |
| 0.5" | 98.2 | | | |
| 0.375" | 98.0 | | | |
| #4 | 96.8 | | | |
| #10 | 94.2 | | | |
| #20 | 91.4 | | | 97.1 |
| #40 | 87.3 | | | 92.8 |
| #60 | 82.2 | | | 87.3 |
| #100 | 75.6 | | | 80.3 |
| #140 | 72.5 | | | 77.0 |
| #200 | 68.8 | | | 73.0 |

* (no specification provided)

**Material Description**

Brown sandy lean clay

**Atterberg Limits**

PL= 19 LL= 31 PI= 12

**Coefficients**

$D_{90}$= 0.6373 $D_{85}$= 0.3257 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(6)

**Test Remarks**

Sample Number: PV-154, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

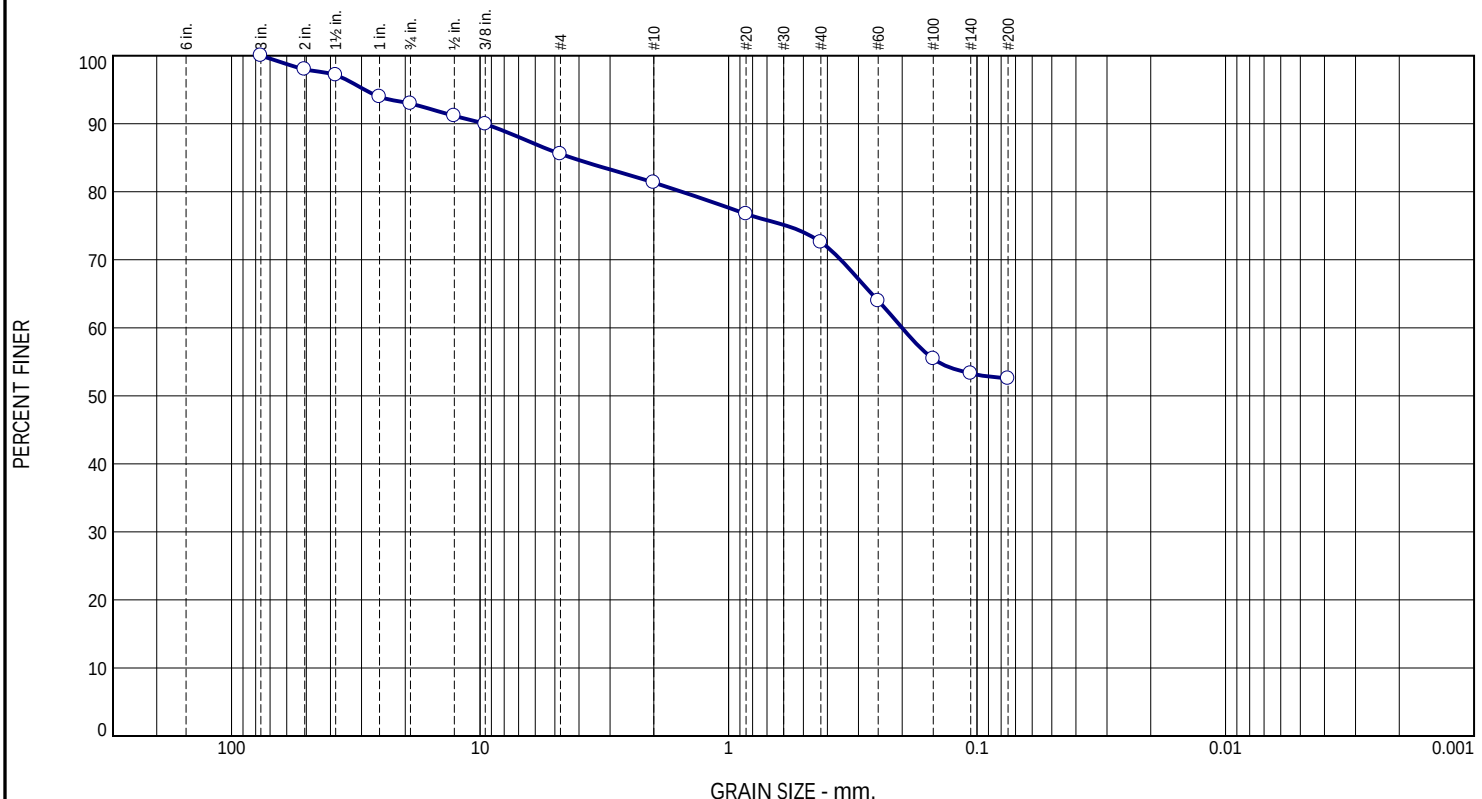
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 7.0 | 7.4 | 4.3 | 8.7 | 20.1 | 52.5 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 3.0" | 100.0 | | | |
| 2.0" | 98.0 | | | |
| 1.5" | 97.2 | | | |
| 1.0" | 94.0 | | | |
| 0.75" | 93.0 | | | |
| 0.5" | 91.2 | | | |
| 0.375" | 89.9 | | | |
| #4 | 85.6 | | | 95.1 |
| #10 | 81.3 | | | 90.5 |
| #20 | 76.7 | | | 85.3 |
| #40 | 72.6 | | | 80.7 |
| #60 | 64.0 | | | 71.1 |
| #100 | 55.4 | | | 61.6 |
| #140 | 53.3 | | | 59.3 |
| #200 | 52.5 | | | 58.4 |

* (no specification provided)

Material Description

Brown sandy silty clay

Atterberg Limits

PL= 20 LL= 25 PI= 5

Coefficients

$D_{90}$= 9.6508 $D_{85}$= 4.2760 $D_{60}$= 0.2004

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(0)

Test Remarks

Sample Number: PV-158, TRT Depth: 2'-5'

Sample Date: 11/18/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

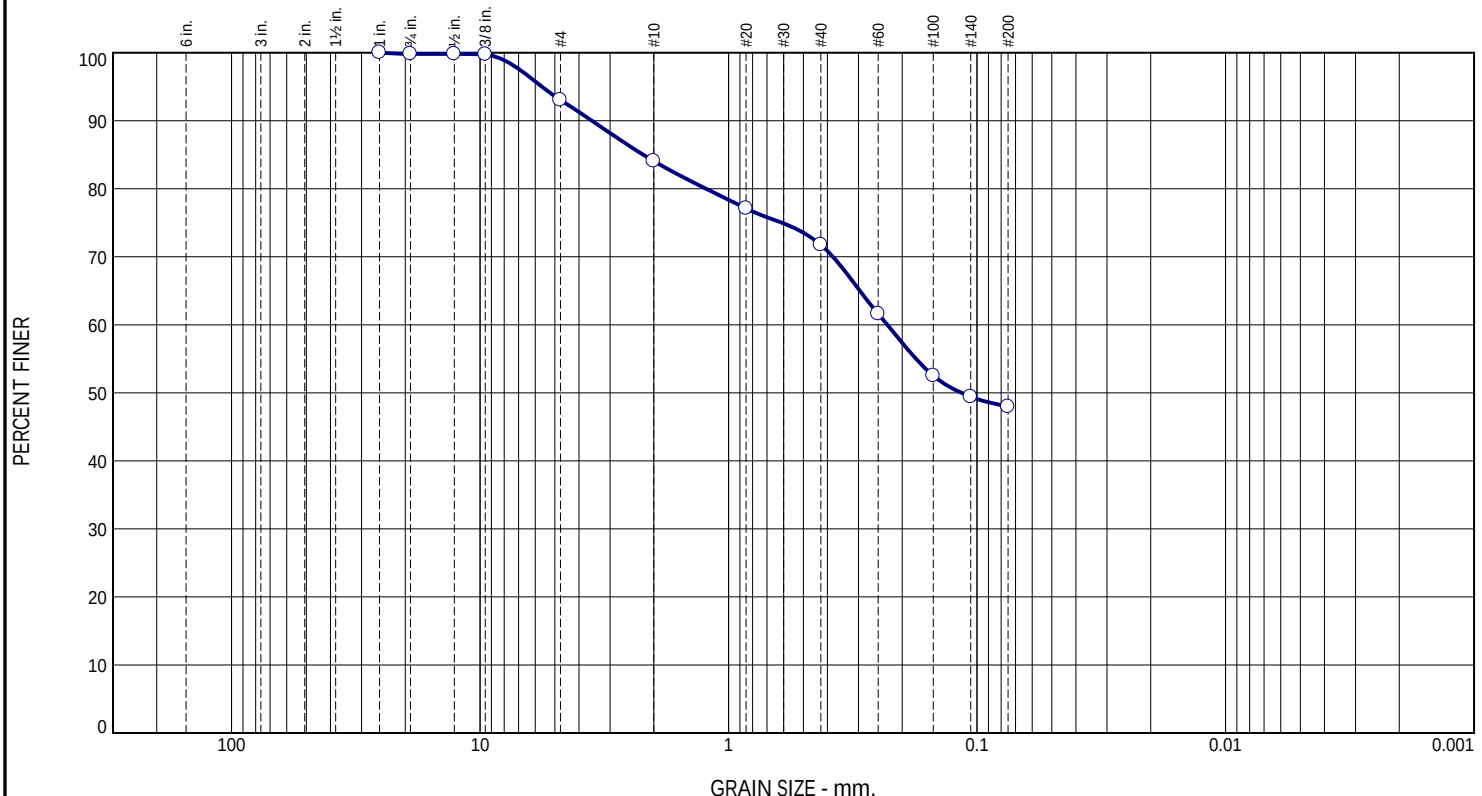
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-653 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.2 | 6.8 | 8.9 | 12.3 | 23.8 | 48.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 99.8 | | | |
| 0.5" | 99.8 | | | |
| 0.375" | 99.7 | | | |
| #4 | 93.0 | | | 93.3 |
| #10 | 84.1 | | | 84.3 |
| #20 | 77.1 | | | 77.3 |
| #40 | 71.8 | | | 72.0 |
| #60 | 61.6 | | | 61.8 |
| #100 | 52.5 | | | 52.7 |
| #140 | 49.4 | | | 49.6 |
| #200 | 48.0 | | | 48.1 |

* (no specification provided)

**Material Description**

Brown clayey sand

**Atterberg Limits**

PL= 17 LL= 25 PI= 8

**Coefficients**

$D_{90}$= 3.5490 $D_{85}$= 2.2053 $D_{60}$= 0.2297
$D_{50}$= 0.1155 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-160, TRT Depth: 2'-5'

Sample Date: 11/18/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

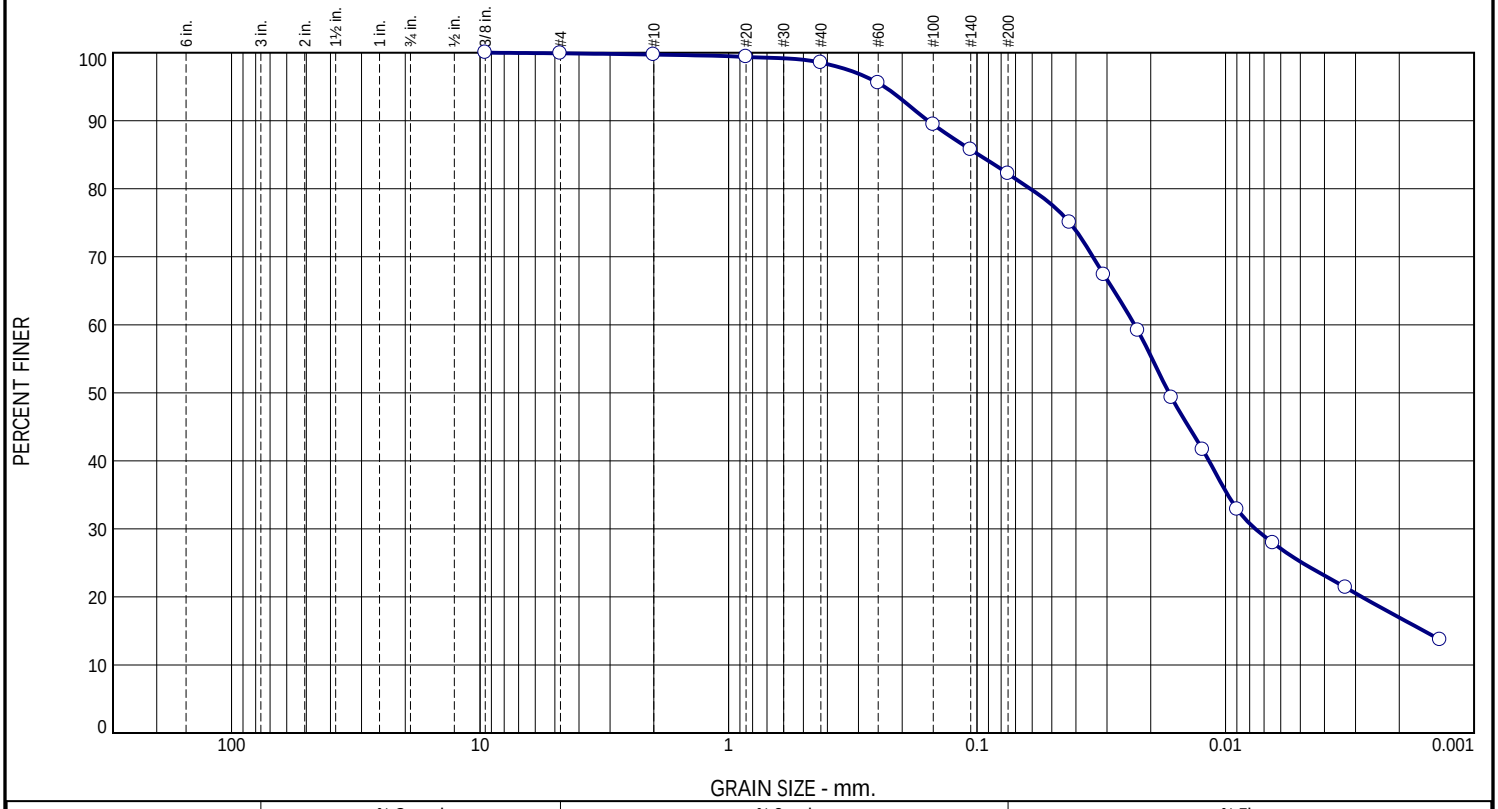
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-653 Figure

Tested By: MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.2 | 1.2 | 16.3 | 65.2 | 17.0 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.7 | | | |
| #20 | 99.4 | | | 99.7 |
| #40 | 98.5 | | | 98.8 |
| #60 | 95.5 | | | 95.8 |
| #100 | 89.4 | | | 89.7 |
| #140 | 85.7 | | | 86.0 |
| #200 | 82.2 | | | 82.4 |
| 0.0424 mm. | 75.0 | | | |
| 0.0309 mm. | 67.4 | | | |
| 0.0225 mm. | 59.2 | | | |
| 0.0165 mm. | 49.3 | | | |
| 0.0124 mm. | 41.6 | | | |
| 0.0090 mm. | 32.9 | | | |
| 0.0064 mm. | 27.9 | | | |
| 0.0033 mm. | 21.4 | | | |
| 0.0014 mm. | 13.7 | | | |

* (no specification provided)

**Material Description**

Brown lean clay with sand

**Atterberg Limits**

PL= 19 LL= 32 PI= 13

**Coefficients**

$D_{90}$= 0.1575 $D_{85}$= 0.0986 $D_{60}$= 0.0232

$D_{50}$= 0.0169 $D_{30}$= 0.0076 $D_{15}$= 0.0016

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(10)

**Test Remarks**

SG Assumed

Sample Number: PV-164, CBR/TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

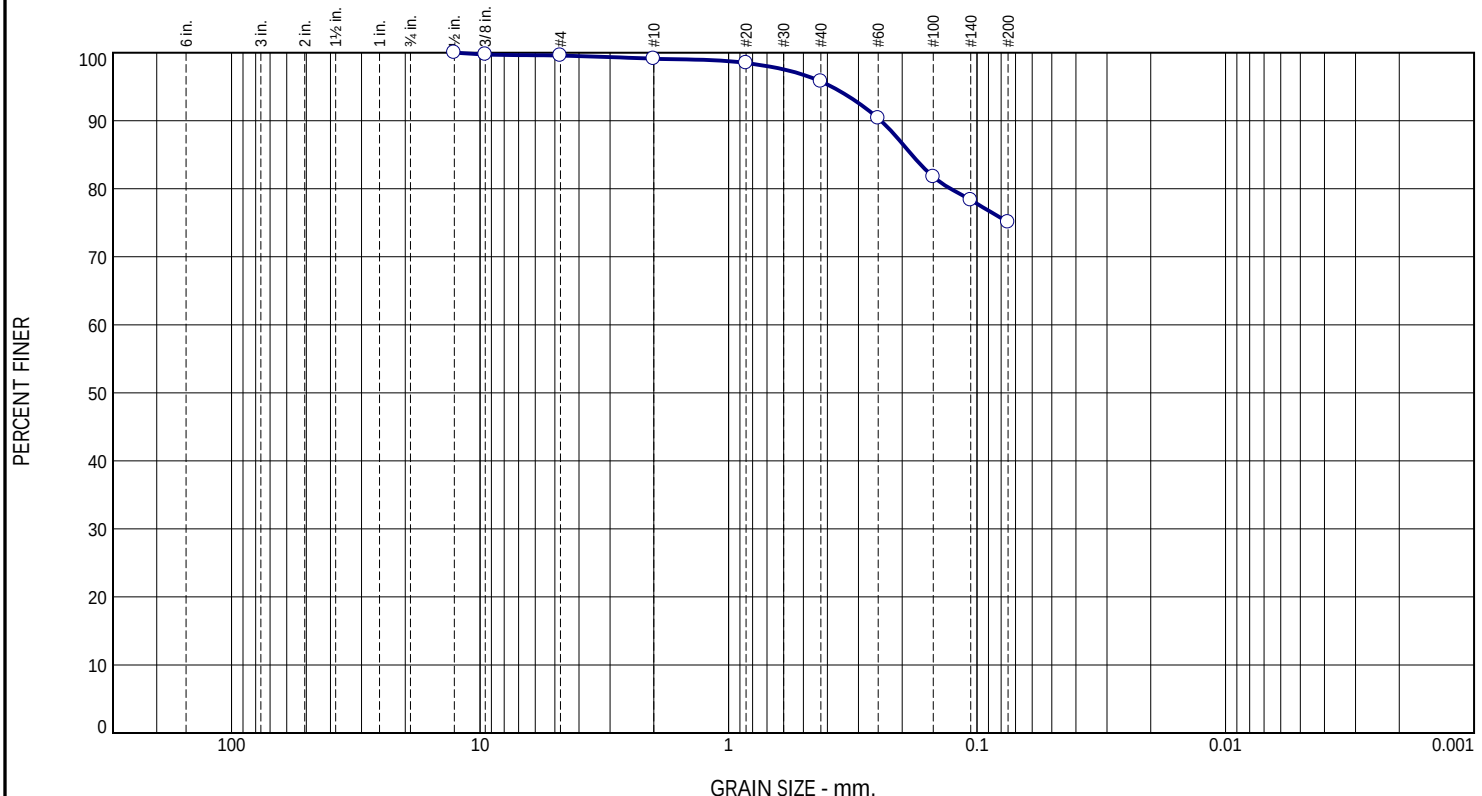
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.4 | 0.5 | 3.3 | 20.7 | 75.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.5" | 100.0 | | | |
| 0.375" | 99.7 | | | |
| #4 | 99.6 | | | |
| #10 | 99.1 | | | |
| #20 | 98.5 | | | 99.4 |
| #40 | 95.8 | | | 96.6 |
| #60 | 90.4 | | | 91.2 |
| #100 | 81.8 | | | 82.5 |
| #140 | 78.3 | | | 79.0 |
| #200 | 75.1 | | | 75.8 |

* (no specification provided)

**Material Description**

Brown lean clay with sand

**Atterberg Limits**

PL= 20 LL= 28 PI= 8

**Coefficients**

$D_{90}$= 0.2437 $D_{85}$= 0.1830 $D_{60}$=

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-4(4)

**Test Remarks**

Sample Number: PV-169, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

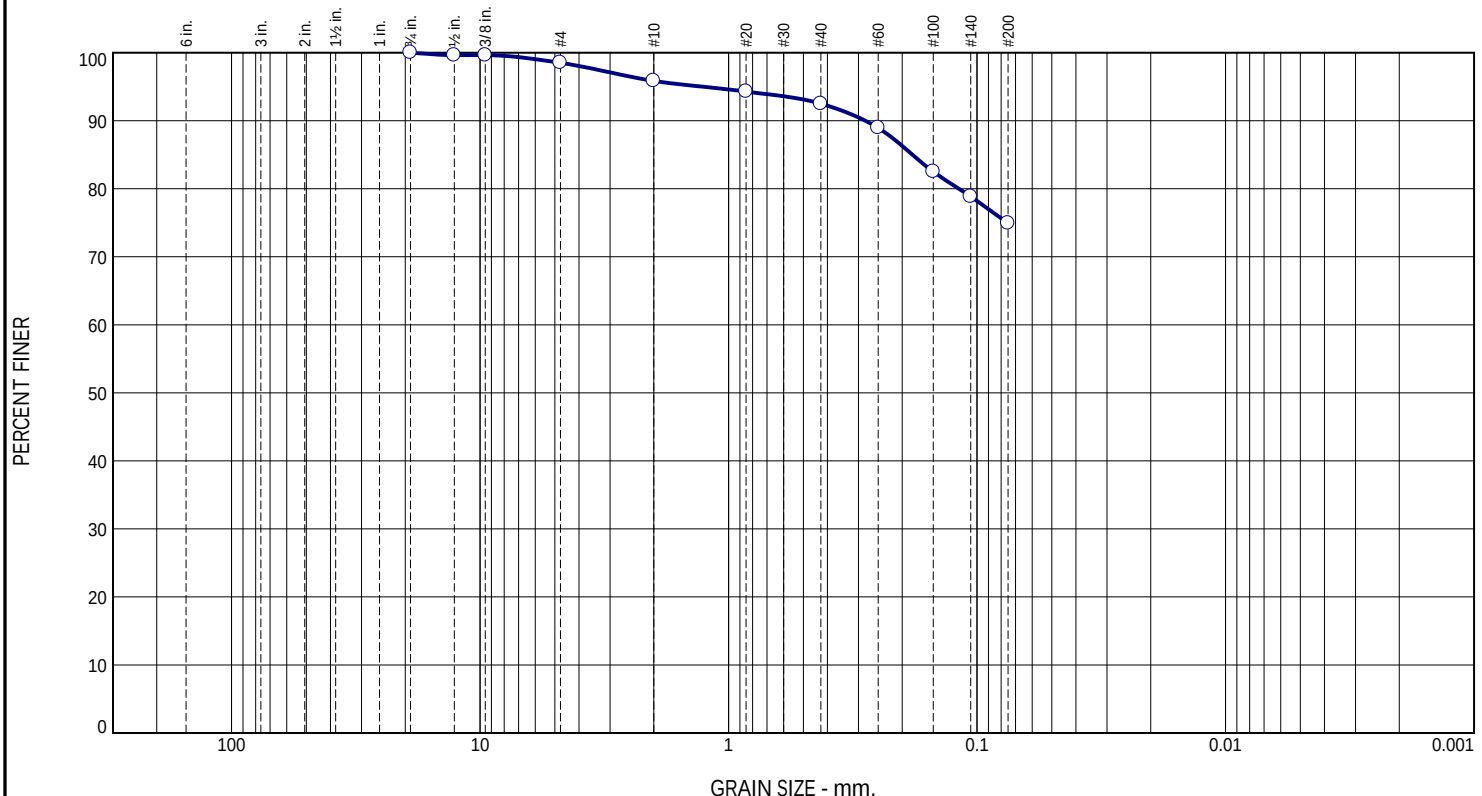
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 1.5 | 2.6 | 3.4 | 17.6 | 74.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.6 | | | |
| 0.375" | 99.6 | | | |
| #4 | 98.5 | | | |
| #10 | 95.9 | | | |
| #20 | 94.3 | | | 98.4 |
| #40 | 92.5 | | | 96.5 |
| #60 | 89.0 | | | 92.8 |
| #100 | 82.5 | | | 86.1 |
| #140 | 78.9 | | | 82.3 |
| #200 | 74.9 | | | 78.2 |

* (no specification provided)

**Material Description**

Pale Brown silty clay with sand

**Atterberg Limits**

PL= 20 LL= 25 PI= 5

**Coefficients**

$D_{90}$= 0.2815 $D_{85}$= 0.1819 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(2)

**Test Remarks**

Sample Number: PV-172, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

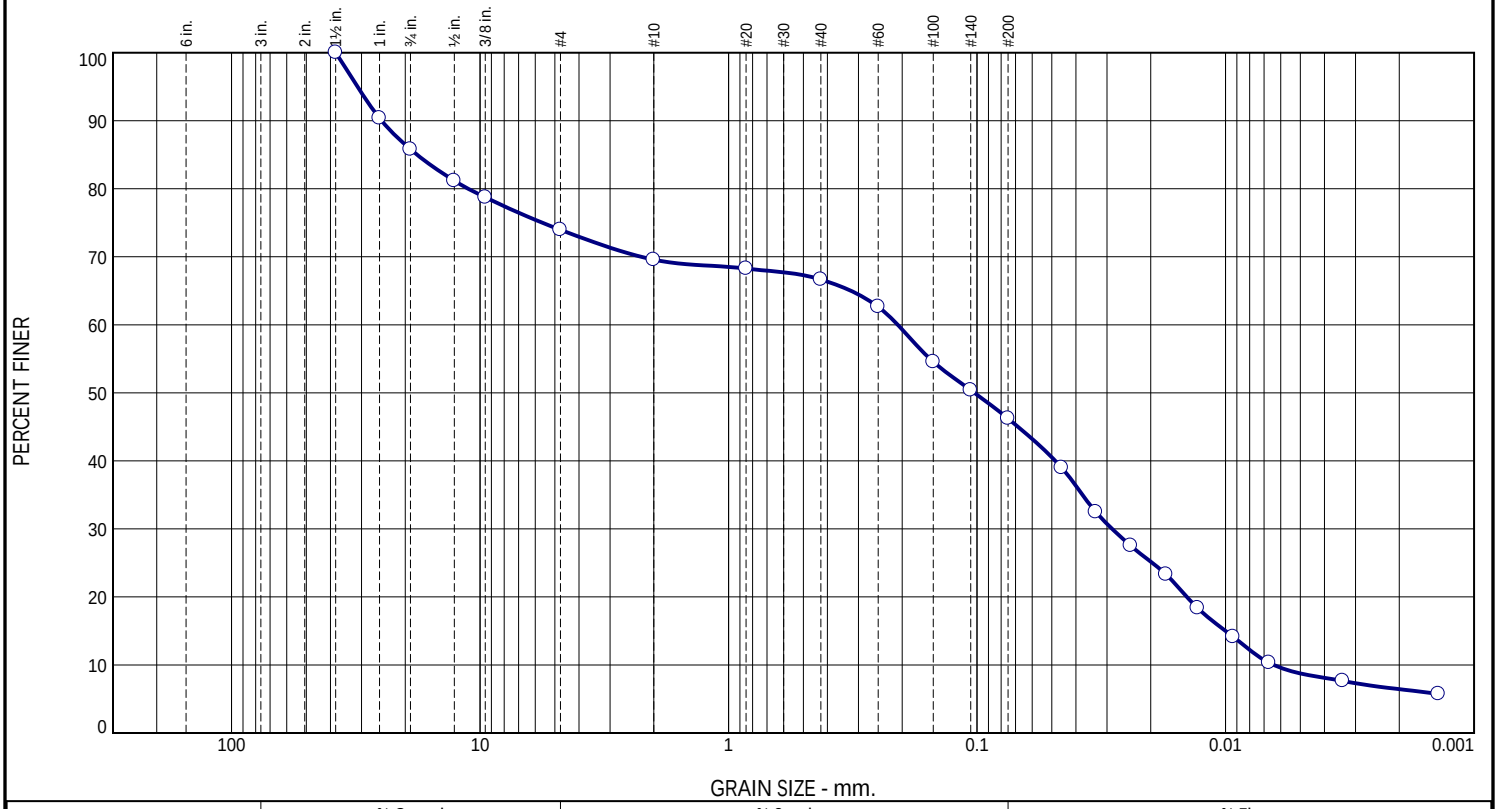
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 14.2 | 11.8 | 4.4 | 2.9 | 20.5 | 39.8 | 6.4 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 90.4 | | | |
| 0.75" | 85.8 | | | |
| 0.5" | 81.2 | | | |
| 0.375" | 78.7 | | | |
| #4 | 74.0 | | | |
| #10 | 69.6 | | | |
| #20 | 68.3 | | | 98.1 |
| #40 | 66.7 | | | 95.8 |
| #60 | 62.6 | | | 90.0 |
| #100 | 54.6 | | | 78.4 |
| #140 | 50.4 | | | 72.4 |
| #200 | 46.2 | | | 66.4 |
| 0.0456 mm. | 39.0 | | | |
| 0.0333 mm. | 32.5 | | | |
| 0.0241 mm. | 27.5 | | | |
| 0.0174 mm. | 23.3 | | | |
| 0.0129 mm. | 18.4 | | | |
| 0.0093 mm. | 14.1 | | | |
| 0.0067 mm. | 10.3 | | | |
| 0.0034 mm. | 7.6 | | | |
| 0.0014 mm. | 5.7 | | | |

* (no specification provided)

**Material Description**

Pale Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 24.9269 $D_{85}$= 17.9238 $D_{60}$= 0.2084

$D_{50}$= 0.1026 $D_{30}$= 0.0286 $D_{15}$= 0.0100

$D_{10}$= 0.0064 $C_u$= 32.57 $C_c$= 0.61

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-178, CBR/TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

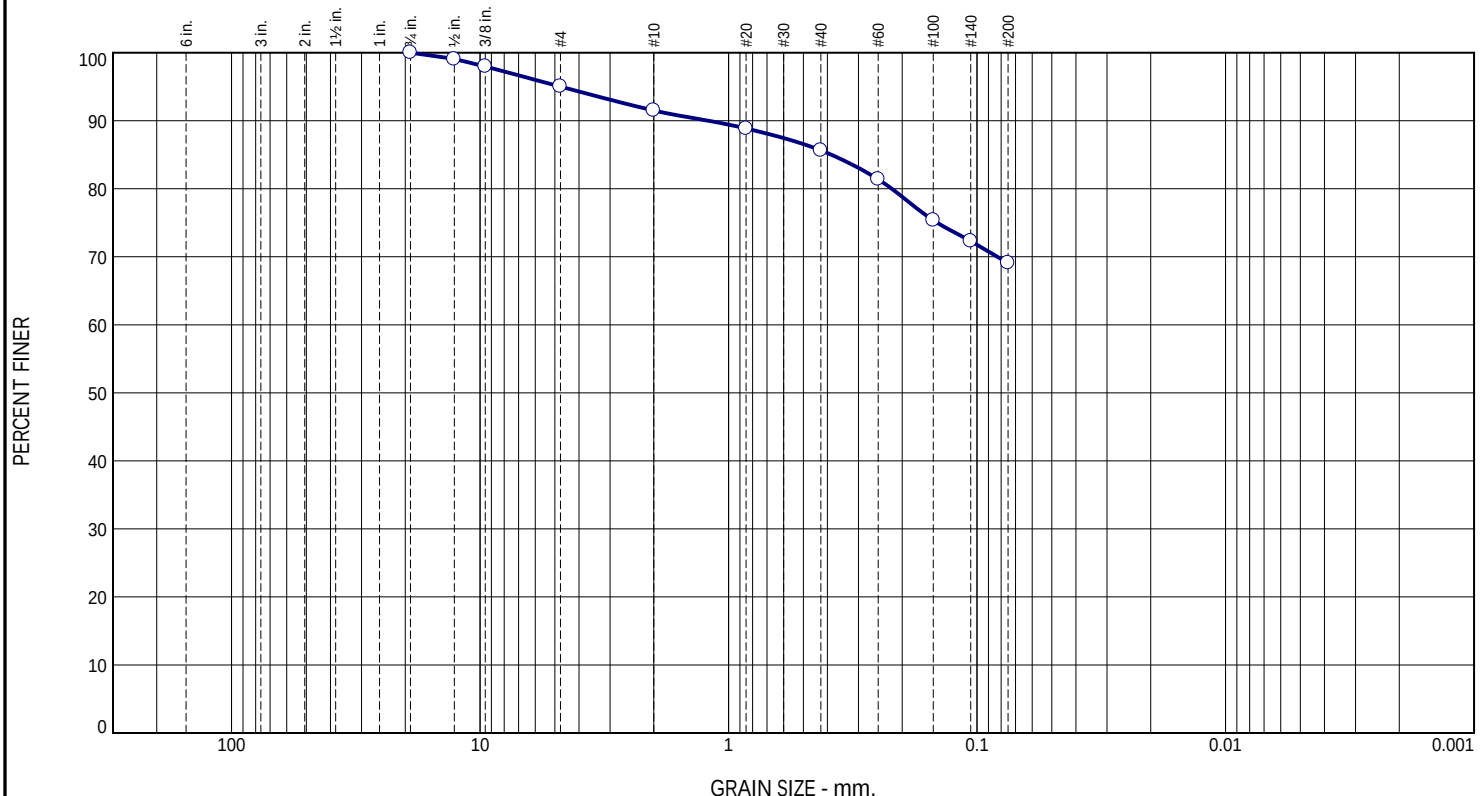
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 5.0 | 3.5 | 5.9 | 16.5 | 69.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.0 | | | |
| 0.375" | 98.0 | | | |
| #4 | 95.0 | | | |
| #10 | 91.5 | | | |
| #20 | 88.9 | | | 97.1 |
| #40 | 85.6 | | | 93.6 |
| #60 | 81.4 | | | 88.9 |
| #100 | 75.4 | | | 82.4 |
| #140 | 72.3 | | | 79.0 |
| #200 | 69.1 | | | 75.5 |

* (no specification provided)

**Material Description**

Brown sandy lean clay

**Atterberg Limits**

PL= 20 LL= 30 PI= 10

**Coefficients**

$D_{90}$= 1.2074 $D_{85}$= 0.3859 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-4(5)

**Test Remarks**

Sample Number: PV-179, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

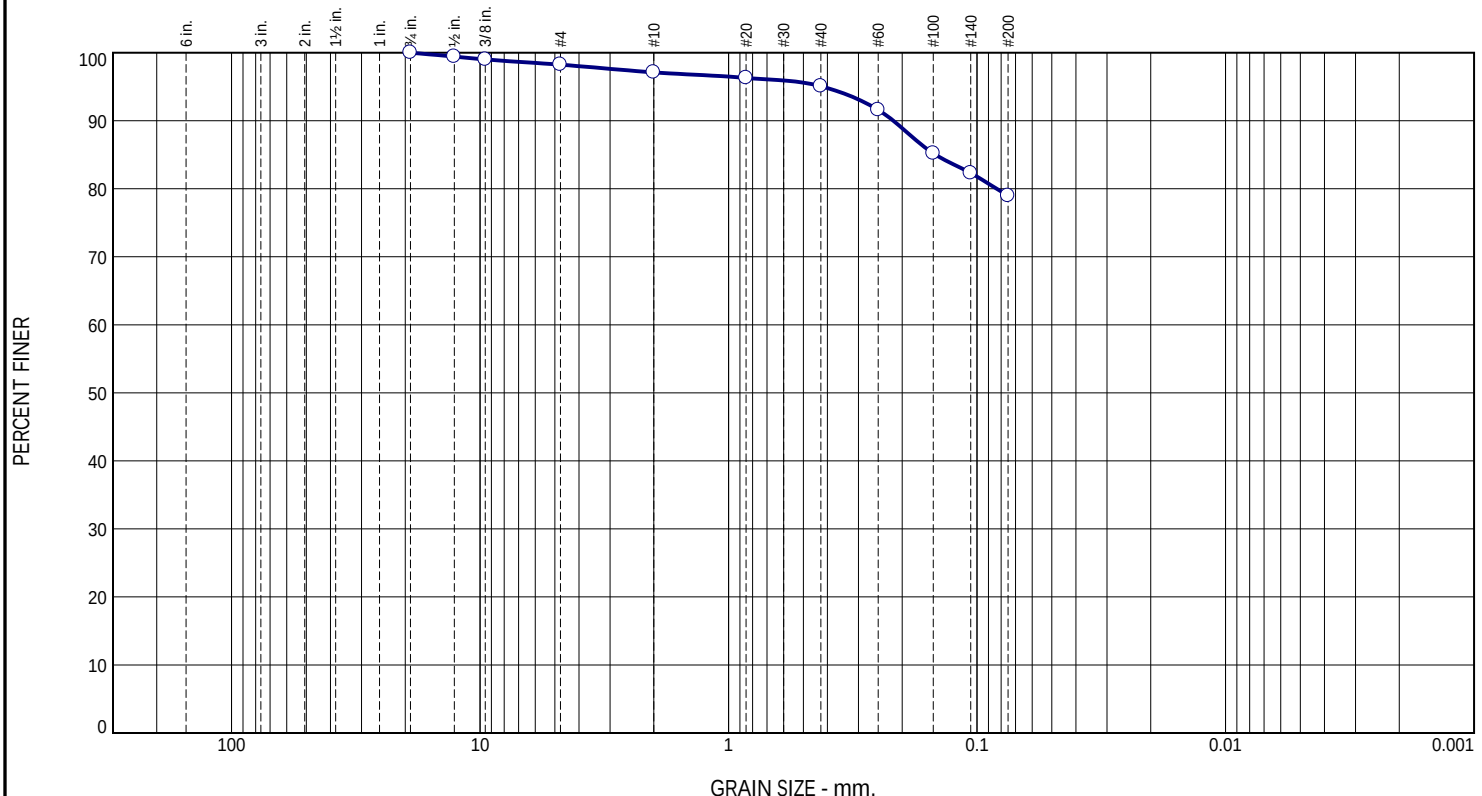
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 1.8 | 1.1 | 2.0 | 16.1 | 79.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.4 | | | |
| 0.375" | 99.0 | | | |
| #4 | 98.2 | | | |
| #10 | 97.1 | | | |
| #20 | 96.3 | | | 99.2 |
| #40 | 95.1 | | | 97.9 |
| #60 | 91.6 | | | 94.3 |
| #100 | 85.2 | | | 87.7 |
| #140 | 82.3 | | | 84.8 |
| #200 | 79.0 | | | 81.3 |

* (no specification provided)

Material Description

Brown lean clay with sand

Atterberg Limits

PL= 20 LL= 29 PI= 9

Coefficients

$D_{90}$= 0.2172 $D_{85}$= 0.1470 $D_{60}$=

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL AASHTO= A-4(6)

Test Remarks

Sample Number: PV-181, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

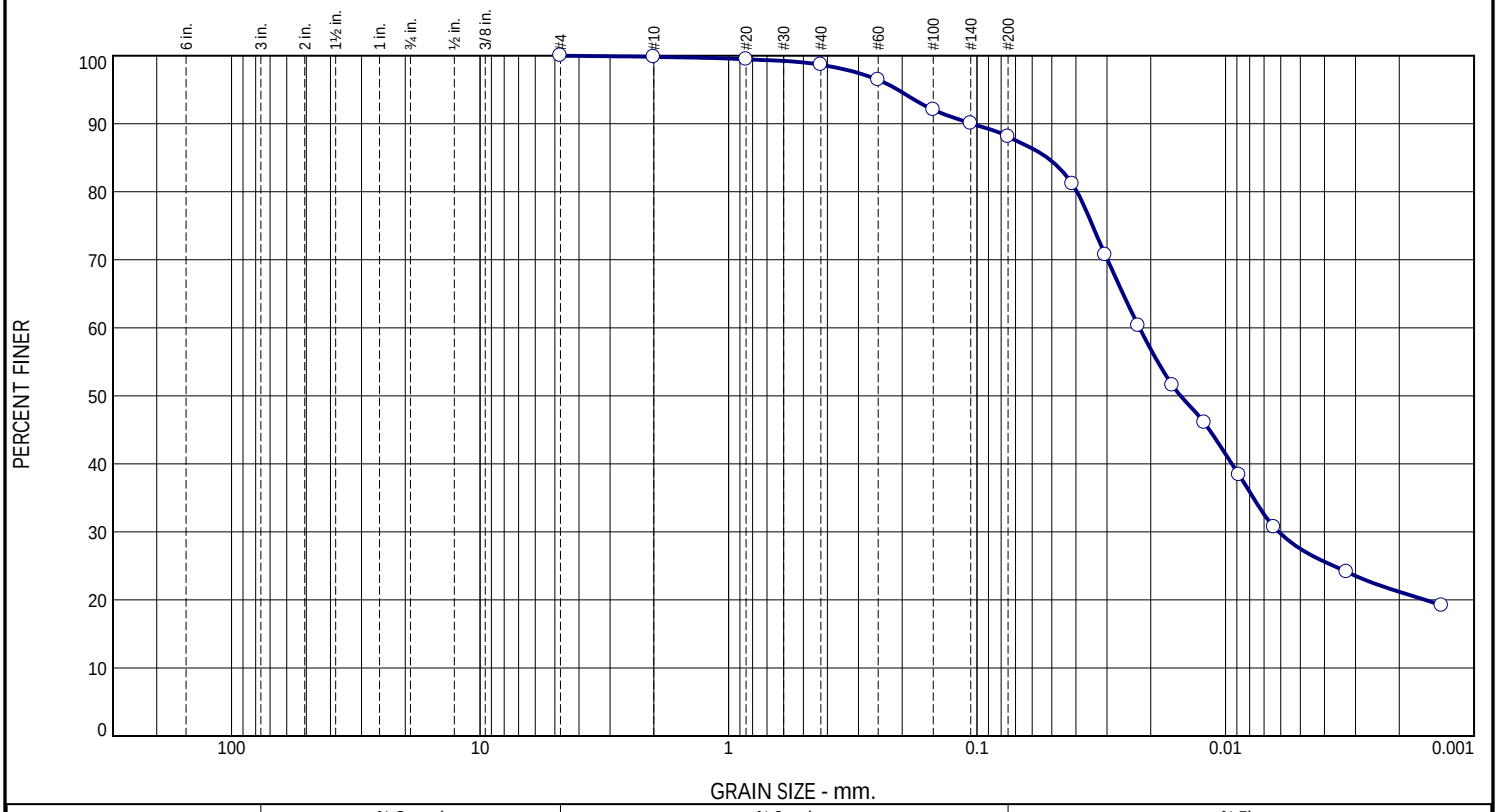
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.2 | 1.1 | 10.6 | 66.9 | 21.2 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| #4 | 100.0 | | | |
| #10 | 99.8 | | | |
| #20 | 99.5 | | | 99.6 |
| #40 | 98.7 | | | 98.8 |
| #60 | 96.5 | | | 96.6 |
| #100 | 92.0 | | | 92.2 |
| #140 | 90.0 | | | 90.2 |
| #200 | 88.1 | | | 88.3 |
| 0.0414 mm. | 81.1 | | | |
| 0.0305 mm. | 70.7 | | | |
| 0.0225 mm. | 60.3 | | | |
| 0.0164 mm. | 51.5 | | | |
| 0.0122 mm. | 46.1 | | | |
| 0.0088 mm. | 38.4 | | | |
| 0.0064 mm. | 30.7 | | | |
| 0.0033 mm. | 24.1 | | | |
| 0.0013 mm. | 19.2 | | | |

* (no specification provided)

**Material Description**

Brown lean clay

**Atterberg Limits**

PL= 19 LL= 31 PI= 12

**Coefficients**

$D_{90}$= 0.1051 $D_{85}$= 0.0521 $D_{60}$= 0.0222
$D_{50}$= 0.0152 $D_{30}$= 0.0061 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(10)

**Test Remarks**

SG Assumed

Sample Number: PV-183, CBR/TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

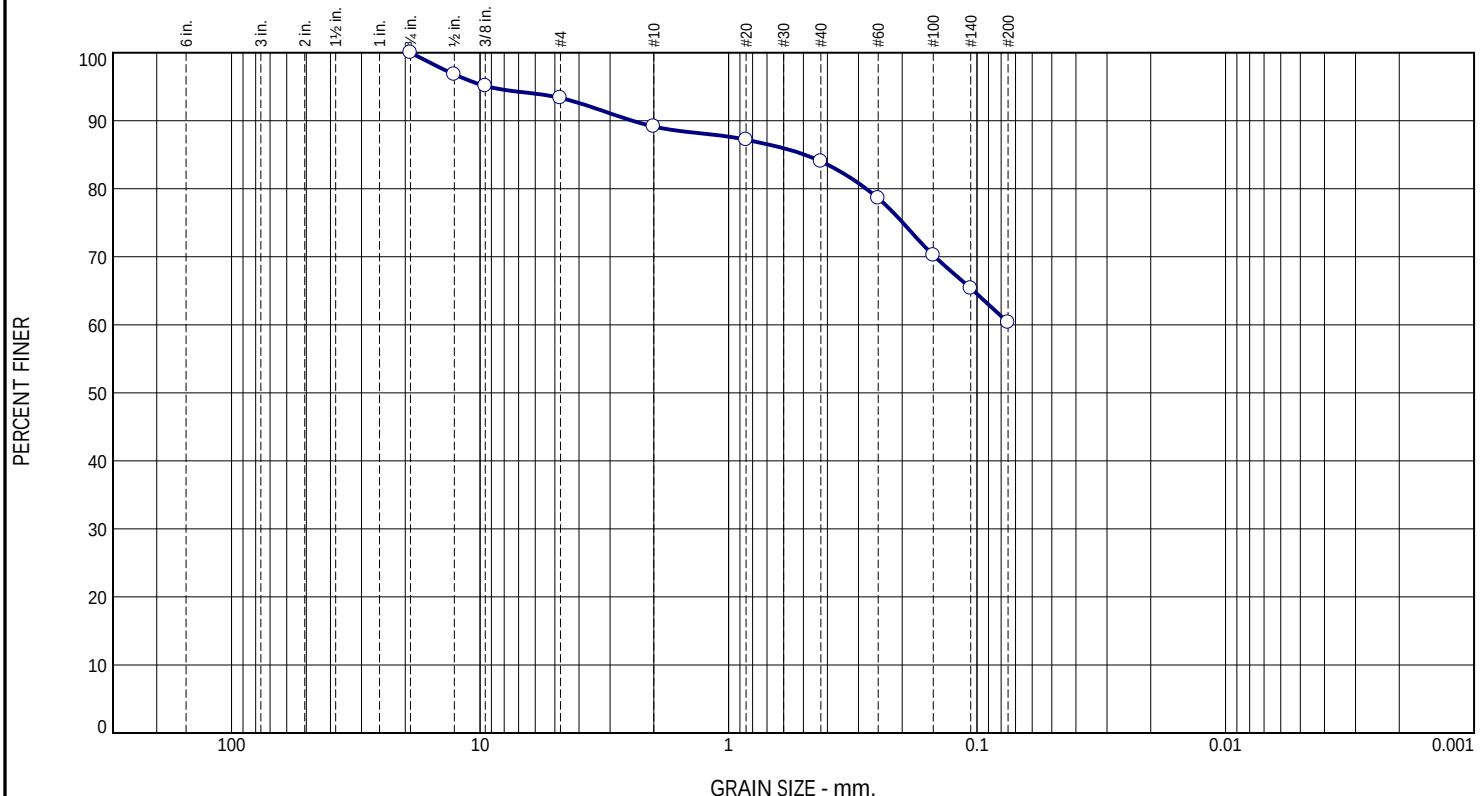
Client: Tetra Tech
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 6.6 | 4.3 | 5.1 | 23.6 | 60.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 96.8 | | | |
| 0.375" | 95.1 | | | |
| #4 | 93.4 | | | |
| #10 | 89.1 | | | |
| #20 | 87.2 | | | 97.8 |
| #40 | 84.0 | | | 94.3 |
| #60 | 78.6 | | | 88.2 |
| #100 | 70.2 | | | 78.8 |
| #140 | 65.4 | | | 73.3 |
| #200 | 60.4 | | | 67.7 |

* (no specification provided)

**Material Description**

Pale Brown sandy silty clay

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 2.4396 $D_{85}$= 0.4934 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(2)

**Test Remarks**

Sample Number: PV-188, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

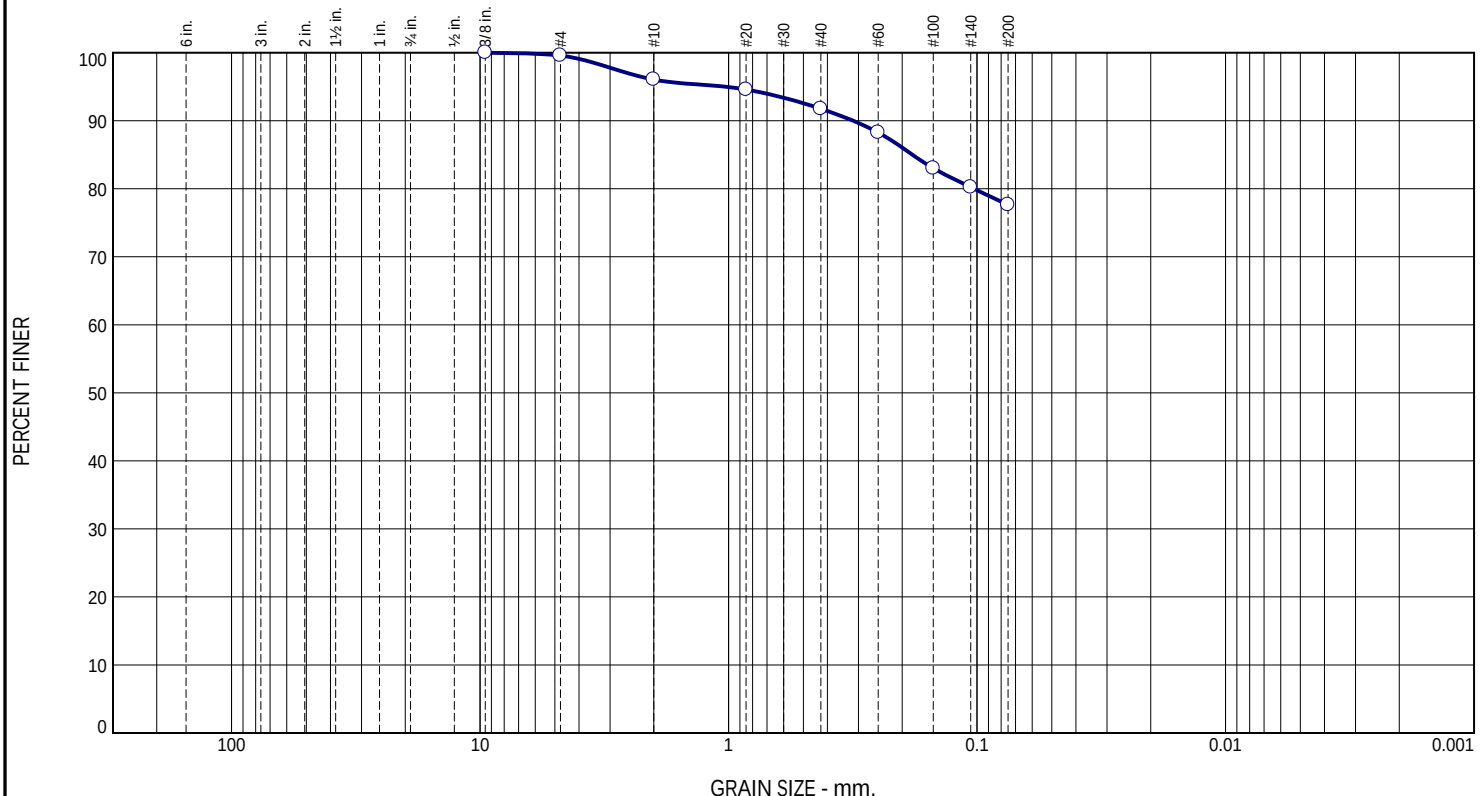
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.4 | 3.6 | 4.2 | 14.2 | 77.6 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.6 | | | |
| #10 | 96.0 | | | |
| #20 | 94.6 | | | 98.5 |
| #40 | 91.8 | | | 95.5 |
| #60 | 88.3 | | | 91.9 |
| #100 | 83.0 | | | 86.4 |
| #140 | 80.2 | | | 83.5 |
| #200 | 77.6 | | | 80.8 |

* (no specification provided)

Material Description

Brown lean clay with sand

Atterberg Limits

PL= 19 LL= 33 PI= 14

Coefficients

$D_{90}$= 0.3153 $D_{85}$= 0.1819 $D_{60}$=

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL AASHTO= A-6(10)

Test Remarks

Sample Number: PV-189, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

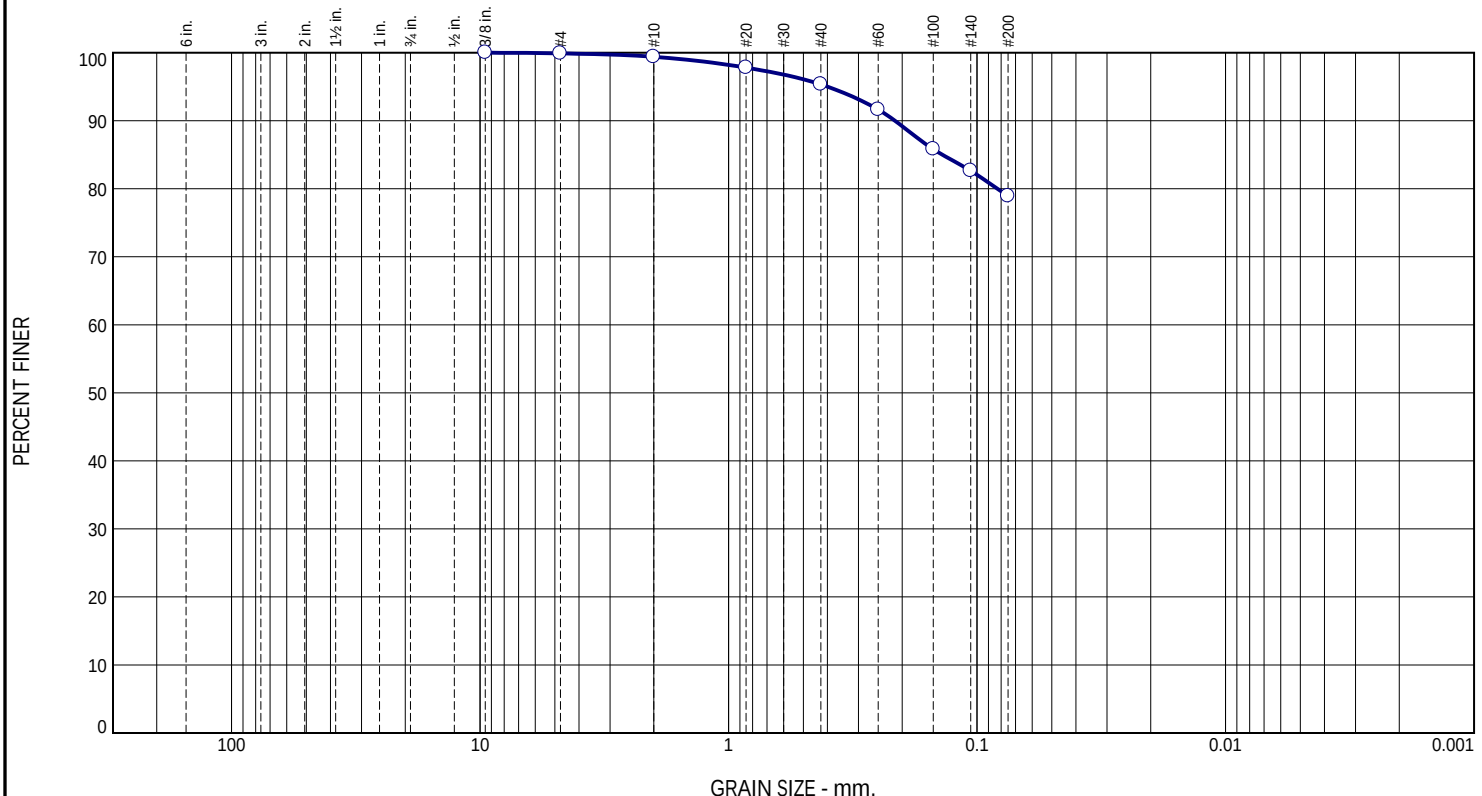
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.5 | 4.1 | 16.4 | 78.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.4 | | | |
| #20 | 97.8 | | | 98.4 |
| #40 | 95.3 | | | 95.9 |
| #60 | 91.6 | | | 92.2 |
| #100 | 85.8 | | | 86.3 |
| #140 | 82.6 | | | 83.1 |
| #200 | 78.9 | | | 79.4 |

* (no specification provided)

Material Description

Brown lean clay with sand

Atterberg Limits

PL= 18 LL= 26 PI= 8

Coefficients

$D_{90}$= 0.2141 $D_{85}$= 0.1379 $D_{60}$=

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL AASHTO= A-4(4)

Test Remarks

Sample Number: PV-193, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

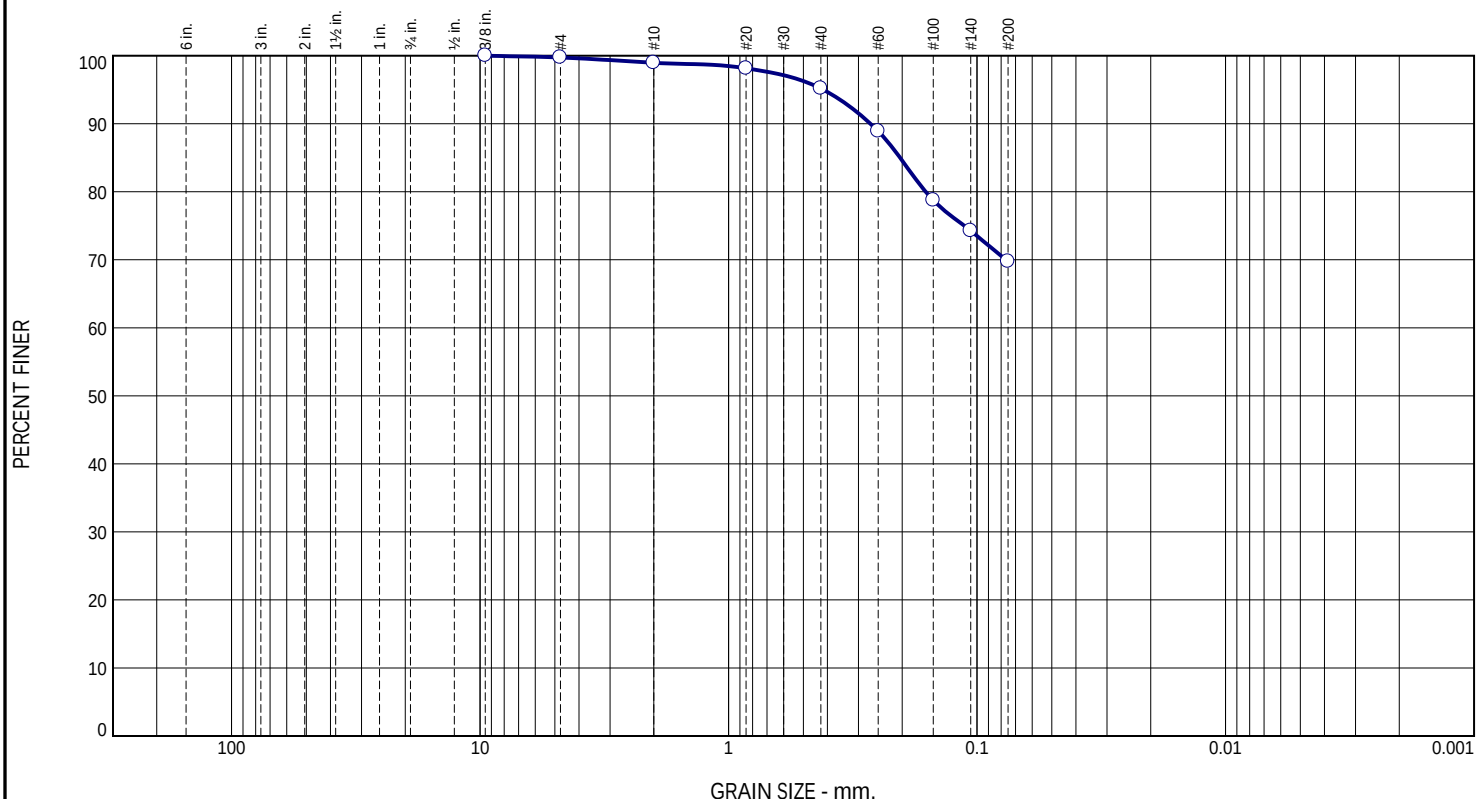
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.3 | 0.7 | 3.8 | 25.5 | 69.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.7 | | | |
| #10 | 99.0 | | | |
| #20 | 98.1 | | | 99.2 |
| #40 | 95.2 | | | 96.2 |
| #60 | 88.9 | | | 89.8 |
| #100 | 78.8 | | | 79.6 |
| #140 | 74.3 | | | 75.0 |
| #200 | 69.7 | | | 70.5 |

* (no specification provided)

Material Description

Brown sandy lean clay

Atterberg Limits

PL= 19 LL= 31 PI= 12

Coefficients

$D_{90}$= 0.2686 $D_{85}$= 0.2041 $D_{60}$=

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL AASHTO= A-6(7)

Test Remarks

Sample Number: PV-195, CBR/TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

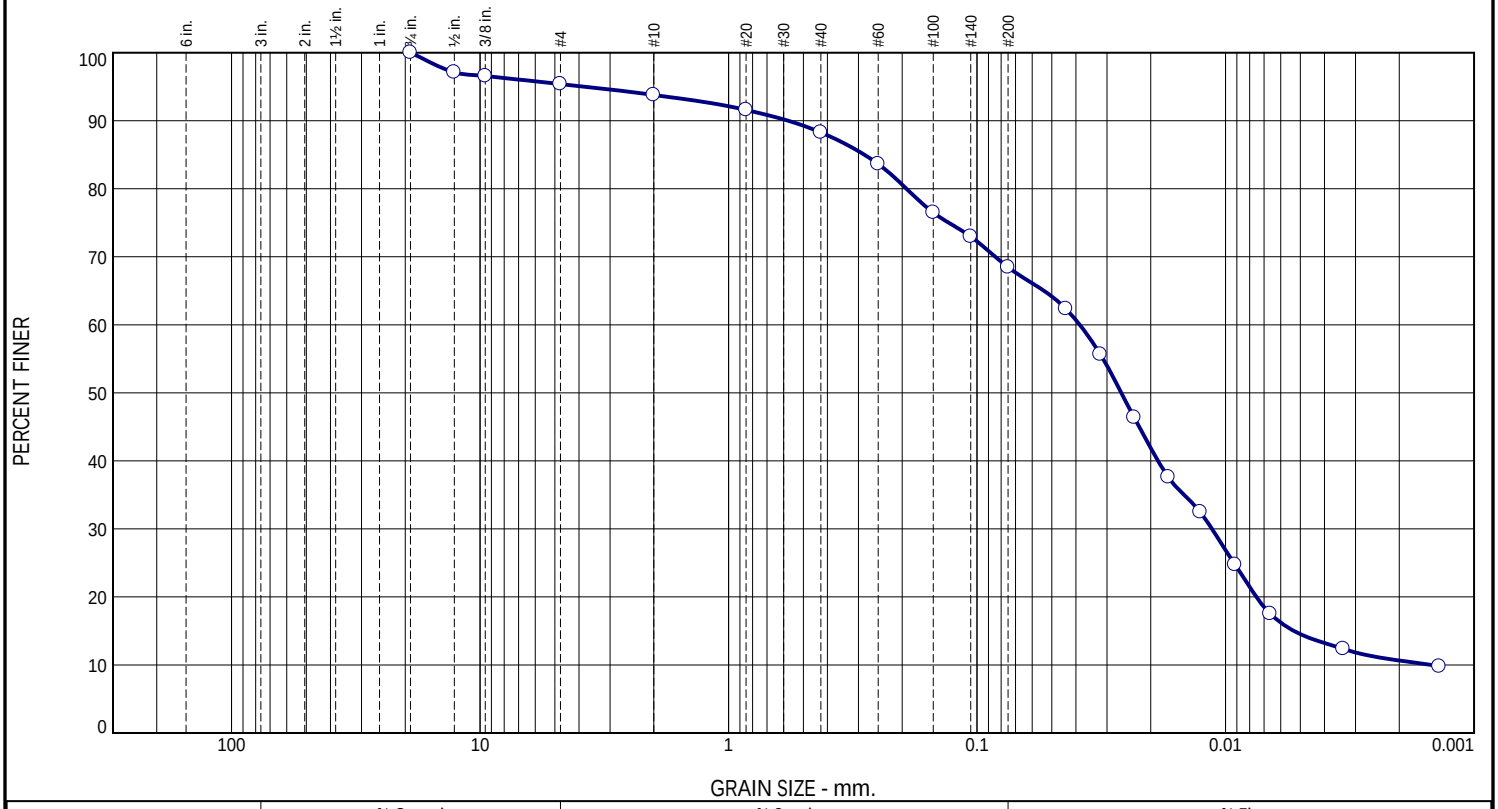
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 4.6 | 1.6 | 5.5 | 19.8 | 57.8 | 10.7 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 97.1 | | | |
| 0.375" | 96.6 | | | |
| #4 | 95.4 | | | |
| #10 | 93.8 | | | |
| #20 | 91.6 | | | 97.6 |
| #40 | 88.3 | | | 94.1 |
| #60 | 83.6 | | | 89.2 |
| #100 | 76.5 | | | 81.6 |
| #140 | 73.0 | | | 77.8 |
| #200 | 68.5 | | | 73.0 |
| 0.0439 mm. | 62.4 | | | |
| 0.0319 mm. | 55.7 | | | |
| 0.0233 mm. | 46.4 | | | |
| 0.0170 mm. | 37.6 | | | |
| 0.0126 mm. | 32.5 | | | |
| 0.0092 mm. | 24.7 | | | |
| 0.0066 mm. | 17.5 | | | |
| 0.0034 mm. | 12.4 | | | |
| 0.0014 mm. | 9.8 | | | |

* (no specification provided)

**Material Description**

Brown sandy lean clay

**Atterberg Limits**

PL= 19 LL= 30 PI= 11

**Coefficients**

$D_{90}$= 0.5763 $D_{85}$= 0.2841 $D_{60}$= 0.0386
$D_{50}$= 0.0263 $D_{30}$= 0.0113 $D_{15}$= 0.0053
$D_{10}$= 0.0015 $C_u$= 25.86 $C_c$= 2.23

**Classification**

USCS= CL AASHTO= A-6(5)

**Test Remarks**

Sample Number: PV-198, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

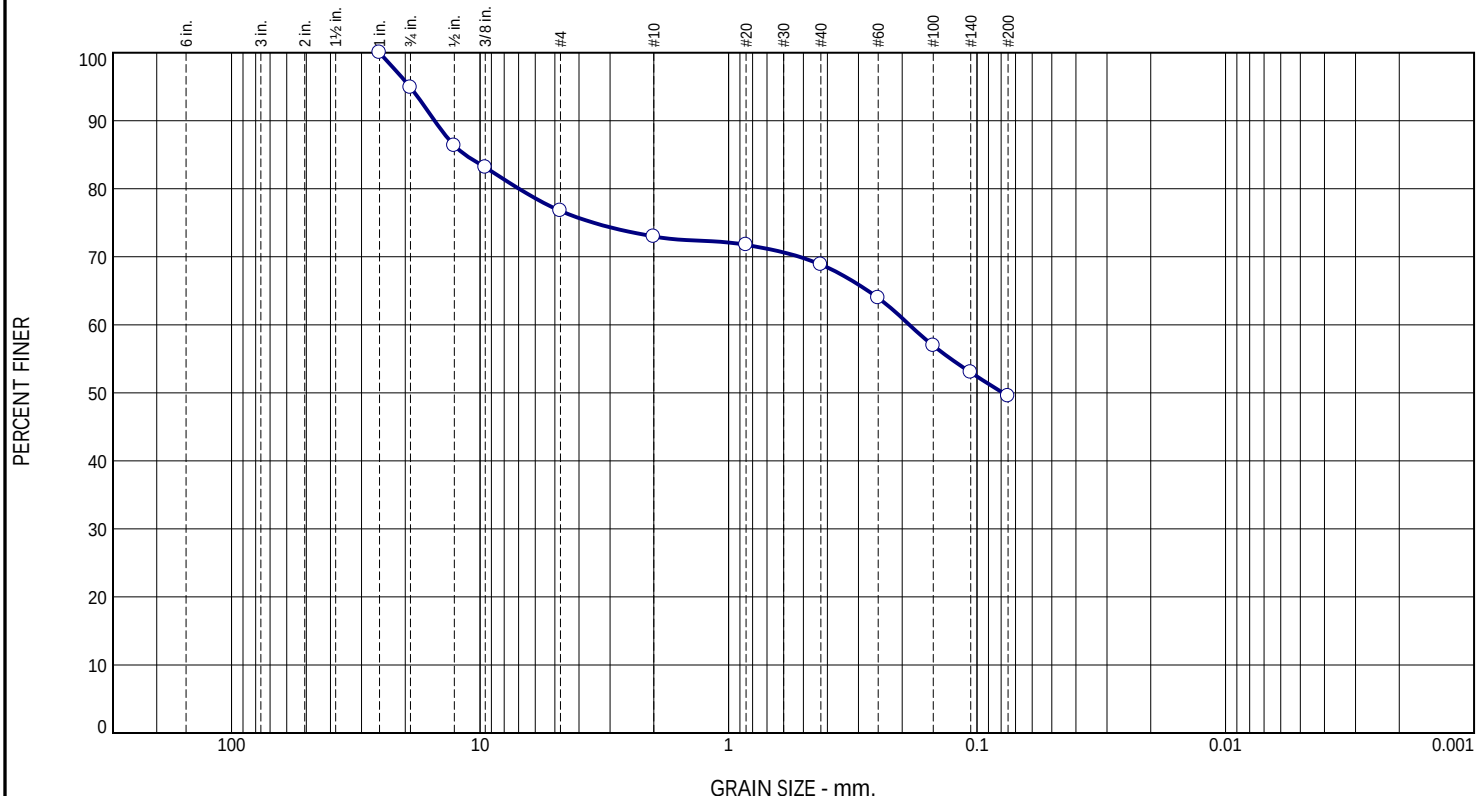
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: AG / MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 5.1 | 18.1 | 3.8 | 4.1 | 19.4 | 49.5 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 94.9 | | | |
| 0.5" | 86.4 | | | |
| 0.375" | 83.1 | | | |
| #4 | 76.8 | | | |
| #10 | 73.0 | | | |
| #20 | 71.8 | | | 98.3 |
| #40 | 68.9 | | | 94.3 |
| #60 | 63.9 | | | 87.6 |
| #100 | 56.9 | | | 78.0 |
| #140 | 53.0 | | | 72.6 |
| #200 | 49.5 | | | 67.9 |

* (no specification provided)

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 19 LL= 27 PI= 8

Coefficients

$D_{90}$= 15.2460 $D_{85}$= 11.4890 $D_{60}$= 0.1871
$D_{50}$= 0.0787 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= SC AASHTO= A-4(1)

Test Remarks

Undersized Specimen

Sample Number: PV-204, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

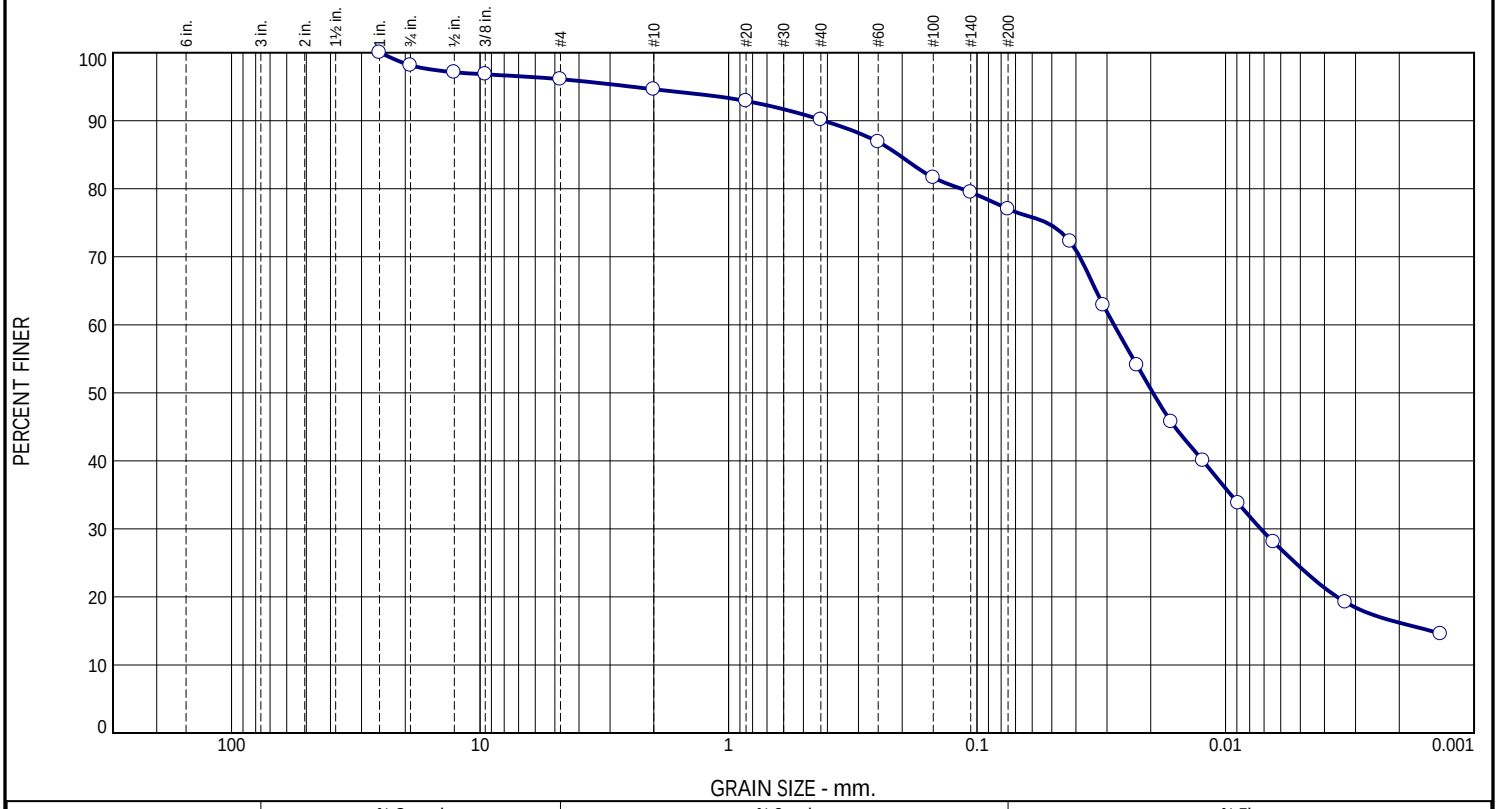
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 1.9 | 2.0 | 1.5 | 4.5 | 13.1 | 60.8 | 16.2 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 98.1 | | | |
| 0.5" | 97.1 | | | |
| 0.375" | 96.8 | | | |
| #4 | 96.1 | | | |
| #10 | 94.6 | | | |
| #20 | 92.9 | | | 98.2 |
| #40 | 90.1 | | | 95.3 |
| #60 | 86.9 | | | 91.8 |
| #100 | 81.6 | | | 86.3 |
| #140 | 79.5 | | | 84.0 |
| #200 | 77.0 | | | 81.4 |
| 0.0422 mm. | 72.2 | | | |
| 0.0310 mm. | 62.9 | | | |
| 0.0227 mm. | 54.0 | | | |
| 0.0166 mm. | 45.7 | | | |
| 0.0123 mm. | 40.0 | | | |
| 0.0089 mm. | 33.8 | | | |
| 0.0064 mm. | 28.1 | | | |
| 0.0033 mm. | 19.2 | | | |
| 0.0014 mm. | 14.6 | | | |

* (no specification provided)

**Material Description**

Dark Brown lean clay with sand

**Atterberg Limits**

PL= 19 LL= 34 PI= 15

**Coefficients**

$D_{90}$= 0.4136 $D_{85}$= 0.2068 $D_{60}$= 0.0281

$D_{50}$= 0.0196 $D_{30}$= 0.0072 $D_{15}$= 0.0015

$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(10)

**Test Remarks**

SG Assumed

Sample Number: PV-207, CBR/TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

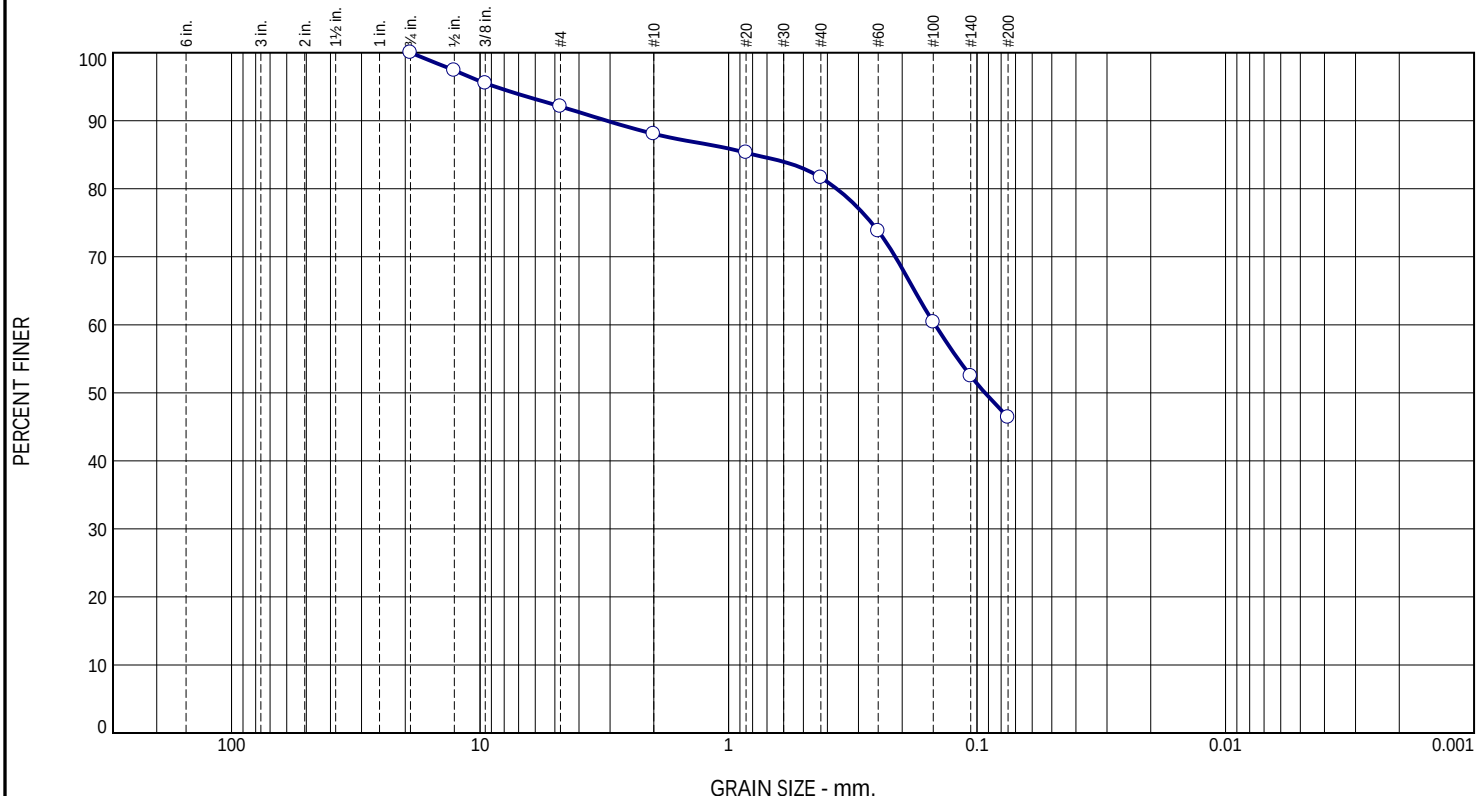
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: AG / MM Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 7.9 | 4.0 | 6.5 | 35.2 | 46.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 97.4 | | | |
| 0.375" | 95.5 | | | |
| #4 | 92.1 | | | |
| #10 | 88.1 | | | |
| #20 | 85.3 | | | 96.9 |
| #40 | 81.6 | | | 92.7 |
| #60 | 73.8 | | | 83.8 |
| #100 | 60.4 | | | 68.6 |
| #140 | 52.5 | | | 59.6 |
| #200 | 46.4 | | | 52.7 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand

**Atterberg Limits**

PL= 16 LL= 22 PI= 6

**Coefficients**

$D_{90}$= 3.0890 $D_{85}$= 0.7888 $D_{60}$= 0.1476
$D_{50}$= 0.0928 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-210, TRT Depth: 2'-5'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

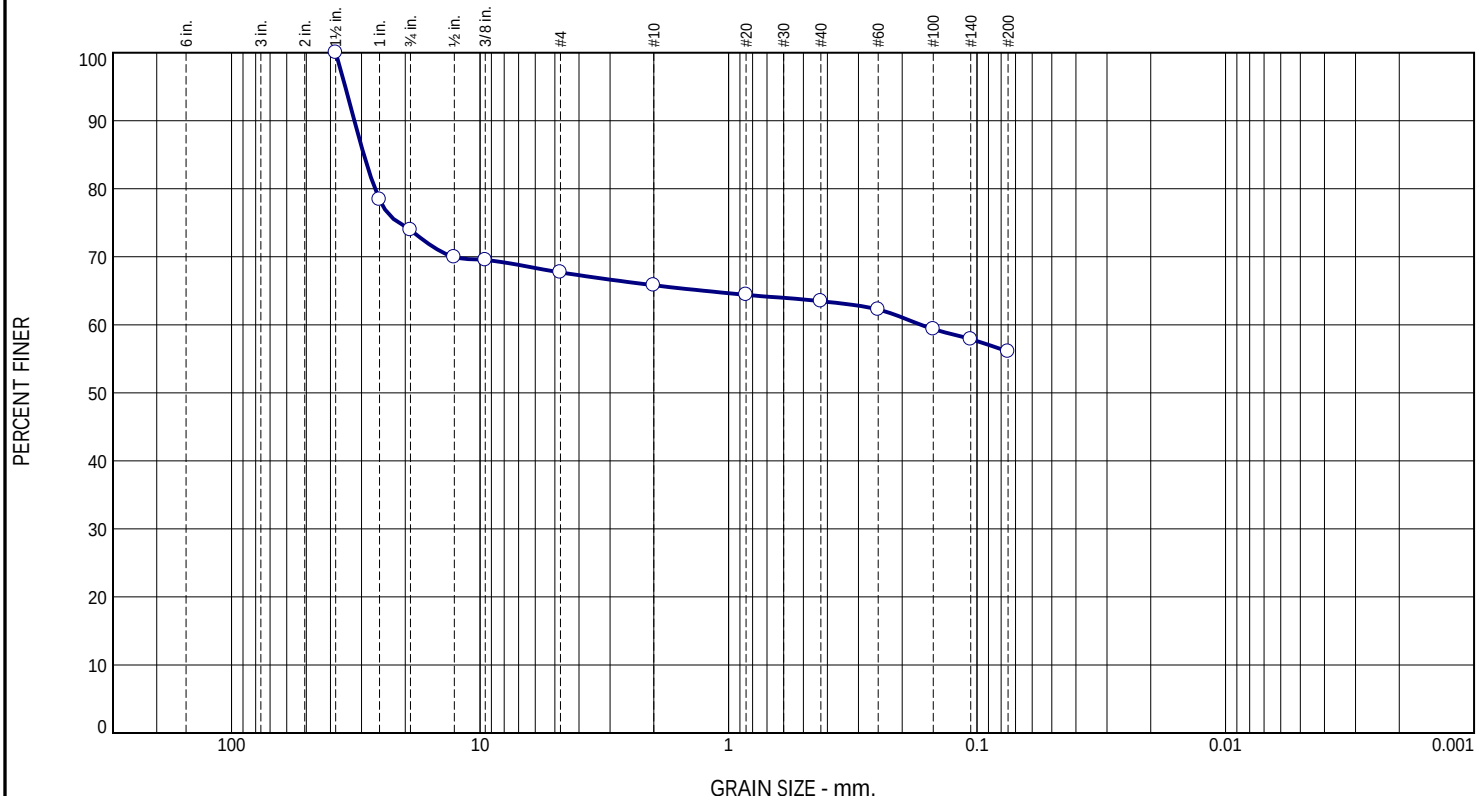
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 26.1 | 6.2 | 1.9 | 2.3 | 7.4 | 56.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 78.4 | | | |
| 0.75" | 73.9 | | | |
| 0.5" | 70.0 | | | |
| 0.375" | 69.5 | | | |
| #4 | 67.7 | | | |
| #10 | 65.8 | | | |
| #20 | 64.4 | | | 97.9 |
| #40 | 63.5 | | | 96.4 |
| #60 | 62.2 | | | 94.6 |
| #100 | 59.4 | | | 90.2 |
| #140 | 57.9 | | | 88.0 |
| #200 | 56.1 | | | 85.2 |

* (no specification provided)

**Material Description**

Dark Brown gravelly lean clay

**Atterberg Limits**

PL= 19 LL= 32 PI= 13

**Coefficients**

$D_{90}$= 32.0551 $D_{85}$= 29.3657 $D_{60}$= 0.1680
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(5)

**Test Remarks**

Undersized Specimen

Sample Number: PV-212, TRT Depth: 1'-2'

Sample Date: 10/28/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

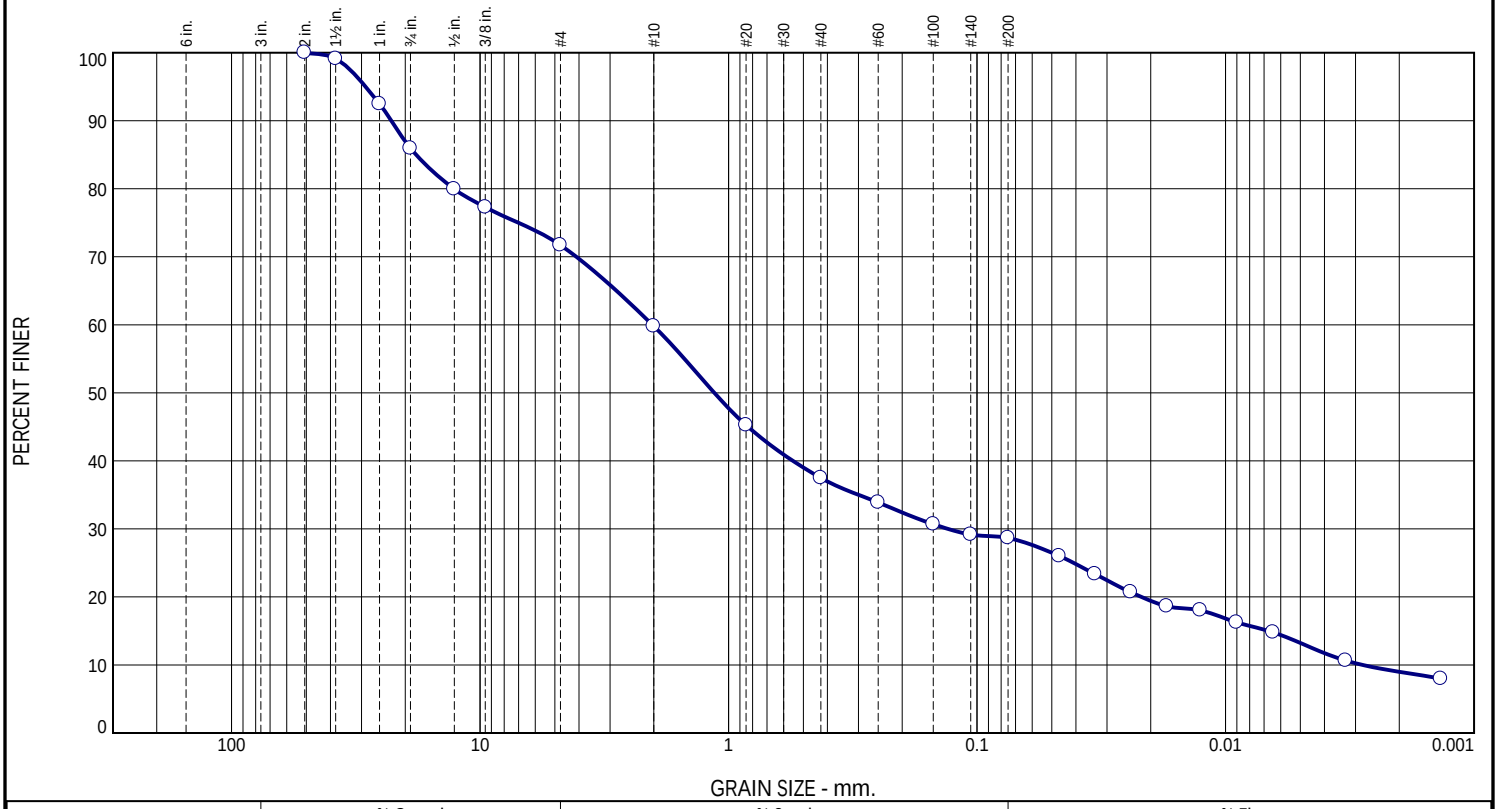
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-598 Figure

Tested By: ST Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913 and D7928




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 14.1 | 14.2 | 11.9 | 22.3 | 8.8 | 19.7 | 9.0 |

Test Results (ASTM D6913 and D7928)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 2.0" | 100.0 | | | |
| 1.5" | 99.1 | | | |
| 1.0" | 92.5 | | | |
| 0.75" | 85.9 | | | |
| 0.5" | 79.9 | | | |
| 0.375" | 77.3 | | | |
| #4 | 71.7 | | | |
| #10 | 59.8 | | | |
| #20 | 45.2 | | | 75.7 |
| #40 | 37.5 | | | 62.7 |
| #60 | 33.9 | | | 56.6 |
| #100 | 30.7 | | | 51.3 |
| #140 | 29.2 | | | 48.8 |
| #200 | 28.7 | | | 47.9 |
| 0.0467 mm. | 26.0 | | | |
| 0.0335 mm. | 23.4 | | | |
| 0.0241 mm. | 20.7 | | | |
| 0.0172 mm. | 18.6 | | | |
| 0.0126 mm. | 18.0 | | | |
| 0.0090 mm. | 16.3 | | | |
| 0.0064 mm. | 14.8 | | | |
| 0.0033 mm. | 10.6 | | | |
| 0.0014 mm. | 8.0 | | | |

* (no specification provided)

Material Description

Brown clayey sand with gravel

Atterberg Limits

PL= 20 LL= 31 PI= 11

Coefficients

$D_{90}$= 22.7554 $D_{85}$= 18.0926 $D_{60}$= 2.0256

$D_{50}$= 1.1413 $D_{30}$= 0.1312 $D_{15}$= 0.0067

$D_{10}$= 0.0028 $C_u$= 721.60 $C_c$= 3.03

Classification

USCS= SC AASHTO= A-2-6(0)

Test Remarks

SG Assumed

Sample Number: PV-214, TRT Depth: 1'-2'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

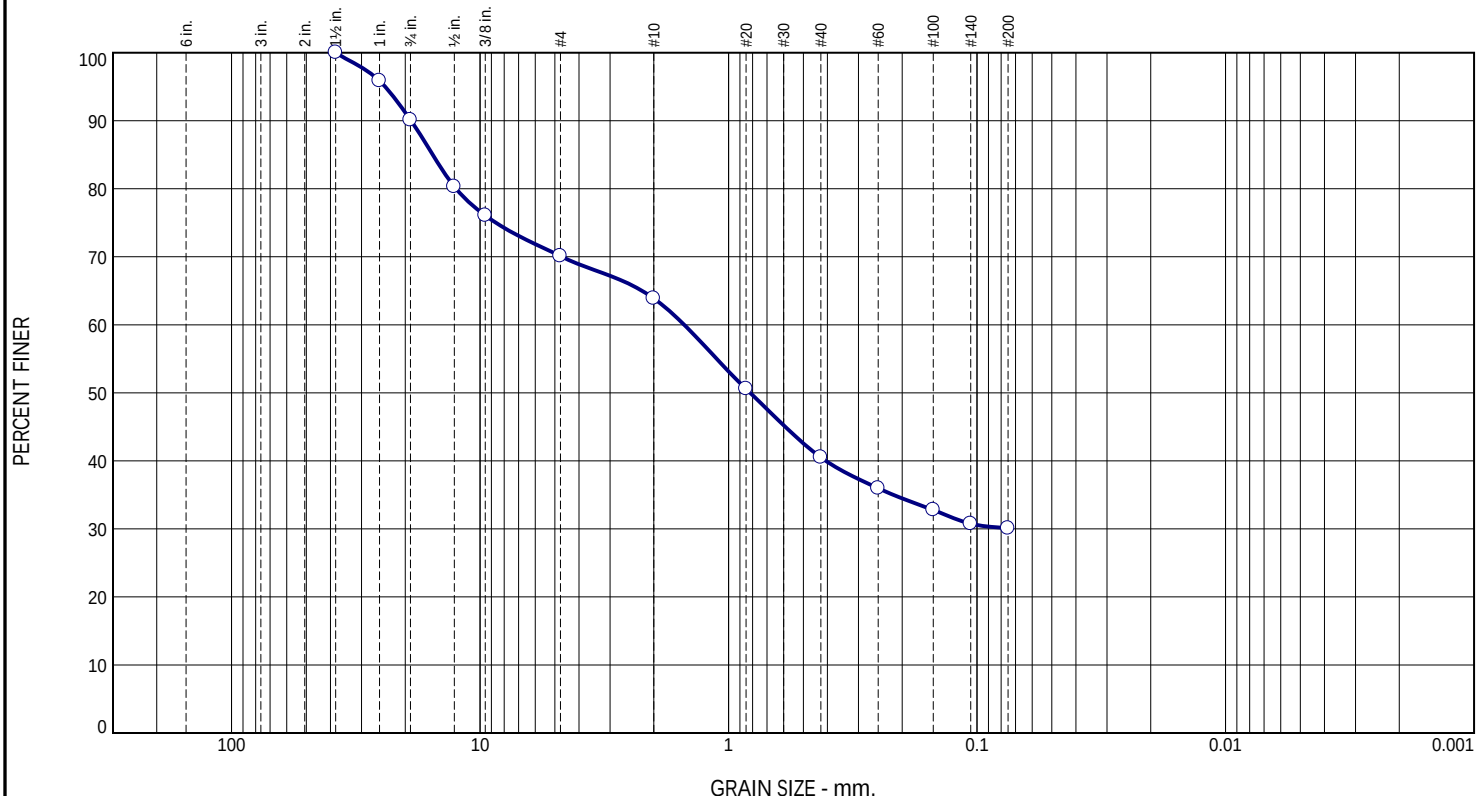
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 9.9 | 20.0 | 6.2 | 23.4 | 10.4 | 30.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 95.9 | | | |
| 0.75" | 90.1 | | | |
| 0.5" | 80.3 | | | |
| 0.375" | 76.1 | | | |
| #4 | 70.1 | | | |
| #10 | 63.9 | | | |
| #20 | 50.6 | | | 79.2 |
| #40 | 40.5 | | | 63.4 |
| #60 | 36.0 | | | 56.3 |
| #100 | 32.8 | | | 51.3 |
| #140 | 30.8 | | | 48.1 |
| #200 | 30.1 | | | 47.1 |

* (no specification provided)

**Material Description**

Brown clayey sand with gravel

**Atterberg Limits**

PL= 24 LL= 40 PI= 16

**Coefficients**

$D_{90}$= 18.9559 $D_{85}$= 15.5102 $D_{60}$= 1.5087
$D_{50}$= 0.8184 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC AASHTO= A-2-6(1)

**Test Remarks**

SG Assumed

Sample Number: PV-217, TRT Depth: 1'-3'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

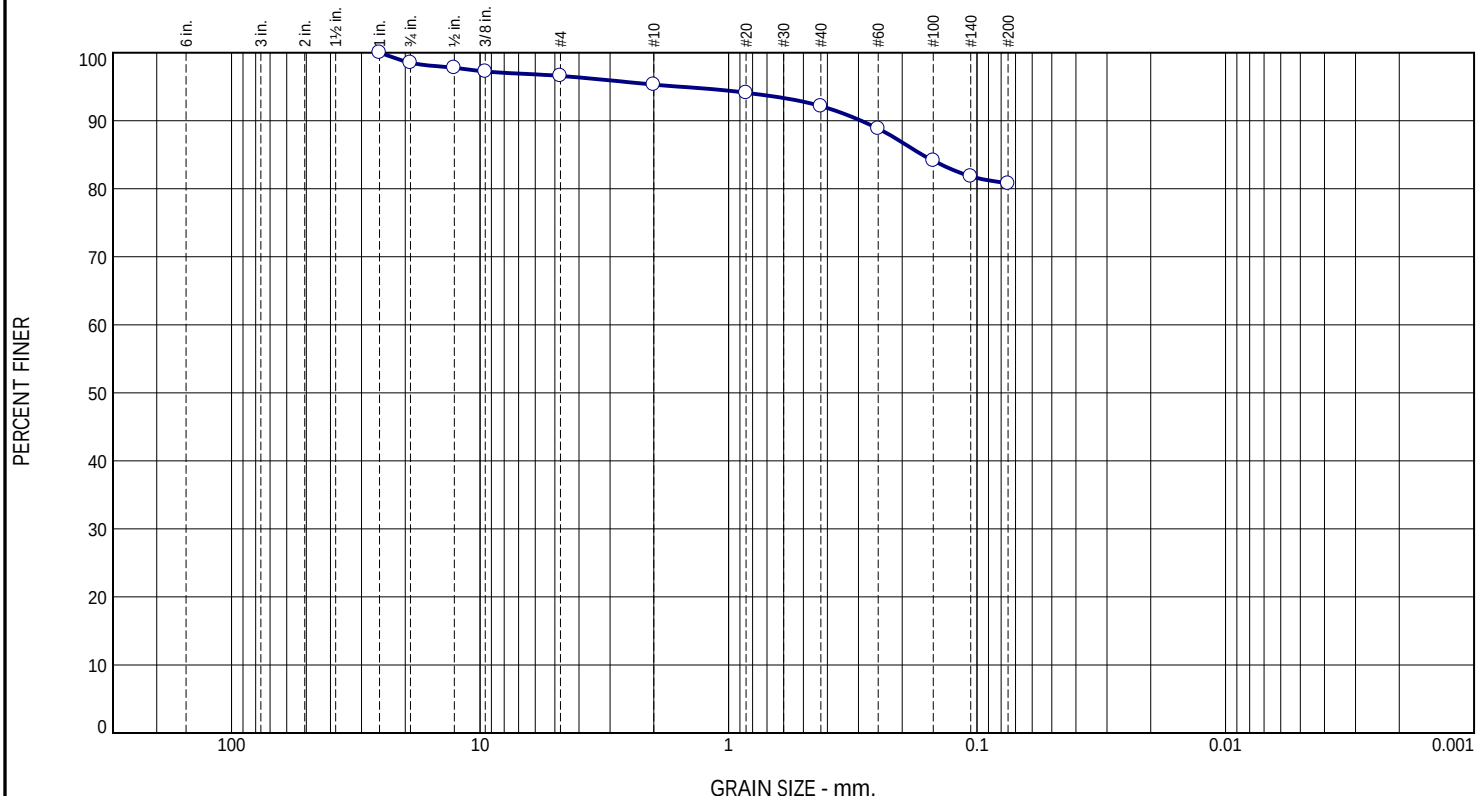
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 1.5 | 1.9 | 1.3 | 3.2 | 11.3 | 80.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 98.5 | | | |
| 0.5" | 97.8 | | | |
| 0.375" | 97.2 | | | |
| #4 | 96.6 | | | |
| #10 | 95.3 | | | |
| #20 | 94.1 | | | 98.7 |
| #40 | 92.1 | | | 96.7 |
| #60 | 88.8 | | | 93.2 |
| #100 | 84.1 | | | 88.3 |
| #140 | 81.8 | | | 85.8 |
| #200 | 80.8 | | | 84.7 |

* (no specification provided)

**Material Description**

Brown lean clay with sand

**Atterberg Limits**

PL= 20 LL= 33 PI= 13

**Coefficients**

$D_{90}$= 0.2931 $D_{85}$= 0.1660 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-6(10)

**Test Remarks**

Sample Number: PV-223, TRT Depth: 1'-2'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

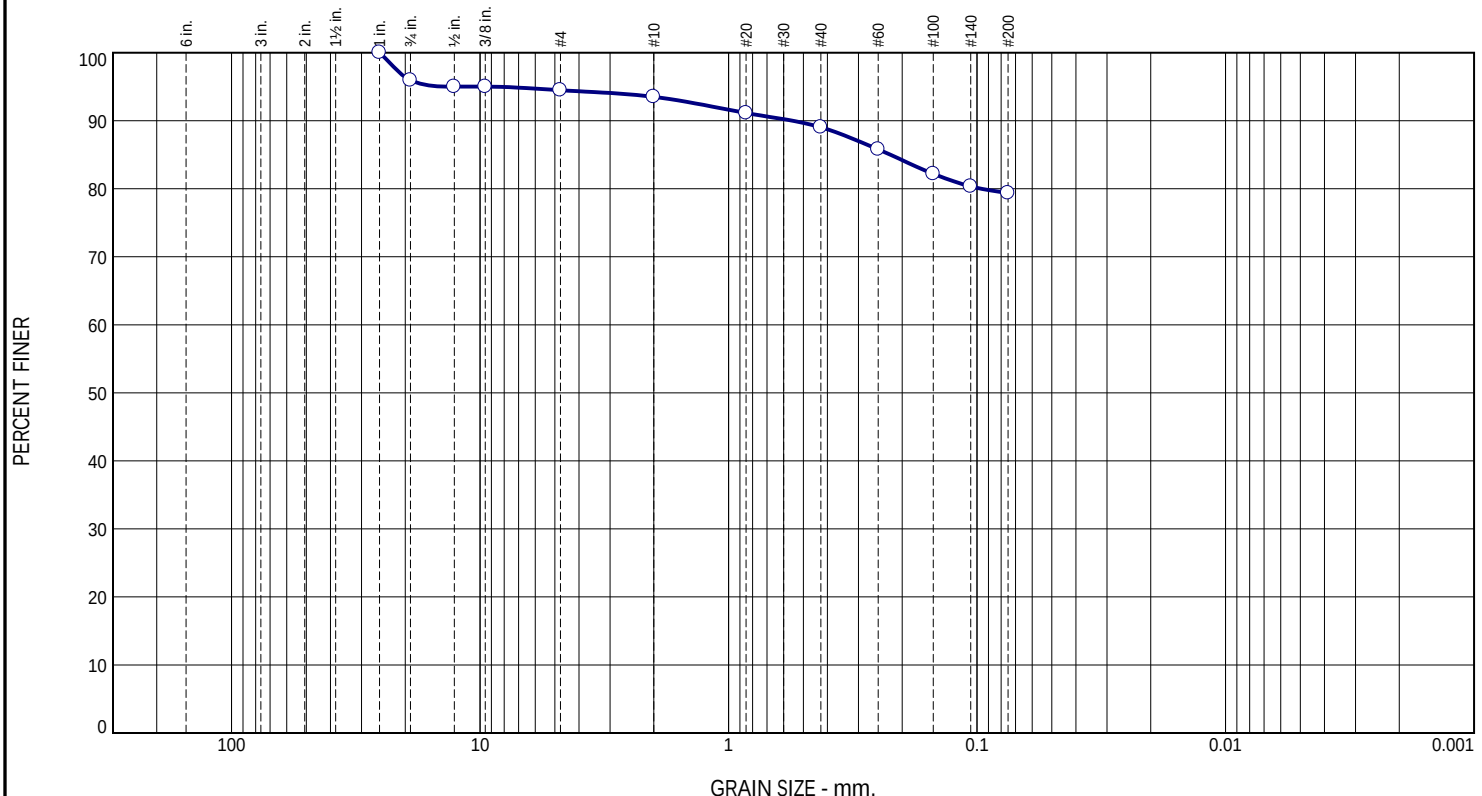
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 4.1 | 1.4 | 1.0 | 4.5 | 9.6 | 79.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 95.9 | | | |
| 0.5" | 95.0 | | | |
| 0.375" | 95.0 | | | |
| #4 | 94.5 | | | |
| #10 | 93.5 | | | |
| #20 | 91.1 | | | 97.5 |
| #40 | 89.0 | | | 95.2 |
| #60 | 85.8 | | | 91.7 |
| #100 | 82.2 | | | 87.9 |
| #140 | 80.3 | | | 85.9 |
| #200 | 79.4 | | | 84.9 |

* (no specification provided)

Material Description

Brown lean clay with sand

Atterberg Limits

PL= 22 LL= 32 PI= 10

Coefficients

$D_{90}$= 0.5530 $D_{85}$= 0.2231 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL AASHTO= A-4(7)

Test Remarks

Sample Number: PV-226, TRT Depth: 1'-2'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

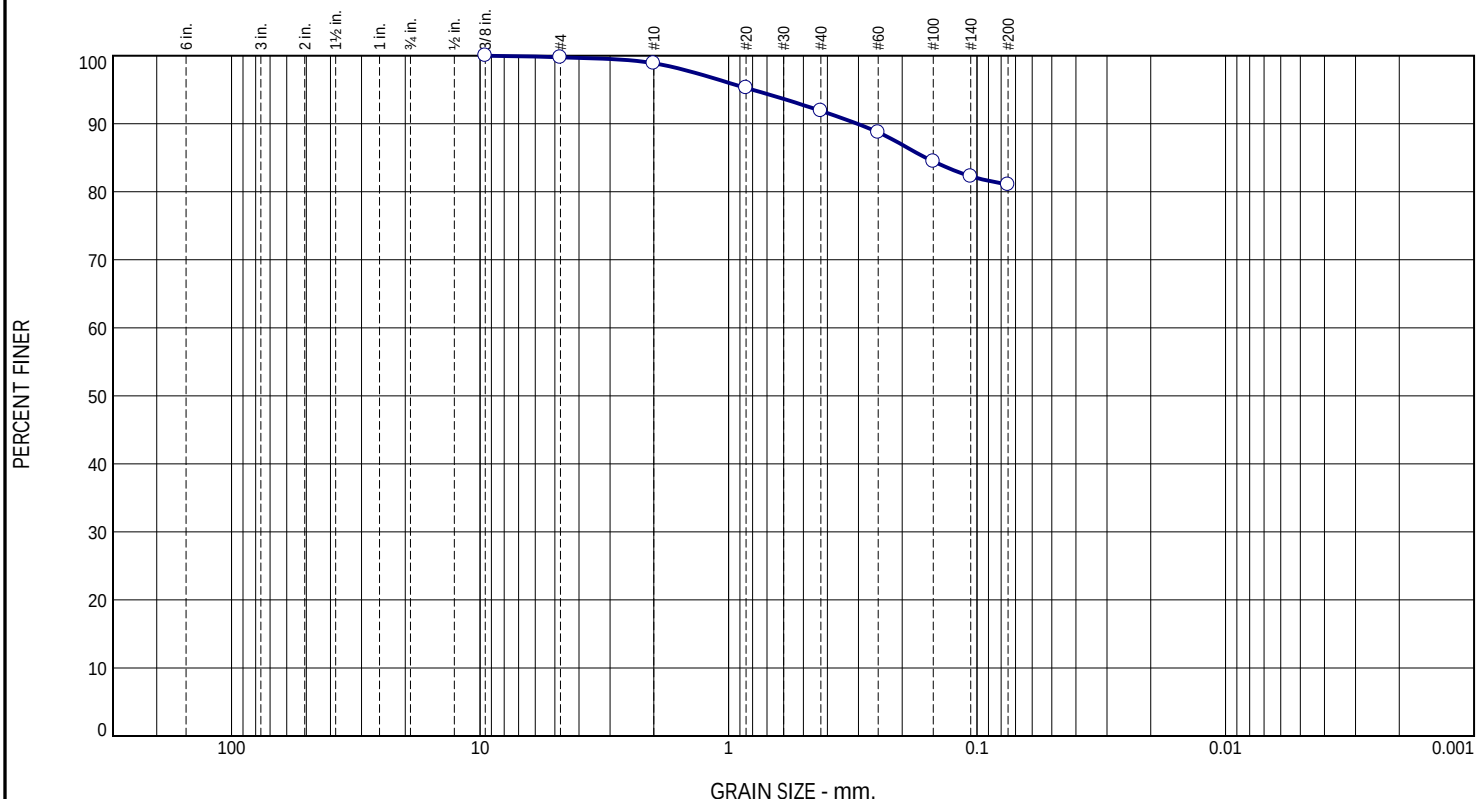
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.2 | 0.9 | 7.0 | 10.9 | 81.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.8 | | | |
| #10 | 98.9 | | | |
| #20 | 95.3 | | | 96.3 |
| #40 | 91.9 | | | 92.9 |
| #60 | 88.7 | | | 89.7 |
| #100 | 84.5 | | | 85.4 |
| #140 | 82.3 | | | 83.2 |
| #200 | 81.0 | | | 82.0 |

* (no specification provided)

**Material Description**

Brown lean clay with sand

**Atterberg Limits**

PL= 21 LL= 30 PI= 9

**Coefficients**

$D_{90}$= 0.3031 $D_{85}$= 0.1607 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL AASHTO= A-4(6)

**Test Remarks**

Sample Number: PV-230, TRT Depth: 1'-2'

Sample Date: 11/6/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

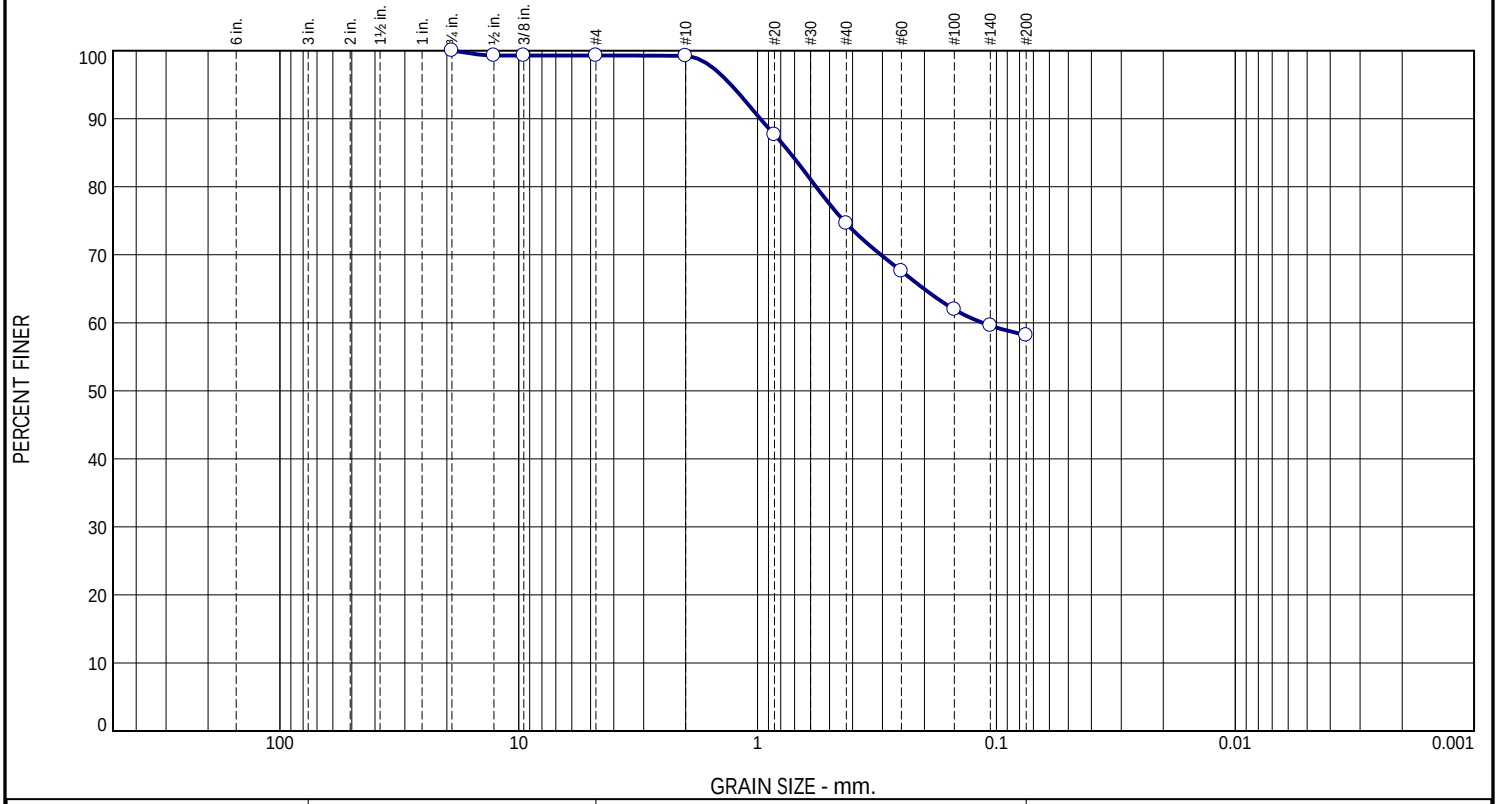
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-599 Figure

Tested By: RS Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.7 | 0.1 | 24.6 | 16.4 | 58.2 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.3 | | | |
| 0.375" | 99.3 | | | |
| #4 | 99.3 | | | |
| #10 | 99.2 | | | |
| #20 | 87.7 | | | 88.3 |
| #40 | 74.6 | | | 75.2 |
| #60 | 67.6 | | | 68.1 |
| #100 | 62.0 | | | 62.4 |
| #140 | 59.6 | | | 60.1 |
| #200 | 58.2 | | | 58.6 |

* (no specification provided)

Material Description

Dark Brown sandy lean clay

Atterberg Limits

PL= 17 LL= 28 PI= 11

Coefficients

$D_{90}$= 0.9745 $D_{85}$= 0.7316 $D_{60}$= 0.1139
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL AASHTO= A-6(4)

Test Remarks

Sample Number: PV-004, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

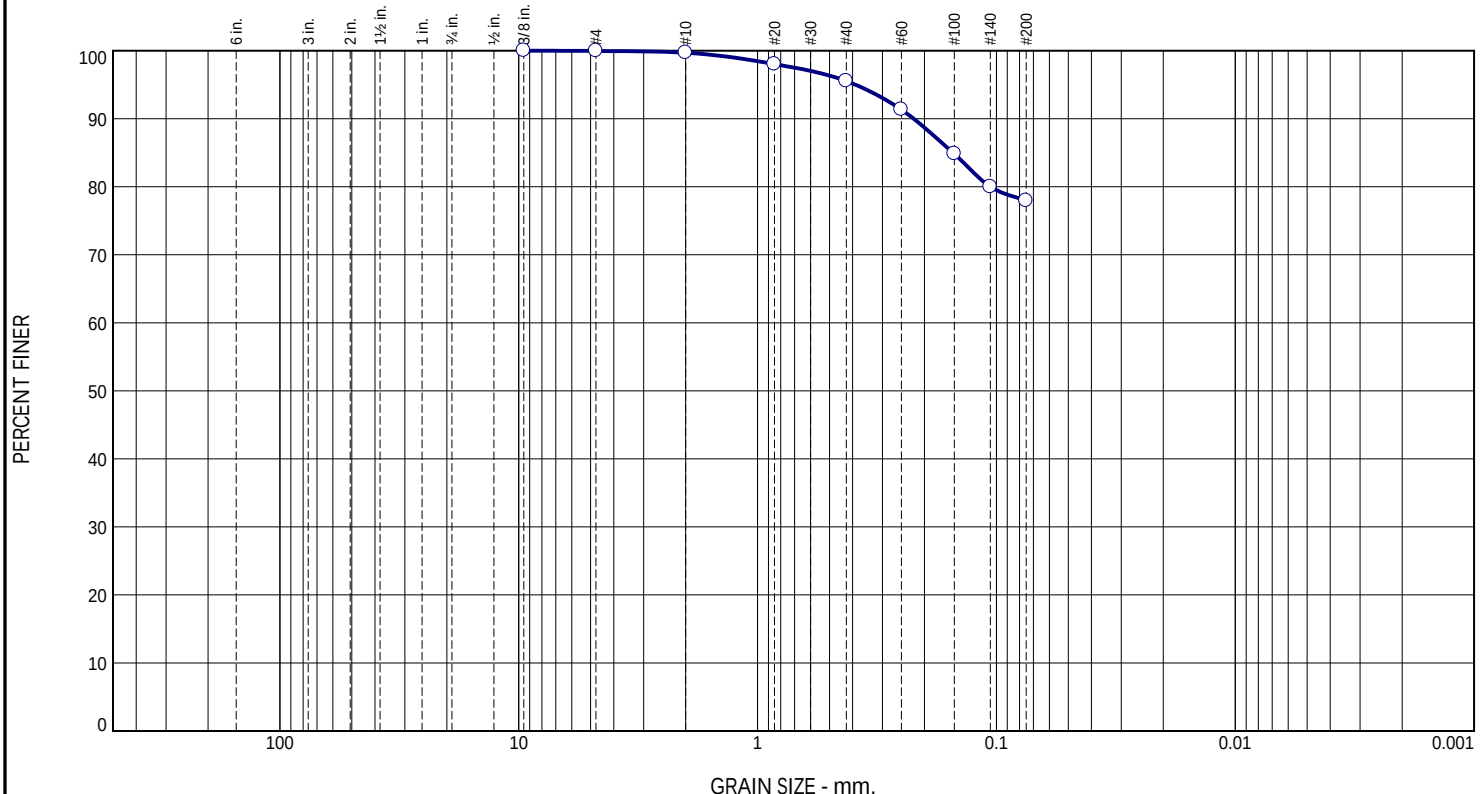
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.3 | 4.2 | 17.6 | 77.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 100.0 | | | |
| #10 | 99.7 | | | |
| #20 | 98.0 | | | 98.3 |
| #40 | 95.5 | | | 95.8 |
| #60 | 91.3 | | | 91.6 |
| #100 | 84.8 | | | 85.1 |
| #140 | 80.0 | | | 80.2 |
| #200 | 77.9 | | | 78.2 |

* (no specification provided)

Material Description

Brown silty clay with sand

Atterberg Limits

PL= 21 LL= 28 PI= 7

Coefficients

$D_{90}$= 0.2219 $D_{85}$= 0.1518 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= CL-ML AASHTO= A-4(4)

Test Remarks

Sample Number: PV-005, S-1 - S-4 Depth: 0'-8'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

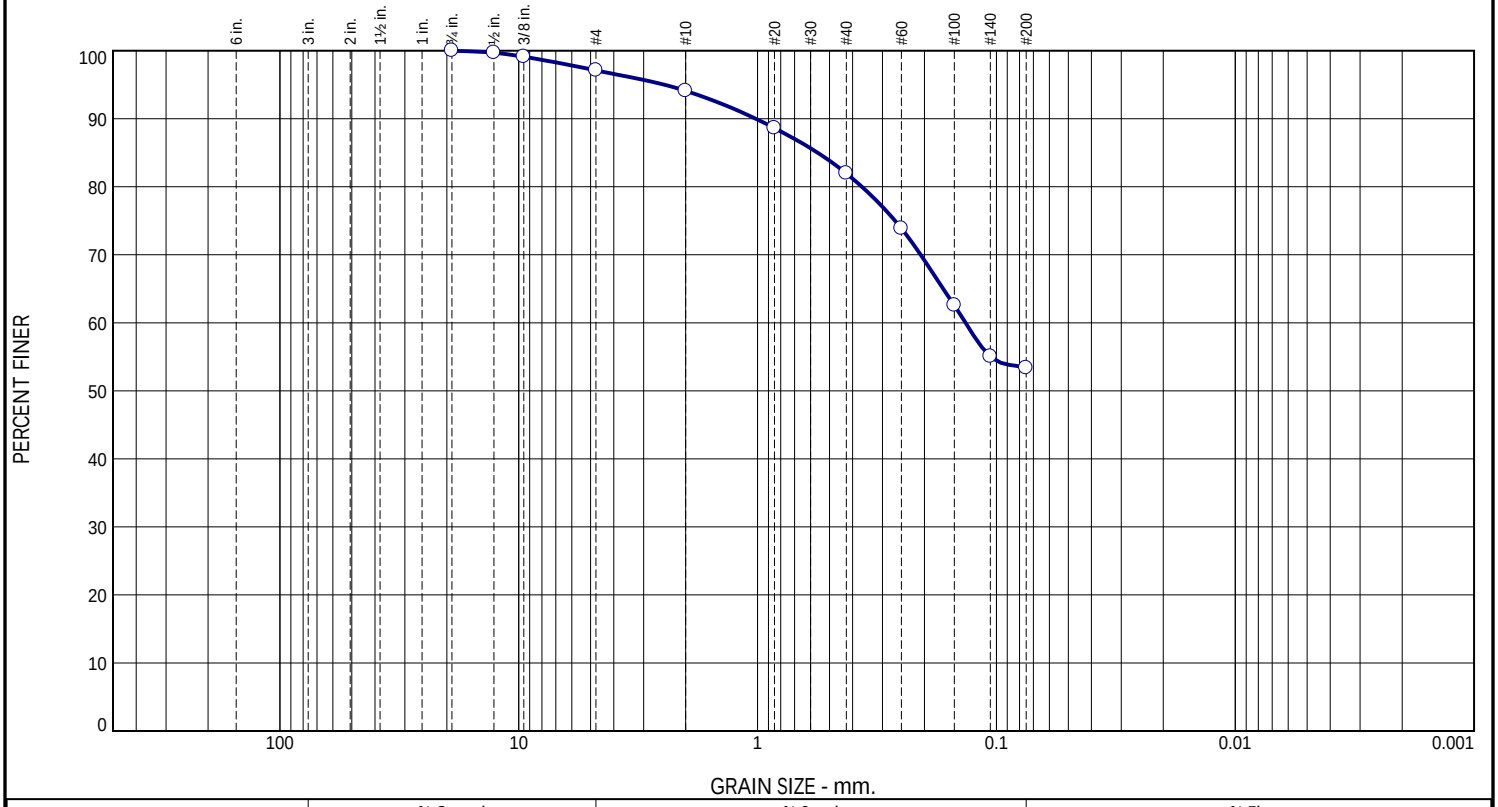
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 2.9 | 3.0 | 12.1 | 28.6 | 53.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.7 | | | |
| 0.375" | 99.1 | | | |
| #4 | 97.1 | | | |
| #10 | 94.1 | | | |
| #20 | 88.6 | | | 94.2 |
| #40 | 82.0 | | | 87.1 |
| #60 | 73.9 | | | 78.5 |
| #100 | 62.6 | | | 66.5 |
| #140 | 55.0 | | | 58.5 |
| #200 | 53.4 | | | 56.7 |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 21 LL= 28 PI= 7

**Coefficients**

$D_{90}$= 1.0173 $D_{85}$= 0.5595 $D_{60}$= 0.1345
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-005, S-5 - S-6 Depth: 8'-15'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

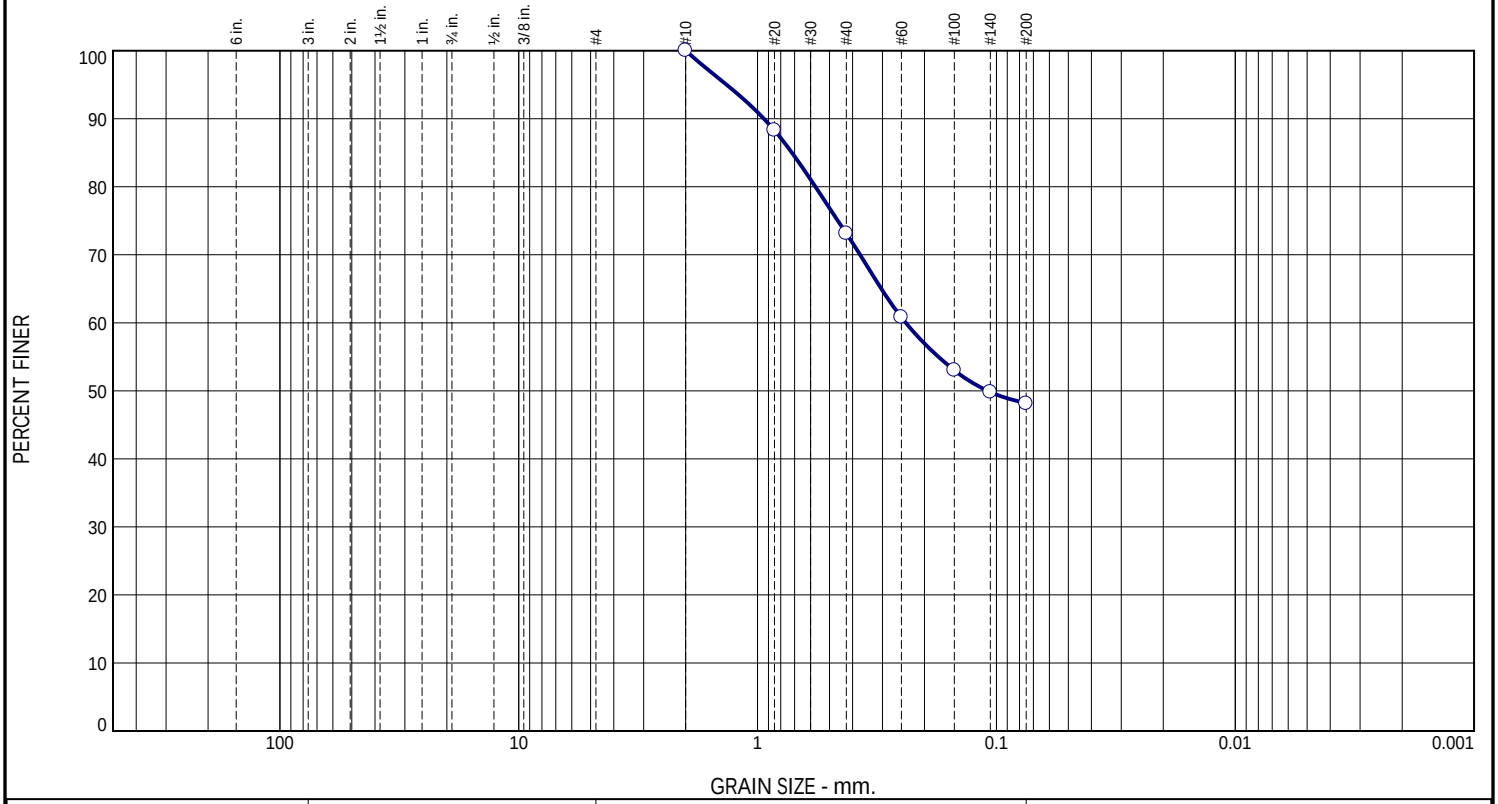
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.0 | 0.0 | 26.9 | 25.0 | 48.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| #10 | 100.0 | | | |
| #20 | 88.3 | | | 88.3 |
| #40 | 73.1 | | | 73.1 |
| #60 | 60.8 | | | 60.8 |
| #100 | 53.0 | | | 53.0 |
| #140 | 49.8 | | | 49.8 |
| #200 | 48.1 | | | 48.1 |

* (no specification provided)

**Material Description**

Grayish Brown silty, clayey sand

**Atterberg Limits**

PL= 21 LL= 28 PI= 7

**Coefficients**

$D_{90}$= 0.9409 $D_{85}$= 0.7175 $D_{60}$= 0.2395
$D_{50}$= 0.1088 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-017, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

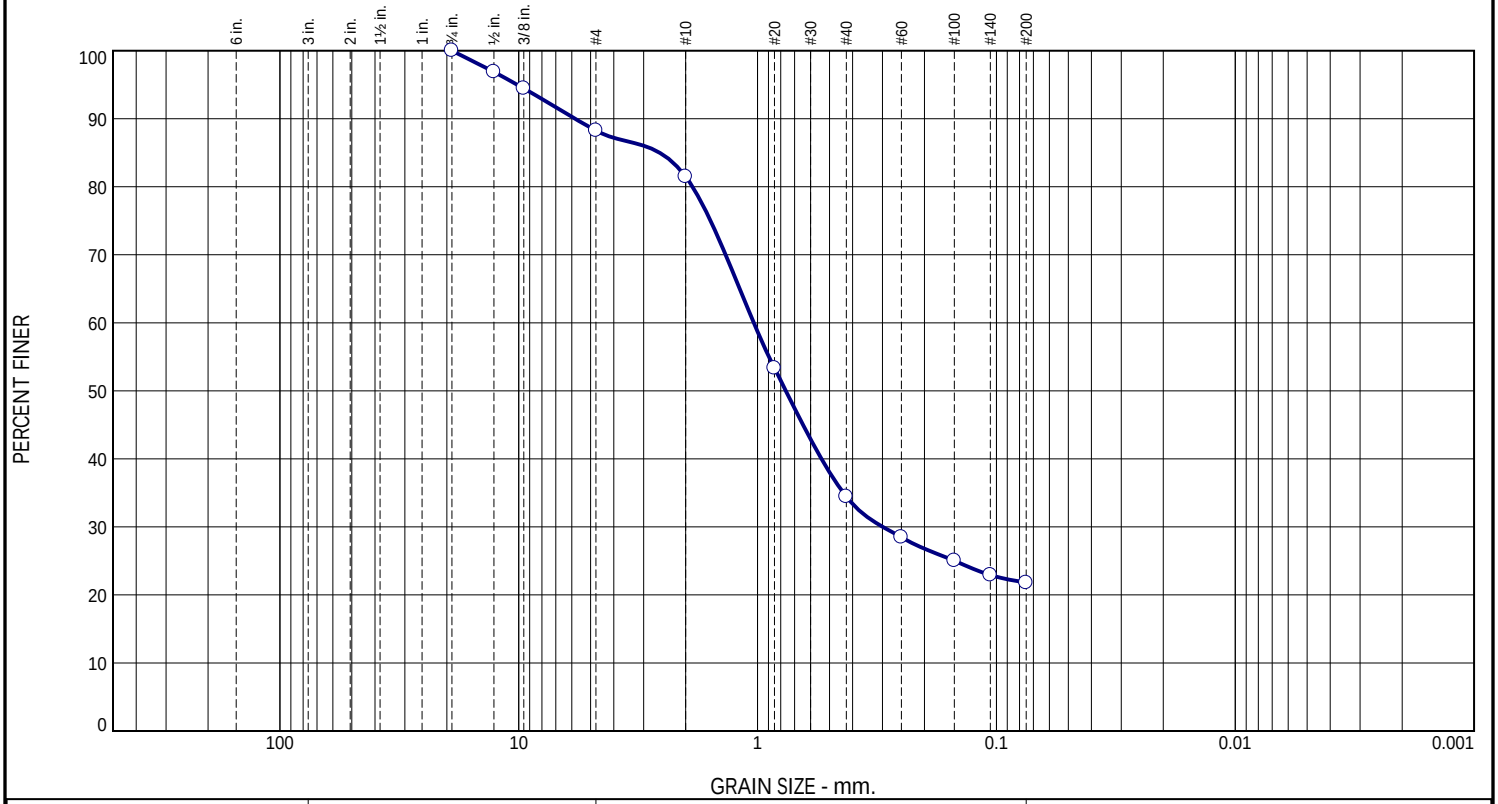
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 11.7 | 6.8 | 47.0 | 12.7 | 21.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 96.9 | | | |
| 0.375" | 94.5 | | | |
| #4 | 88.3 | | | |
| #10 | 81.5 | | | |
| #20 | 53.3 | | | 65.5 |
| #40 | 34.5 | | | 42.3 |
| #60 | 28.5 | | | 34.9 |
| #100 | 25.0 | | | 30.7 |
| #140 | 22.9 | | | 28.1 |
| #200 | 21.8 | | | 26.7 |

* (no specification provided)

Material Description

Grayish Brown silty sand

Atterberg Limits

PL= 24 LL= 32 PI= 8

Coefficients

$D_{90}$= 5.8063 $D_{85}$= 2.5678 $D_{60}$= 1.0372

$D_{50}$= 0.7614 $D_{30}$= 0.2992 $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= SM AASHTO= A-2-4(0)

Test Remarks

Sample Number: PV-017, S-4 - S-6 Depth: 6'-13.9'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

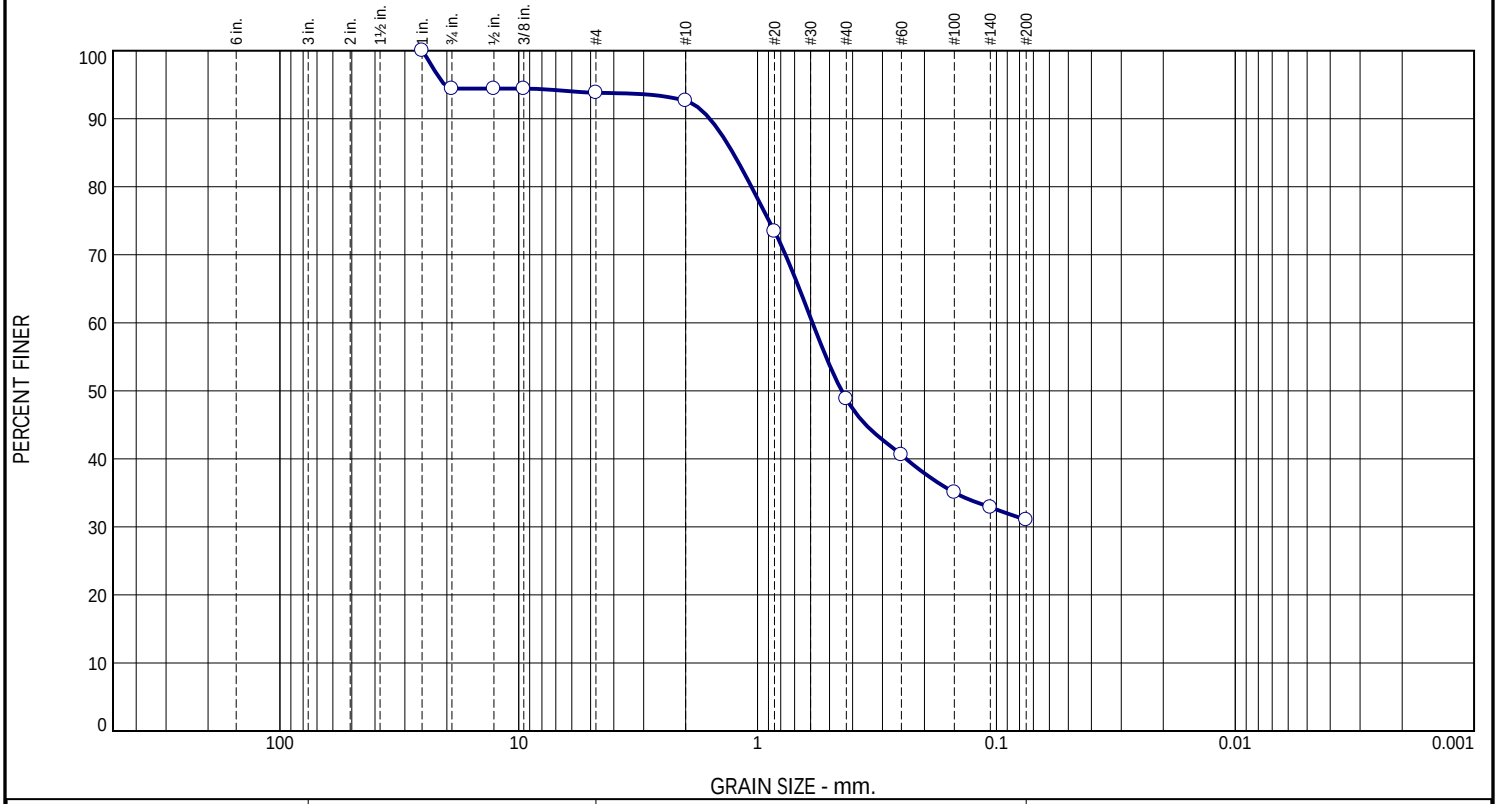
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 5.6 | 0.6 | 1.2 | 43.8 | 17.8 | 31.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.0" | 100.0 | | | |
| 0.75" | 94.4 | | | |
| 0.5" | 94.4 | | | |
| 0.375" | 94.4 | | | |
| #4 | 93.8 | | | |
| #10 | 92.6 | | | |
| #20 | 73.4 | | | 79.3 |
| #40 | 48.8 | | | 52.7 |
| #60 | 40.6 | | | 43.8 |
| #100 | 35.0 | | | 37.8 |
| #140 | 32.9 | | | 35.5 |
| #200 | 31.0 | | | 33.5 |

* (no specification provided)

**Material Description**

Brown silty sand

**Atterberg Limits**

PL= 24 LL= 32 PI= 8

**Coefficients**

$D_{90}$= 1.5851 $D_{85}$= 1.2682 $D_{60}$= 0.5887
$D_{50}$= 0.4441 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SM AASHTO= A-2-4(0)

**Test Remarks**

Undersized Specimen

Sample Number: PV-019, S-3 - S-5 Depth: 4'-8.4'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

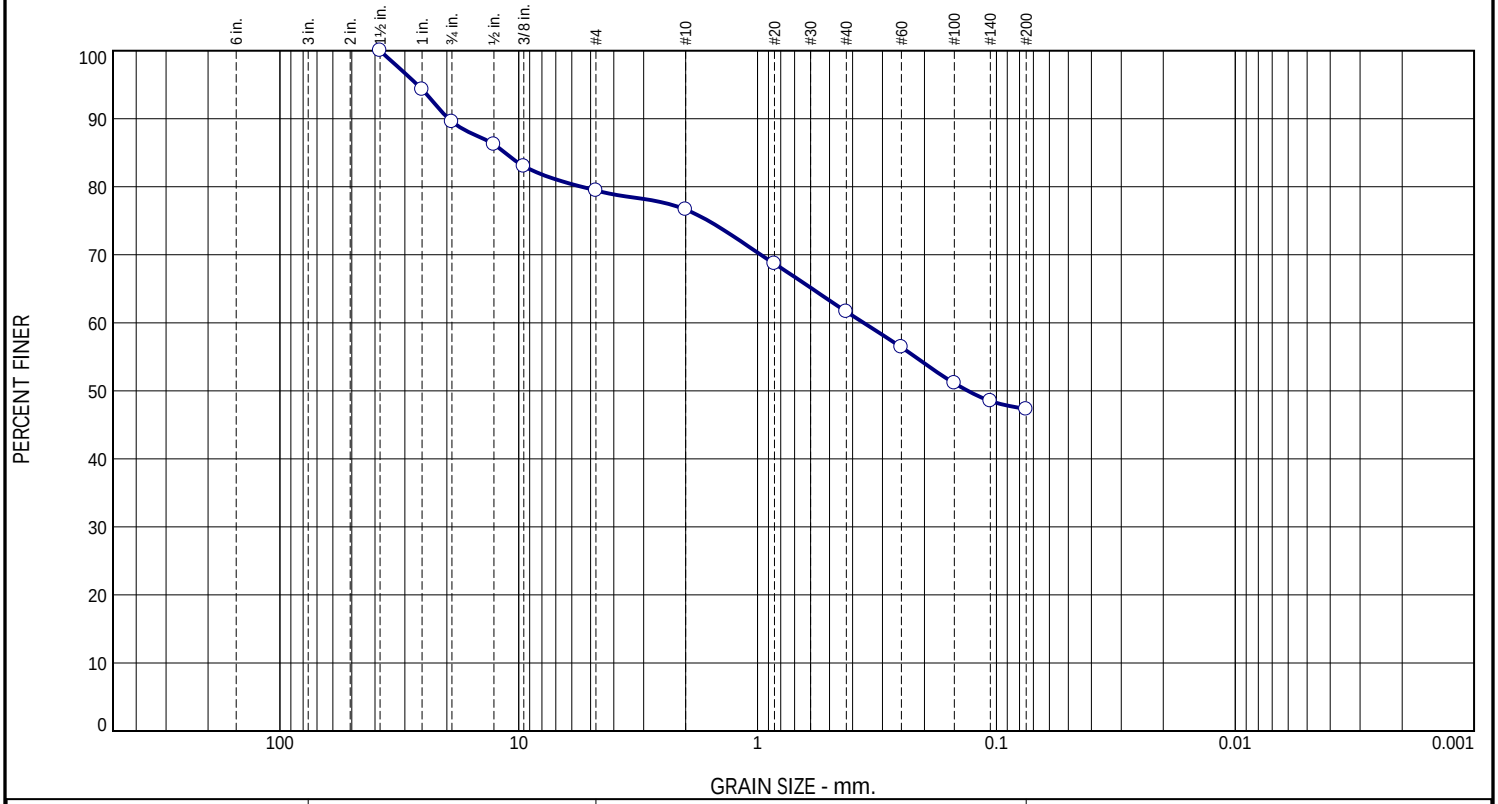
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 10.4 | 10.2 | 2.8 | 15.0 | 14.3 | 47.3 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 1.5" | 100.0 | | | |
| 1.0" | 94.3 | | | |
| 0.75" | 89.6 | | | |
| 0.5" | 86.2 | | | |
| 0.375" | 83.0 | | | |
| #4 | 79.4 | | | |
| #10 | 76.6 | | | |
| #20 | 68.7 | | | 89.6 |
| #40 | 61.6 | | | 80.4 |
| #60 | 56.4 | | | 73.6 |
| #100 | 51.1 | | | 66.7 |
| #140 | 48.5 | | | 63.3 |
| #200 | 47.3 | | | 61.7 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 21 LL= 28 PI= 7

**Coefficients**

$D_{90}$= 19.6761 $D_{85}$= 11.4010 $D_{60}$= 0.3599
$D_{50}$= 0.1316 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(1)

**Test Remarks**

Undersized Specimen

Sample Number: PV-020, S-2 - S-4 Depth: 2'-7.3'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

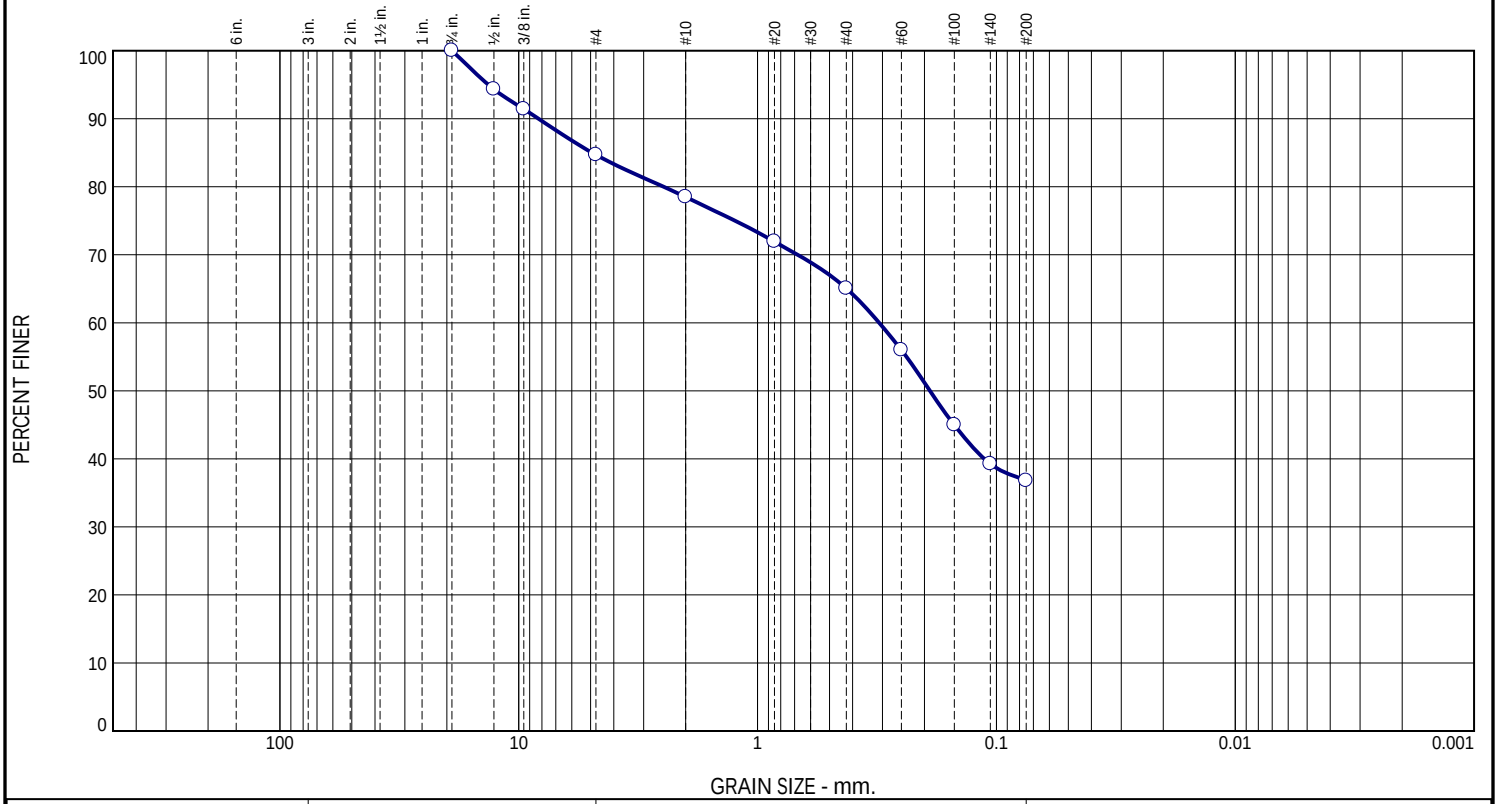
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 15.3 | 6.2 | 13.4 | 28.3 | 36.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 94.3 | | | |
| 0.375" | 91.4 | | | |
| #4 | 84.7 | | | |
| #10 | 78.5 | | | |
| #20 | 71.9 | | | 91.6 |
| #40 | 65.1 | | | 82.9 |
| #60 | 56.0 | | | 71.3 |
| #100 | 45.0 | | | 57.3 |
| #140 | 39.2 | | | 50.0 |
| #200 | 36.8 | | | 46.9 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand with gravel

**Atterberg Limits**

PL= 20 LL= 27 PI= 7

**Coefficients**

$D_{90}$= 8.2713 $D_{85}$= 4.9252 $D_{60}$= 0.3094
$D_{50}$= 0.1897 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-028, S-3 - S-4 Depth: 4'-8'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

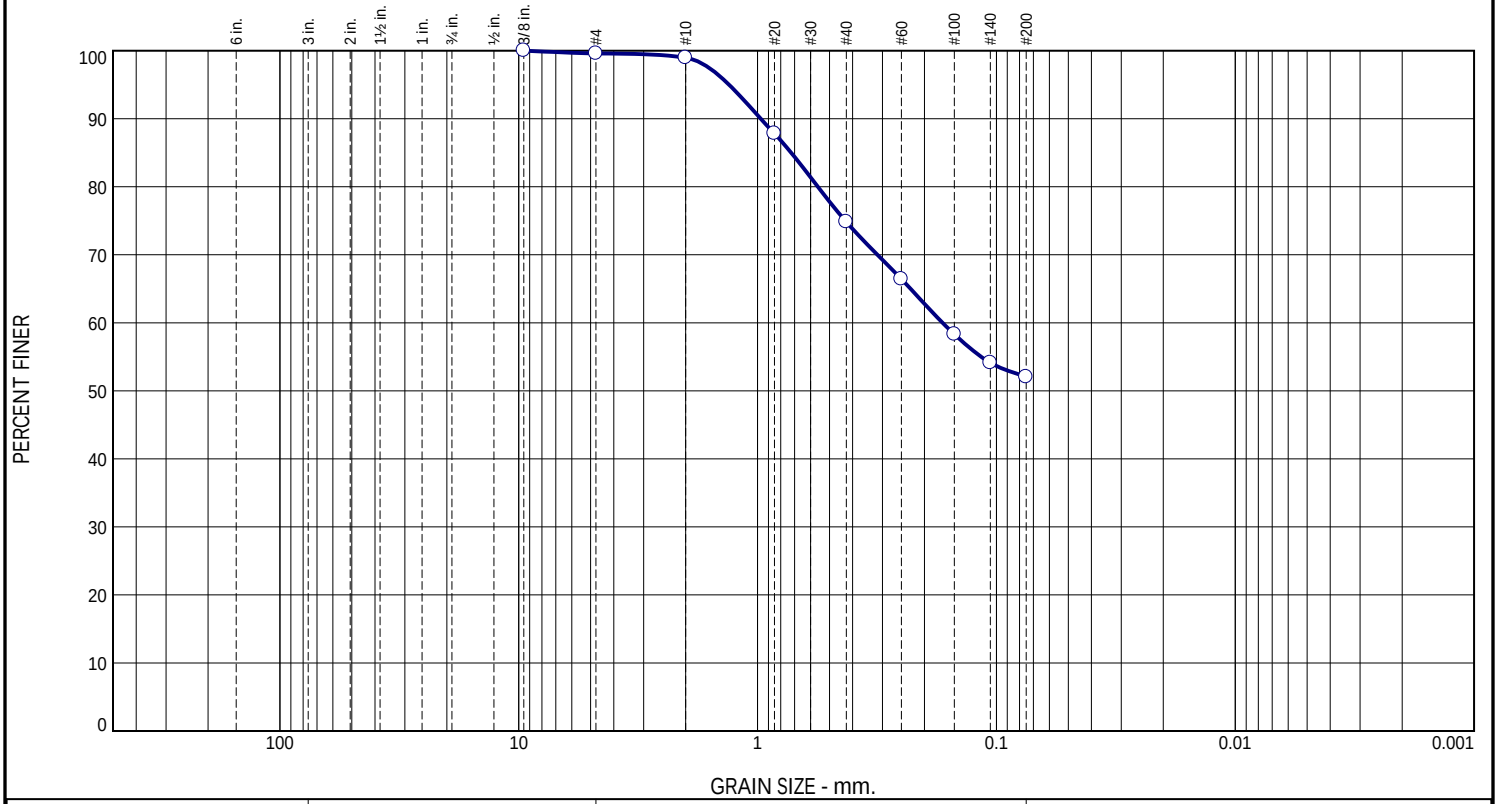
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.4 | 0.6 | 24.2 | 22.7 | 52.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.6 | | | |
| #10 | 99.0 | | | |
| #20 | 87.8 | | | 88.7 |
| #40 | 74.8 | | | 75.6 |
| #60 | 66.4 | | | 67.1 |
| #100 | 58.3 | | | 58.9 |
| #140 | 54.1 | | | 54.7 |
| #200 | 52.1 | | | 52.6 |

* (no specification provided)

**Material Description**

Brown sandy silty clay

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 0.9704 $D_{85}$= 0.7226 $D_{60}$= 0.1680
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-030, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

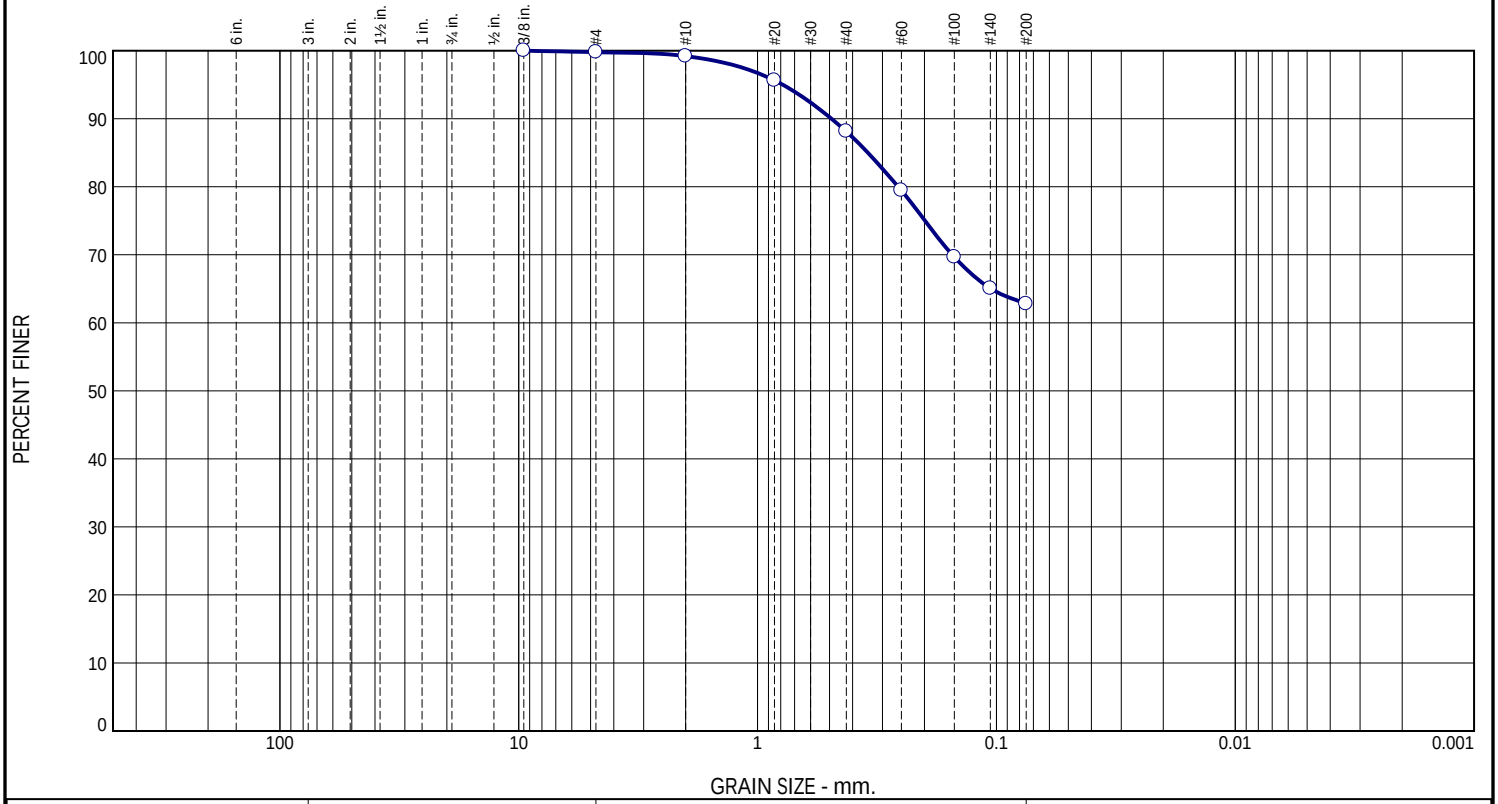
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.2 | 0.6 | 11.1 | 25.3 | 62.8 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.8 | | | |
| #10 | 99.2 | | | |
| #20 | 95.6 | | | 96.4 |
| #40 | 88.1 | | | 88.8 |
| #60 | 79.5 | | | 80.1 |
| #100 | 69.7 | | | 70.2 |
| #140 | 65.1 | | | 65.6 |
| #200 | 62.8 | | | 63.3 |

* (no specification provided)

**Material Description**

Brown sandy silt

**Atterberg Limits**

PL= 24 LL= 31 PI= 7

**Coefficients**

$D_{90}$= 0.4904 $D_{85}$= 0.3451 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= ML AASHTO= A-4(3)

**Test Remarks**

Sample Number: PV-031, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

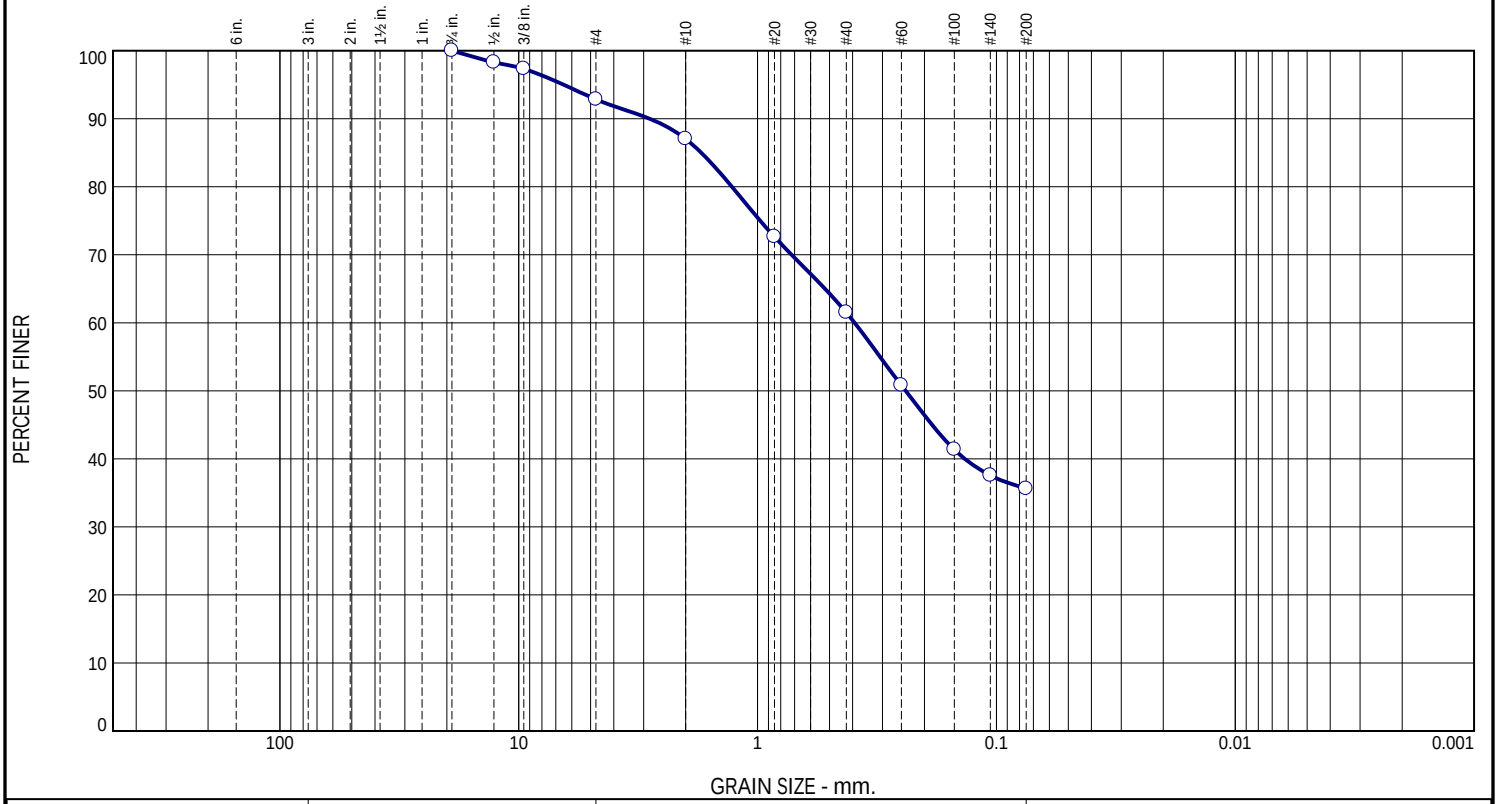
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 7.2 | 5.8 | 25.5 | 25.9 | 35.6 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 98.3 | | | |
| 0.375" | 97.3 | | | |
| #4 | 92.8 | | | |
| #10 | 87.0 | | | |
| #20 | 72.6 | | | 83.5 |
| #40 | 61.5 | | | 70.7 |
| #60 | 50.8 | | | 58.4 |
| #100 | 41.4 | | | 47.5 |
| #140 | 37.6 | | | 43.2 |
| #200 | 35.6 | | | 40.9 |

* (no specification provided)

**Material Description**

Brown silty, clayey sand

**Atterberg Limits**

PL= 21 LL= 27 PI= 6

**Coefficients**

$D_{90}$= 2.8292 $D_{85}$= 1.7202 $D_{60}$= 0.3921
$D_{50}$= 0.2397 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SC-SM AASHTO= A-4(0)

**Test Remarks**

Sample Number: PV-045, S-5 - S-7 Depth: 8'-18.8'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

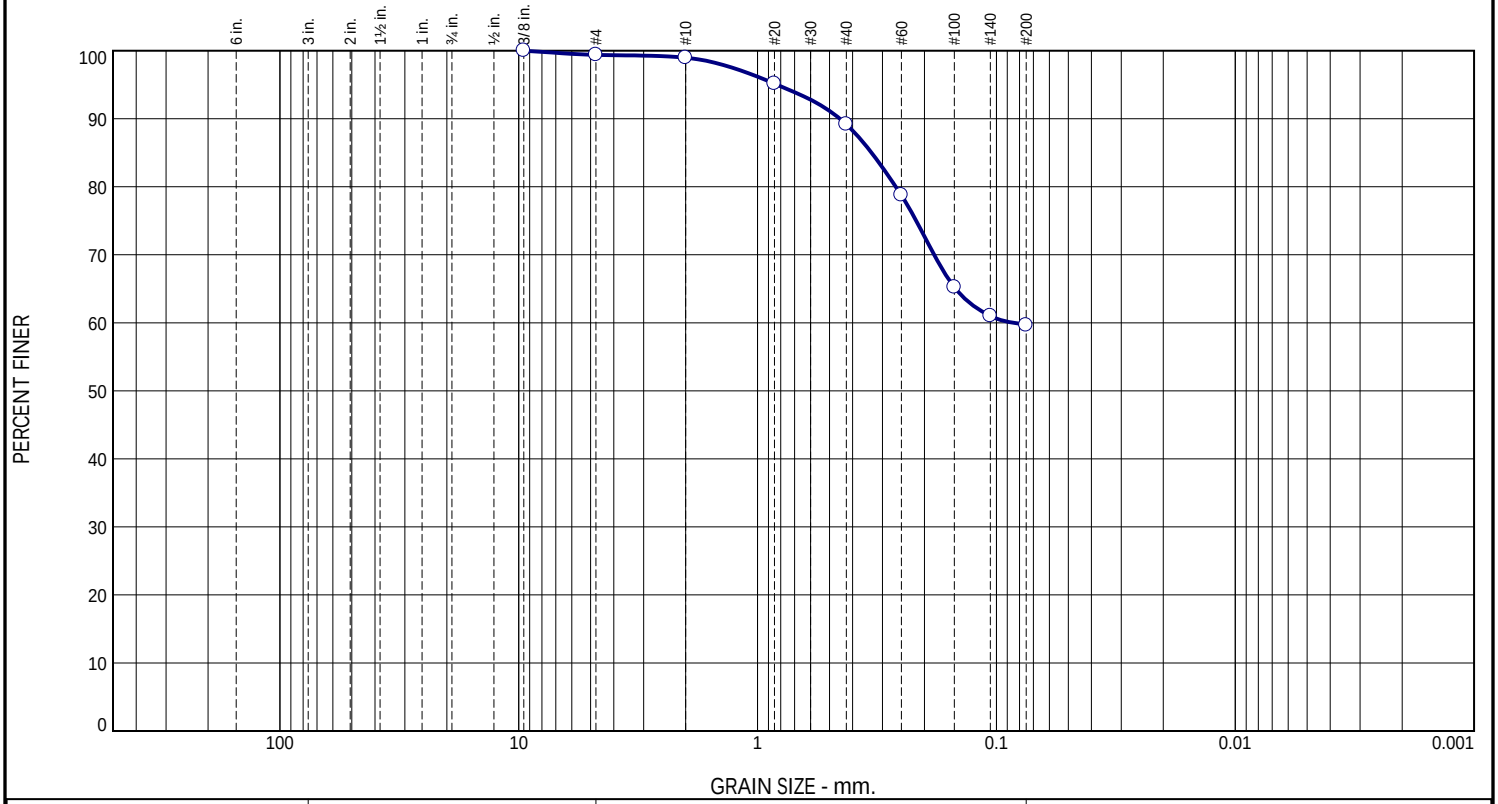
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.6 | 0.4 | 9.8 | 29.5 | 59.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.4 | | | |
| #10 | 99.0 | | | |
| #20 | 95.2 | | | 96.1 |
| #40 | 89.2 | | | 90.1 |
| #60 | 78.8 | | | 79.6 |
| #100 | 65.2 | | | 65.9 |
| #140 | 61.0 | | | 61.6 |
| #200 | 59.7 | | | 60.3 |

* (no specification provided)

Material Description

Grayish Brown sandy silt

Atterberg Limits

PL= 26 LL= 36 PI= 10

Coefficients

$D_{90}$= 0.4519 $D_{85}$= 0.3332 $D_{60}$= 0.0844

$D_{50}$= $D_{30}$= $D_{15}$=

$D_{10}$= $C_u$= $C_c$=

Classification

USCS= ML AASHTO= A-4(4)

Test Remarks

Sample Number: PV-077, S-2 - S-5 Depth: 4'-8.5'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

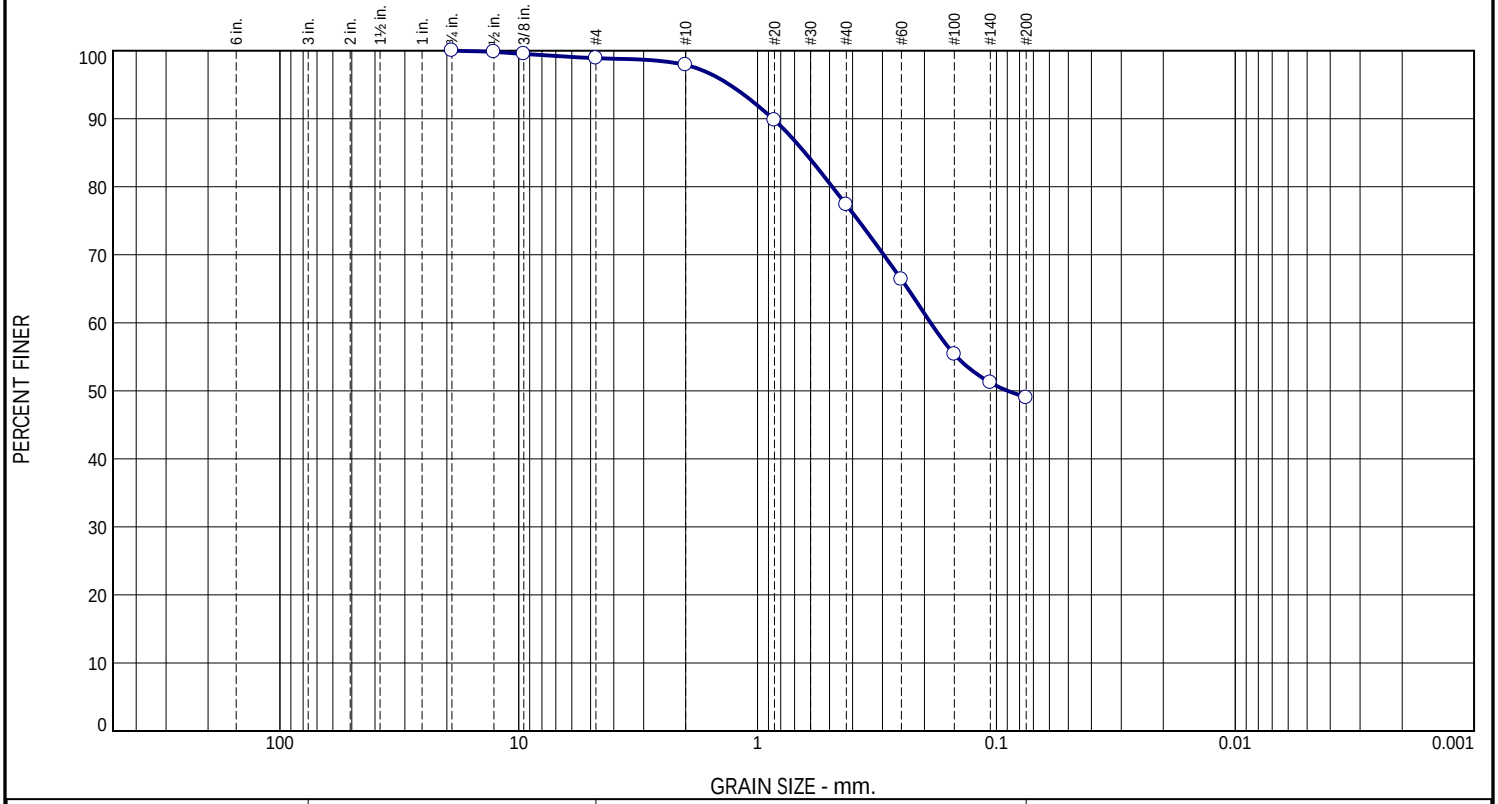
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 1.1 | 1.0 | 20.5 | 28.4 | 49.0 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.8 | | | |
| 0.375" | 99.5 | | | |
| #4 | 98.9 | | | |
| #10 | 97.9 | | | |
| #20 | 89.8 | | | 91.7 |
| #40 | 77.4 | | | 79.0 |
| #60 | 66.4 | | | 67.8 |
| #100 | 55.4 | | | 56.6 |
| #140 | 51.2 | | | 52.3 |
| #200 | 49.0 | | | 50.0 |

* (no specification provided)

Material Description

Yellowish Brown silty sand

Atterberg Limits

PL= 36 LL= 75 PI= 39

Coefficients

$D_{90}$= 0.8624 $D_{85}$= 0.6324 $D_{60}$= 0.1886
$D_{50}$= 0.0895 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= SM AASHTO= A-7-5(15)

Test Remarks

Sample Number: PV-084, S-3 - S-5 Depth: 4'-9.3'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

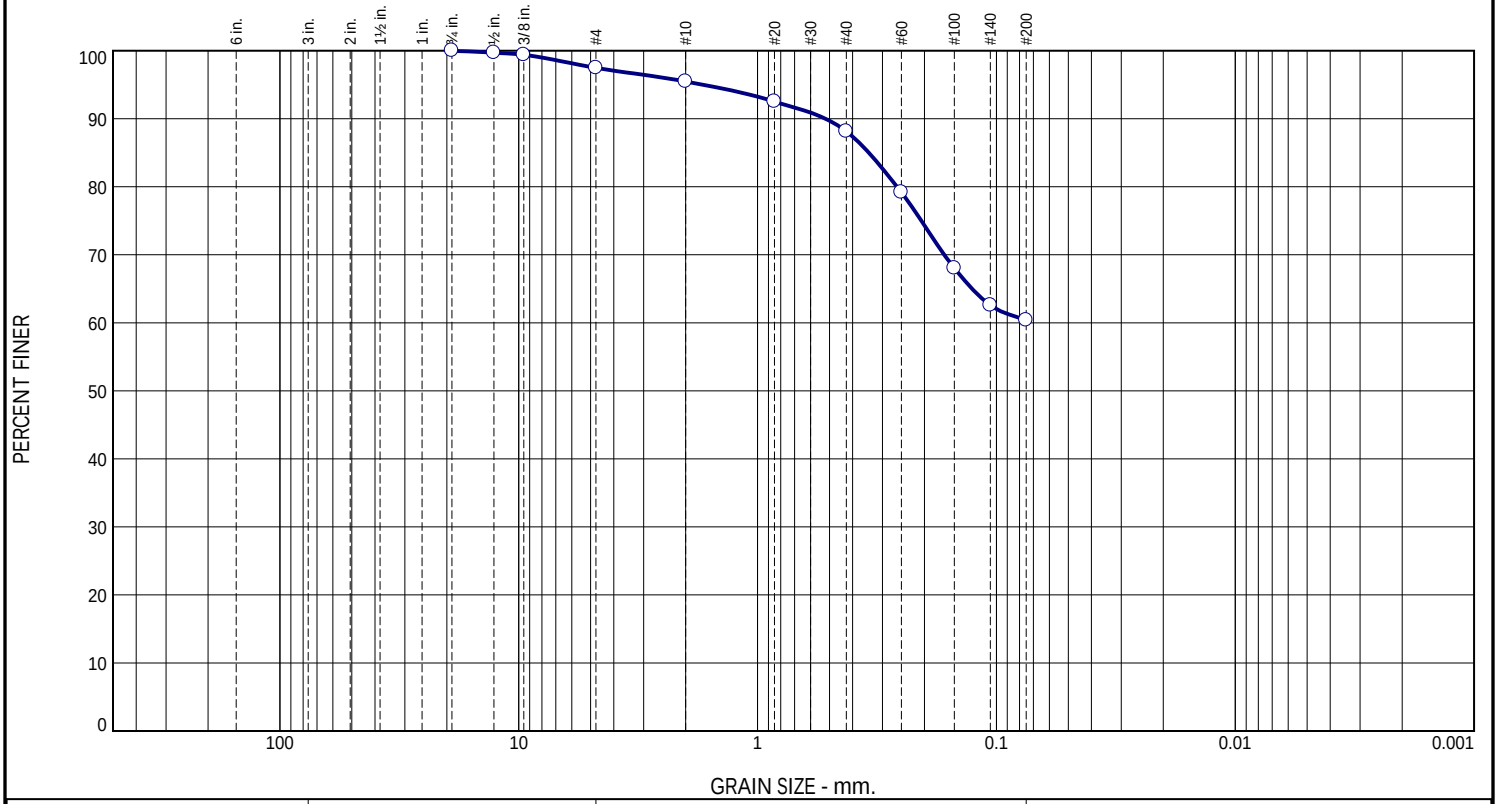
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 2.5 | 2.0 | 7.4 | 27.7 | 60.4 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.7 | | | |
| 0.375" | 99.4 | | | |
| #4 | 97.5 | | | |
| #10 | 95.5 | | | |
| #20 | 92.5 | | | 96.9 |
| #40 | 88.1 | | | 92.3 |
| #60 | 79.2 | | | 82.9 |
| #100 | 68.0 | | | 71.3 |
| #140 | 62.6 | | | 65.5 |
| #200 | 60.4 | | | 63.2 |

* (no specification provided)

**Material Description**

Dark Brown sandy silty clay

**Atterberg Limits**

PL= 21 LL= 28 PI= 7

**Coefficients**

$D_{90}$= 0.5191 $D_{85}$= 0.3419 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(2)

**Test Remarks**

Sample Number: PV-093, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

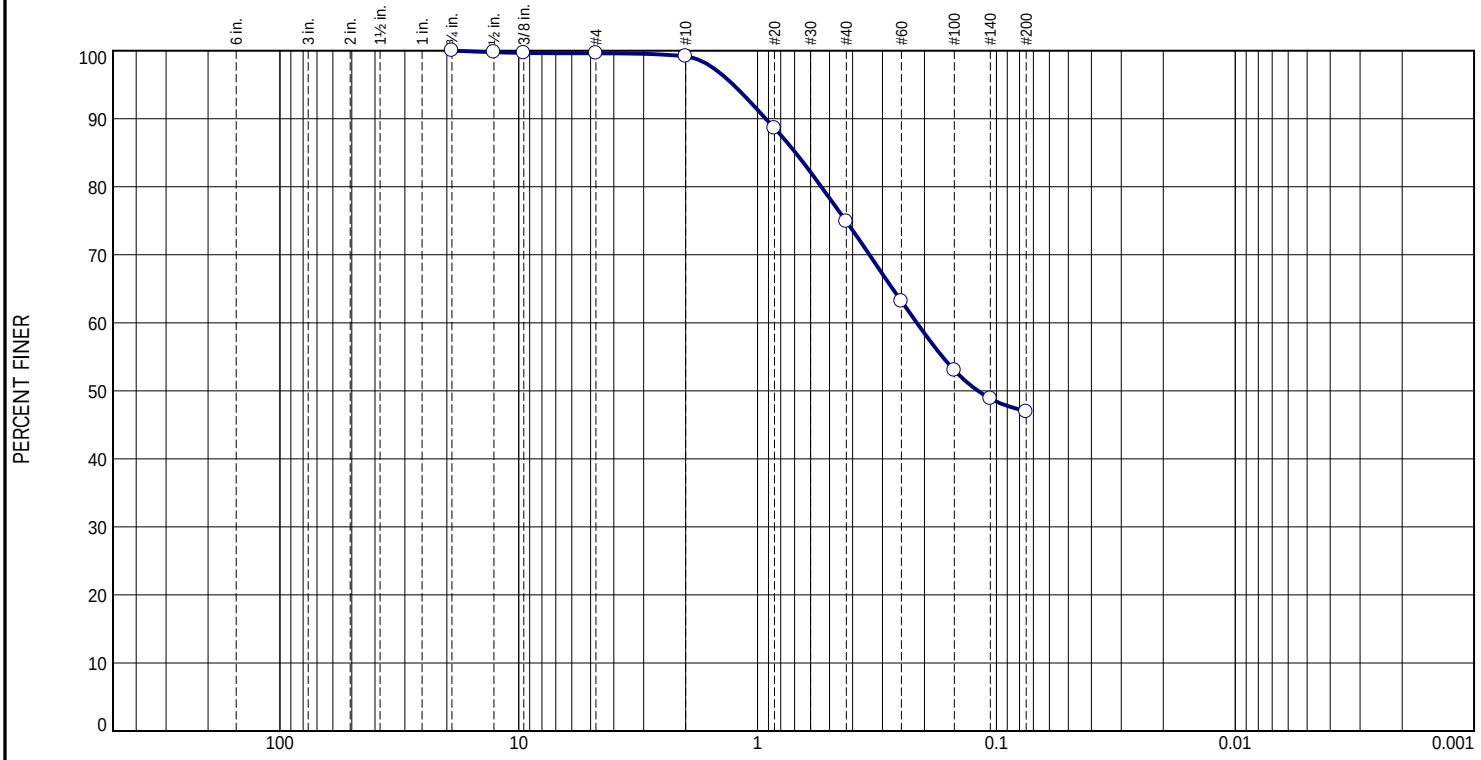
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.4 | 0.4 | 24.3 | 28.0 | 46.9 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 99.8 | | | |
| 0.375" | 99.7 | | | |
| #4 | 99.6 | | | |
| #10 | 99.2 | | | |
| #20 | 88.6 | | | 89.4 |
| #40 | 74.9 | | | 75.5 |
| #60 | 63.2 | | | 63.7 |
| #100 | 53.0 | | | 53.5 |
| #140 | 48.8 | | | 49.3 |
| #200 | 46.9 | | | 47.3 |

* (no specification provided)

Material Description

Dark Brown silty, clayey sand

Atterberg Limits

PL= 19 LL= 26 PI= 7

Coefficients

$D_{90}$= 0.9248 $D_{85}$= 0.6927 $D_{60}$= 0.2152
$D_{50}$= 0.1193 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

Classification

USCS= SC-SM AASHTO= A-4(1)

Test Remarks

Sample Number: PV-098, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

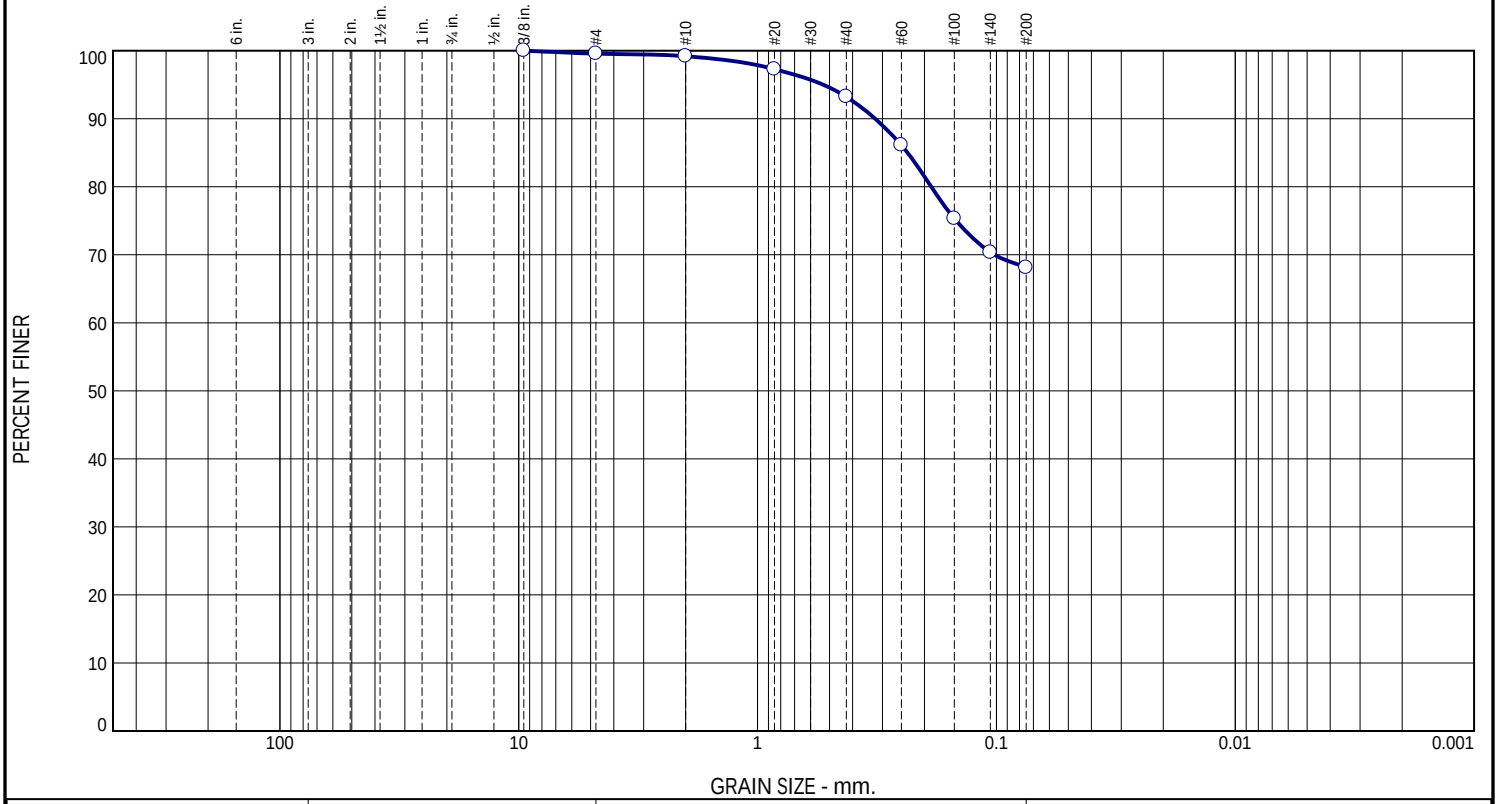
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.4 | 0.4 | 6.0 | 25.1 | 68.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.6 | | | |
| #10 | 99.2 | | | |
| #20 | 97.3 | | | 98.1 |
| #40 | 93.2 | | | 94.0 |
| #60 | 86.1 | | | 86.8 |
| #100 | 75.3 | | | 75.9 |
| #140 | 70.4 | | | 70.9 |
| #200 | 68.1 | | | 68.7 |

* (no specification provided)

**Material Description**

Dark Brown sandy silt

**Atterberg Limits**

PL= 25 LL= 32 PI= 7

**Coefficients**

$D_{90}$= 0.3217 $D_{85}$= 0.2353 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= ML AASHTO= A-4(4)

**Test Remarks**

Sample Number: PV-101, S-1 - S-3 Depth: 0'-6'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

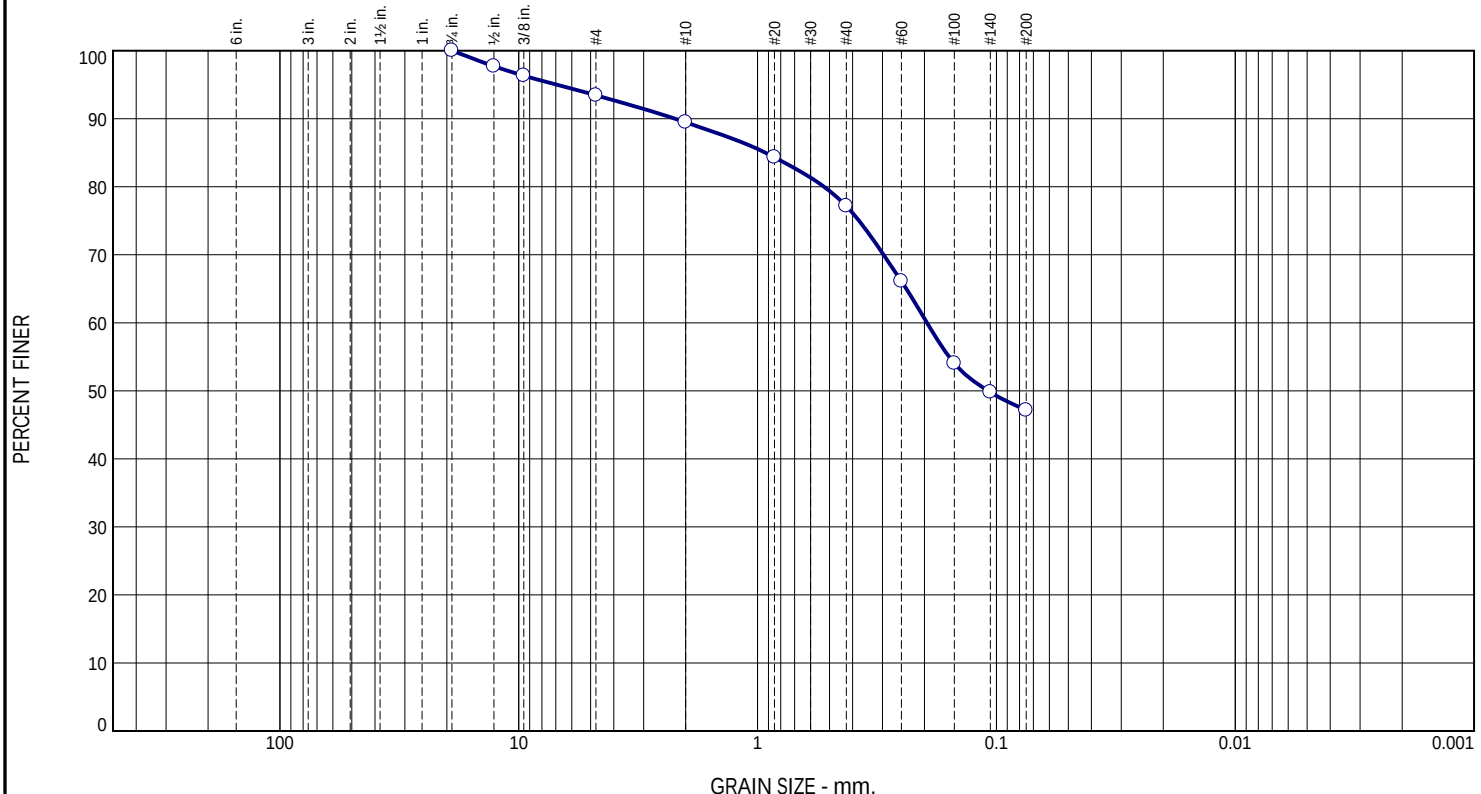
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 6.6 | 3.9 | 12.3 | 30.1 | 47.1 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.75" | 100.0 | | | |
| 0.5" | 97.7 | | | |
| 0.375" | 96.3 | | | |
| #4 | 93.4 | | | |
| #10 | 89.5 | | | |
| #20 | 84.3 | | | 94.2 |
| #40 | 77.2 | | | 86.2 |
| #60 | 66.1 | | | 73.9 |
| #100 | 54.0 | | | 60.4 |
| #140 | 49.8 | | | 55.7 |
| #200 | 47.1 | | | 52.7 |

* (no specification provided)

**Material Description**

Olive Brown silty sand

**Atterberg Limits**

PL= 25 LL= 31 PI= 6

**Coefficients**

$D_{90}$= 2.2147 $D_{85}$= 0.9267 $D_{60}$= 0.1951
$D_{50}$= 0.1082 $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SM AASHTO= A-4(1)

**Test Remarks**

Sample Number: PV-111, S-3 - S-4 Depth: 4'-7.1'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

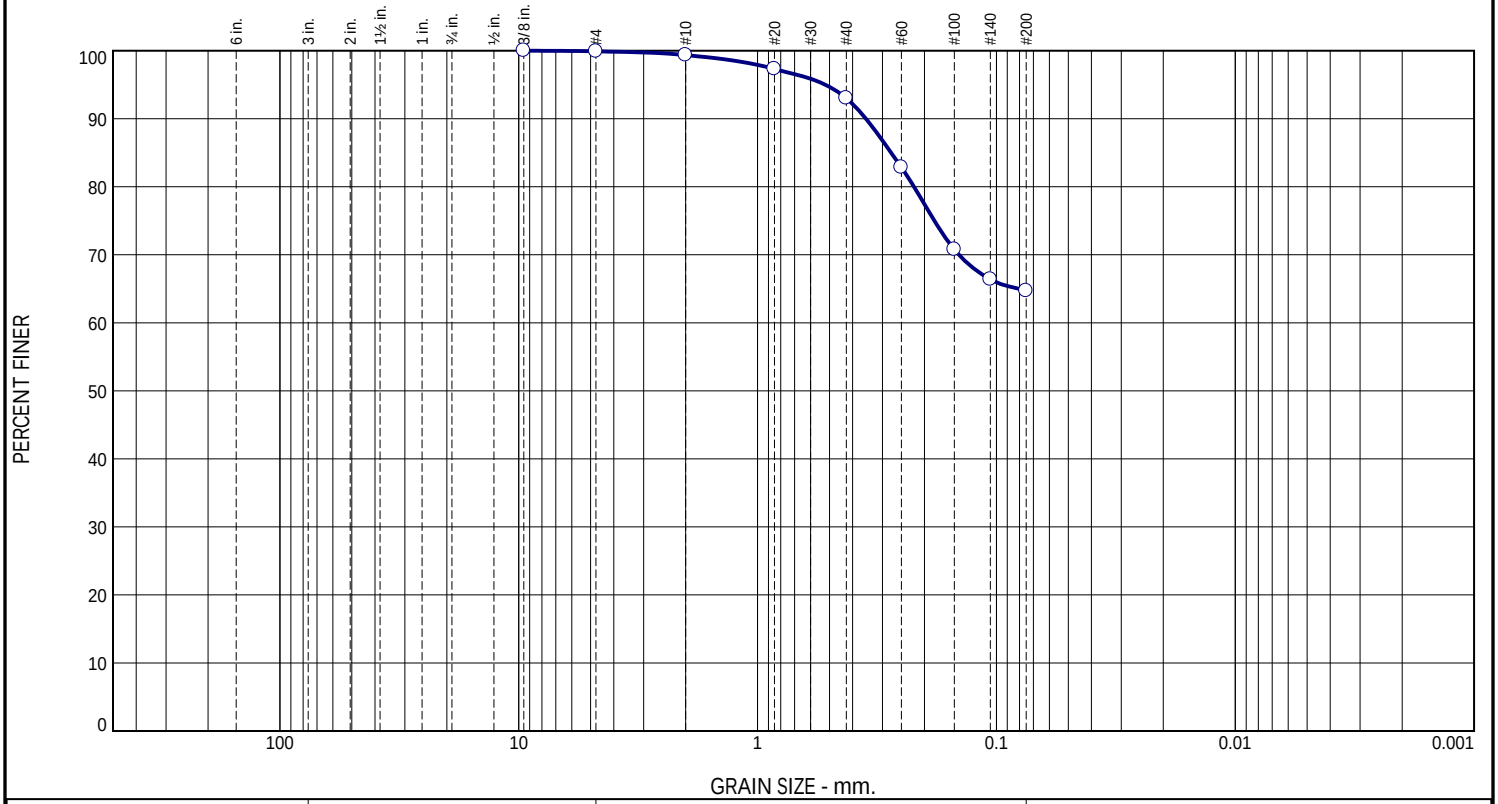
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913




| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 0.1 | 0.5 | 6.4 | 28.3 | 64.7 | |

Test Results (ASTM D6913)

| Sieve Size or Diam. (mm.) | Finer (%) | Spec.* (%) | Out of Spec. (%) | Pct. of Fines |
|---|---|---|---|---|
| 0.375" | 100.0 | | | |
| #4 | 99.9 | | | |
| #10 | 99.4 | | | |
| #20 | 97.3 | | | 97.9 |
| #40 | 93.0 | | | 93.6 |
| #60 | 82.9 | | | 83.4 |
| #100 | 70.8 | | | 71.2 |
| #140 | 66.4 | | | 66.8 |
| #200 | 64.7 | | | 65.1 |

* (no specification provided)

**Material Description**

Grayish Brown sandy silty clay

**Atterberg Limits**

PL= 20 LL= 26 PI= 6

**Coefficients**

$D_{90}$= 0.3517 $D_{85}$= 0.2760 $D_{60}$=
$D_{50}$= $D_{30}$= $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= CL-ML AASHTO= A-4(2)

**Test Remarks**

Sample Number: PV-140, S-1 - S-2 Depth: 0'-4'

Sample Date: 12/16/2025

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Client: Tetra Tech

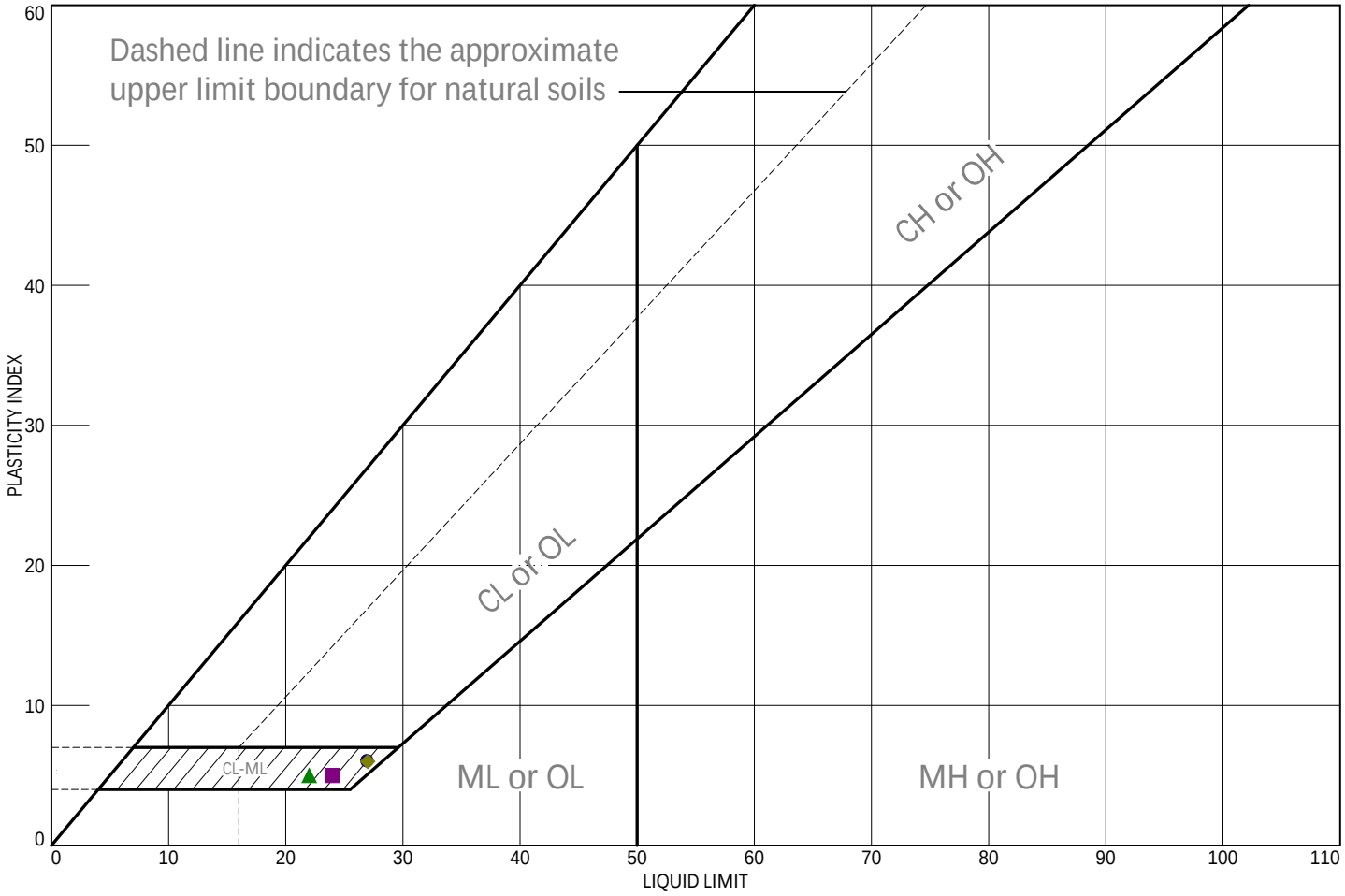
Project: Speedway, Sherman County, OR

Project No: IRN 25-N-742 Figure

Tested By: CB Checked By: ANS

# ATTERBERG LIMITS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Grayish Brown silty, clayey sand | 27 | 21 | 6 | 54.0 | 38.7 | SC-SM |
| ■ | Brown silty, clayey sand | 24 | 19 | 5 | 70.9 | 46.8 | SC-SM |
| ▲ | Grayish Brown silty, clayey sand | 22 | 17 | 5 | 74.2 | 42.4 | SC-SM |
| ◆ | Brown silty, clayey sand | 27 | 21 | 6 | 68.7 | 45.9 | SC-SM |
| | | | | | | | |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-52, TRT

■Depth: 2'-5' Sample Number: WTG-01, TRT/CBR

▲Depth: 2'-5' Sample Number: WTG-02, TRT/CBR

◆Depth: 2'-5' Sample Number: WTG-03, TRT/CBR

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

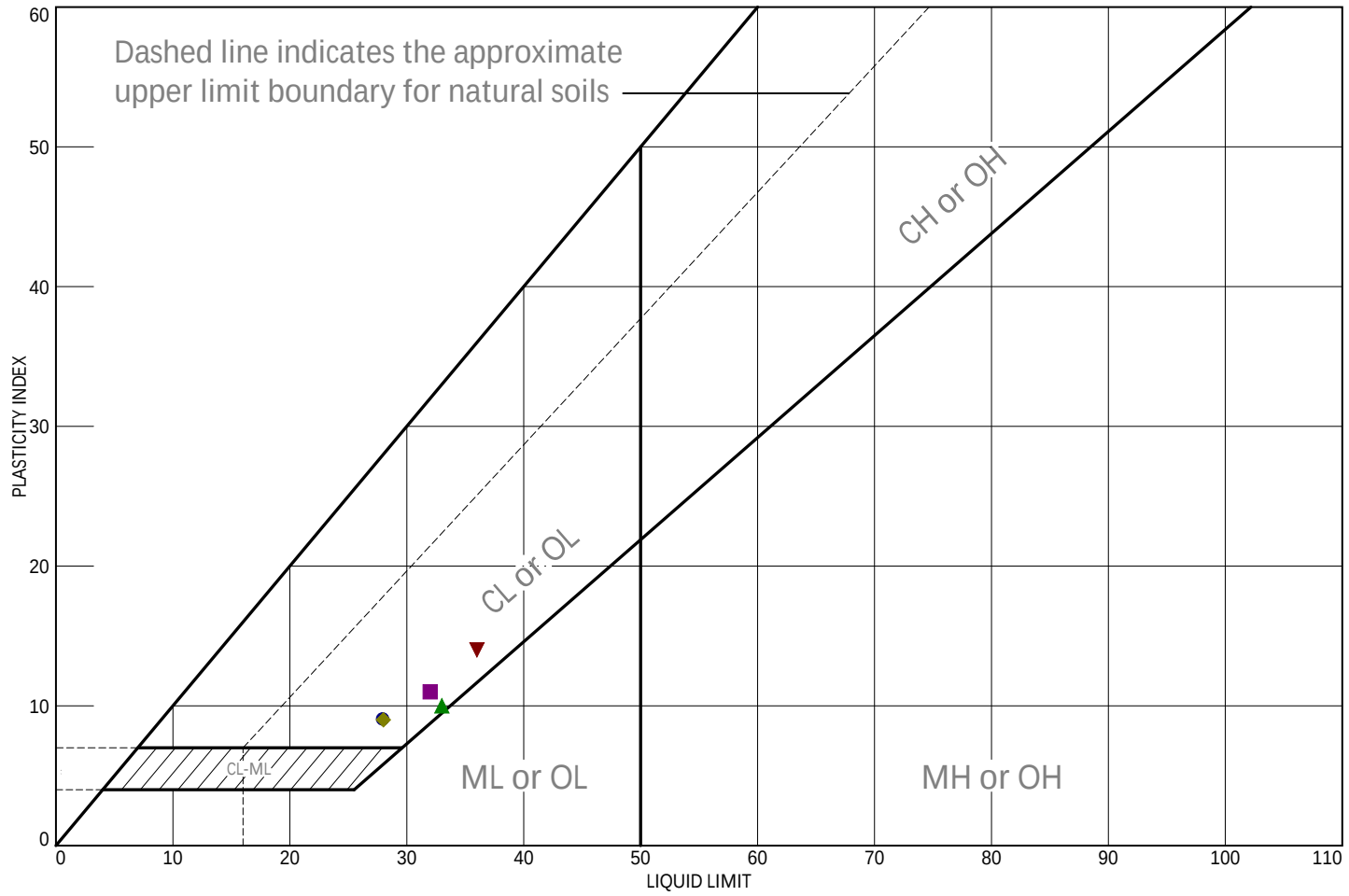
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/21/2025

Figure

Tested By: DS Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown sandy lean clay with gravel | 28 | 19 | 9 | 60.8 | 51.2 | CL |
| ■ | Brown clayey sand with gravel | 32 | 21 | 11 | 54.6 | 42.0 | SC |
| ▲ | Brown sandy lean clay | 33 | 23 | 10 | 64.5 | 54.1 | CL |
| ◆ | Brown sandy lean clay with gravel | 28 | 19 | 9 | 73.7 | 55.4 | CL |
| ▼ | Brown clayey gravel with sand | 36 | 22 | 14 | 56.0 | 47.3 | GC |

Project No. IRN 25-N-599 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: WTG-04, TRT
■Depth: 2'-5' Sample Number: WTG-05, TRT
▲Depth: 2'-5' Sample Number: WTG-06, TRT
◆Depth: 2'-5' Sample Number: WTG-07, TRT
▼Depth: 1'-2' Sample Number: WTG-08, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

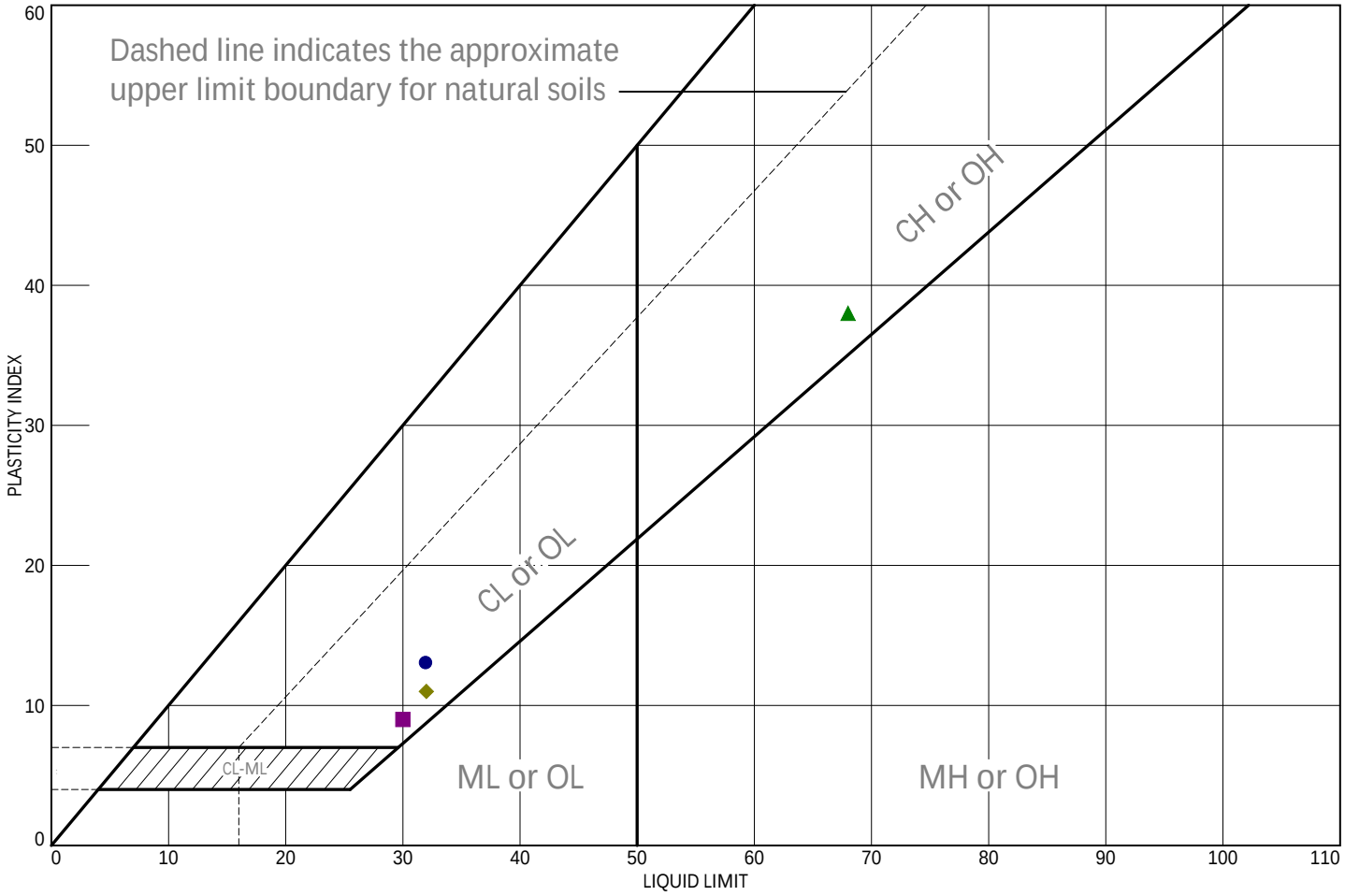
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/6/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Dark Brown lean clay with sand | 32 | 19 | 13 | 81.1 | 71.6 | CL |
| ■ | Brown lean clay | 30 | 21 | 9 | 98.4 | 85.6 | CL |
| ▲ | Gray fat clay with sand | 68 | 30 | 38 | 87.6 | 77.3 | CH |
| ◆ | Brown lean clay with sand | 32 | 21 | 11 | 96.7 | 84.6 | CL |
| ▼ | Brown silty sand | NV | NP | NP | 63.8 | 42.0 | SM |

Project No. IRN 25-T-215 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-079, TRT
■Depth: 2'-5' Sample Number: PV-081, TRT
▲Depth: 2'-5' Sample Number: PV-084, TRT
◆Depth: 2'-5' Sample Number: PV-100, TRT
▼Depth: 2'-5' Sample Number: SB-01, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

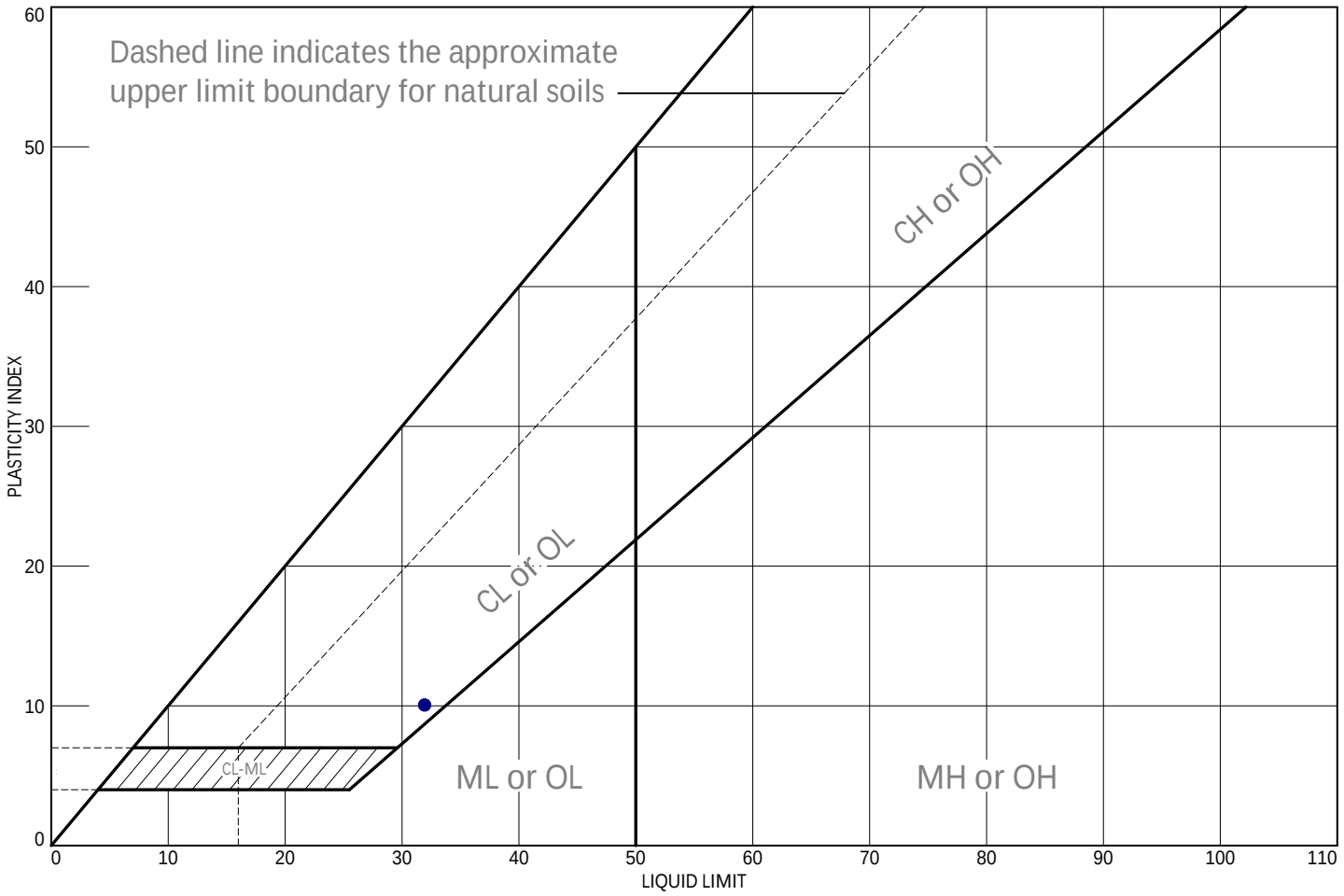
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/11/2025

Figure

Tested By: ES Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown sandy lean clay | 32 | 22 | 10 | 66.6 | 60.3 | CL |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Project No. IRN 25-T-215 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: SB-02, TRT

Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/11/2025

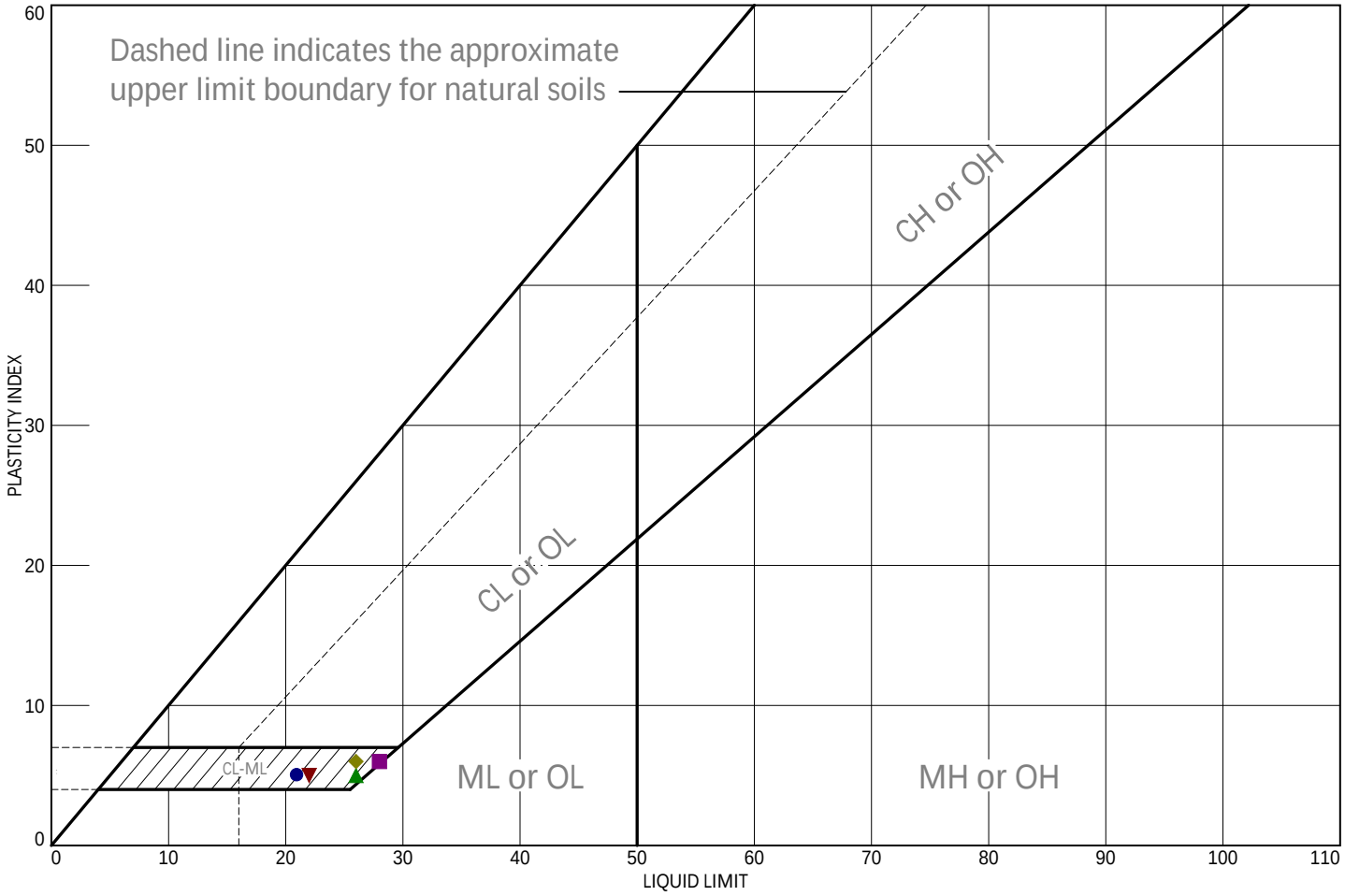
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: ES Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Dark Brown sandy silty clay | 21 | 16 | 5 | 96.5 | 60.4 | CL-ML |
| ■ | Dark Brown sandy silty clay with gravel | 28 | 22 | 6 | 72.1 | 59.0 | CL-ML |
| ▲ | Light Brown sandy silty clay | 26 | 21 | 5 | 81.1 | 63.5 | CL-ML |
| ◆ | Light Brown silty clayey gravel with sand | 26 | 20 | 6 | 62.3 | 47.4 | GC-GM |
| ▼ | Brown silty clay with sand | 22 | 17 | 5 | 96.0 | 72.2 | CL-ML |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-01, TRT

■Depth: 2'-5' Sample Number: PV-03, TRT

▲Depth: 2'-5' Sample Number: PV-08, TRT/CBR

◆Depth: 2'-5' Sample Number: PV-12, TRT

▼Depth: 2'-5' Sample Number: PV-15, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

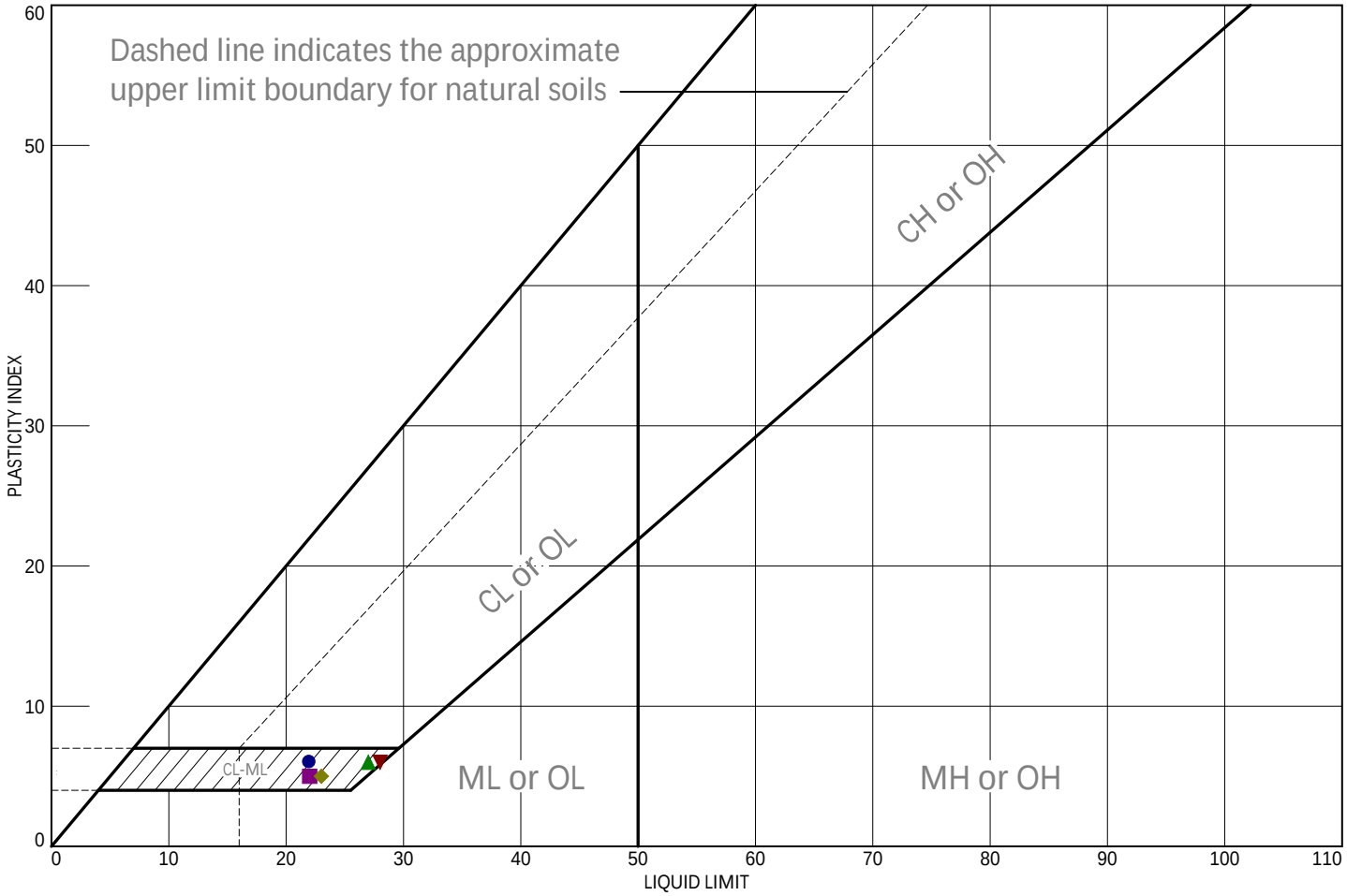
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/21/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown sandy silty clay | 22 | 16 | 6 | 85.7 | 61.2 | CL-ML |
| ■ | Dark Brown sandy silty clay | 22 | 17 | 5 | 73.8 | 54.1 | CL-ML |
| ▲ | Light Brown silty, clayey sand | 27 | 21 | 6 | 64.7 | 48.8 | SC-SM |
| ◆ | Brown silty clay with sand | 23 | 18 | 5 | 96.7 | 73.2 | CL-ML |
| ▼ | Brown silty clay with sand | 28 | 22 | 6 | 93.9 | 72.5 | CL-ML |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

● Depth: 2'-5' Sample Number: PV-16, TRT

■ Depth: 2'-5' Sample Number: PV-21, TRT/CBR

▲ Depth: 2'-5' Sample Number: PV-24, TRT/CBR

◆ Depth: 2'-5' Sample Number: PV-26, TRT

▼ Depth: 2'-5' Sample Number: PV-29, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

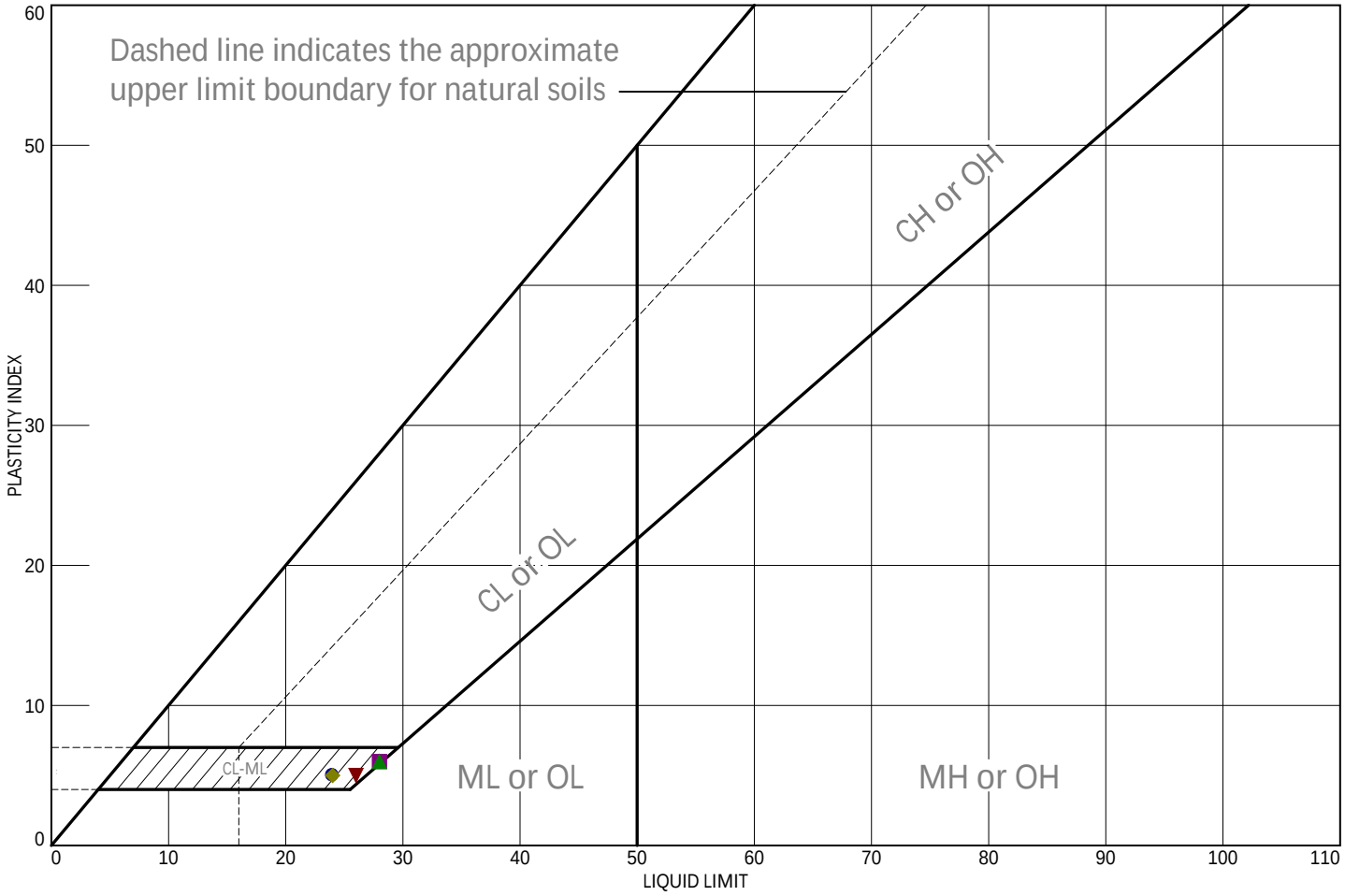
Remarks:

● ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/21/2025

Figure

Tested By: DS Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Light Brown sandy silty clay | 24 | 19 | 5 | 92.5 | 61.6 | CL-ML |
| ■ | Brown silty, clayey sand with gravel | 28 | 22 | 6 | 51.1 | 39.4 | SC-SM |
| ▲ | Dark Brown silty, clayey sand with gravel | 28 | 22 | 6 | 48.5 | 33.9 | SC-SM |
| ◆ | Dark Brown poorly graded sand with silty clay and gravel | 24 | 19 | 5 | 11.9 | 5.8 | SP-SC |
| ▼ | Brown silty, clayey sand with gravel | 26 | 21 | 5 | 32.2 | 20.7 | SC-SM |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-34, TRT/CBR
■Depth: 0.5'-2' Sample Number: PV-36, TRT
▲Depth: 2'-5' Sample Number: PV-40, TRT
◆Depth: 2'-5' Sample Number: PV-47, TRT
▼Depth: 2'-5' Sample Number: PV-49, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

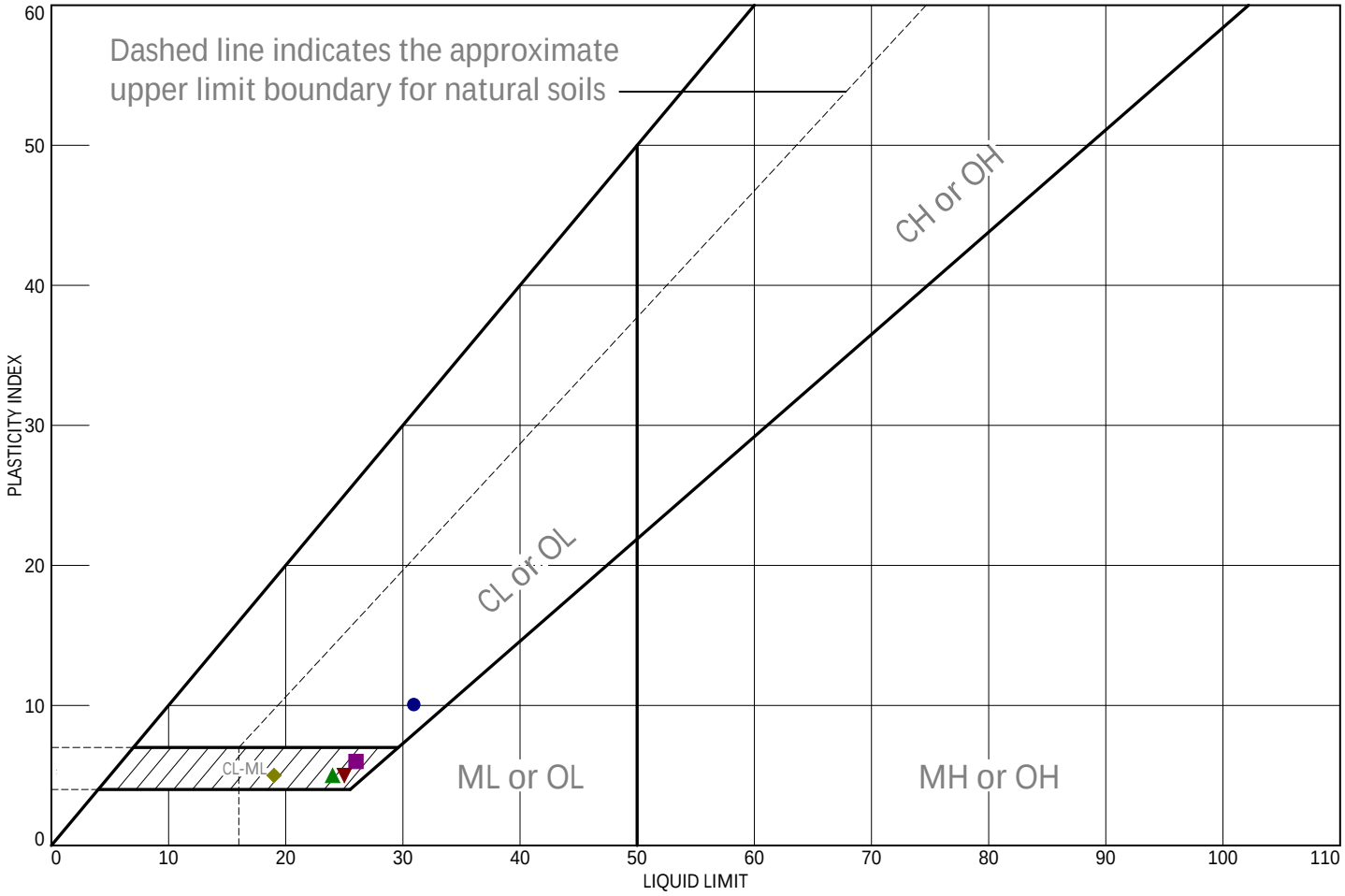
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/21/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown clayey sand | 31 | 21 | 10 | 55.7 | 40.6 | SC |
| ■ | Brown silty clay with sand | 26 | 20 | 6 | 98.1 | 73.5 | CL-ML |
| ▲ | Brown sandy silty clay | 24 | 19 | 5 | 88.9 | 58.7 | CL-ML |
| ◆ | Brown sandy silty clay | 19 | 14 | 5 | 91.3 | 52.0 | CL-ML |
| ▼ | Brown sandy silty clay | 25 | 20 | 5 | 89.4 | 61.3 | CL-ML |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-043, TRT
■Depth: 2'-5' Sample Number: PV-045, TRT
▲Depth: 2'-5' Sample Number: PV-089, TRT
◆Depth: 2'-5' Sample Number: PV-090, TRT
▼Depth: 2'-5' Sample Number: PV-095, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

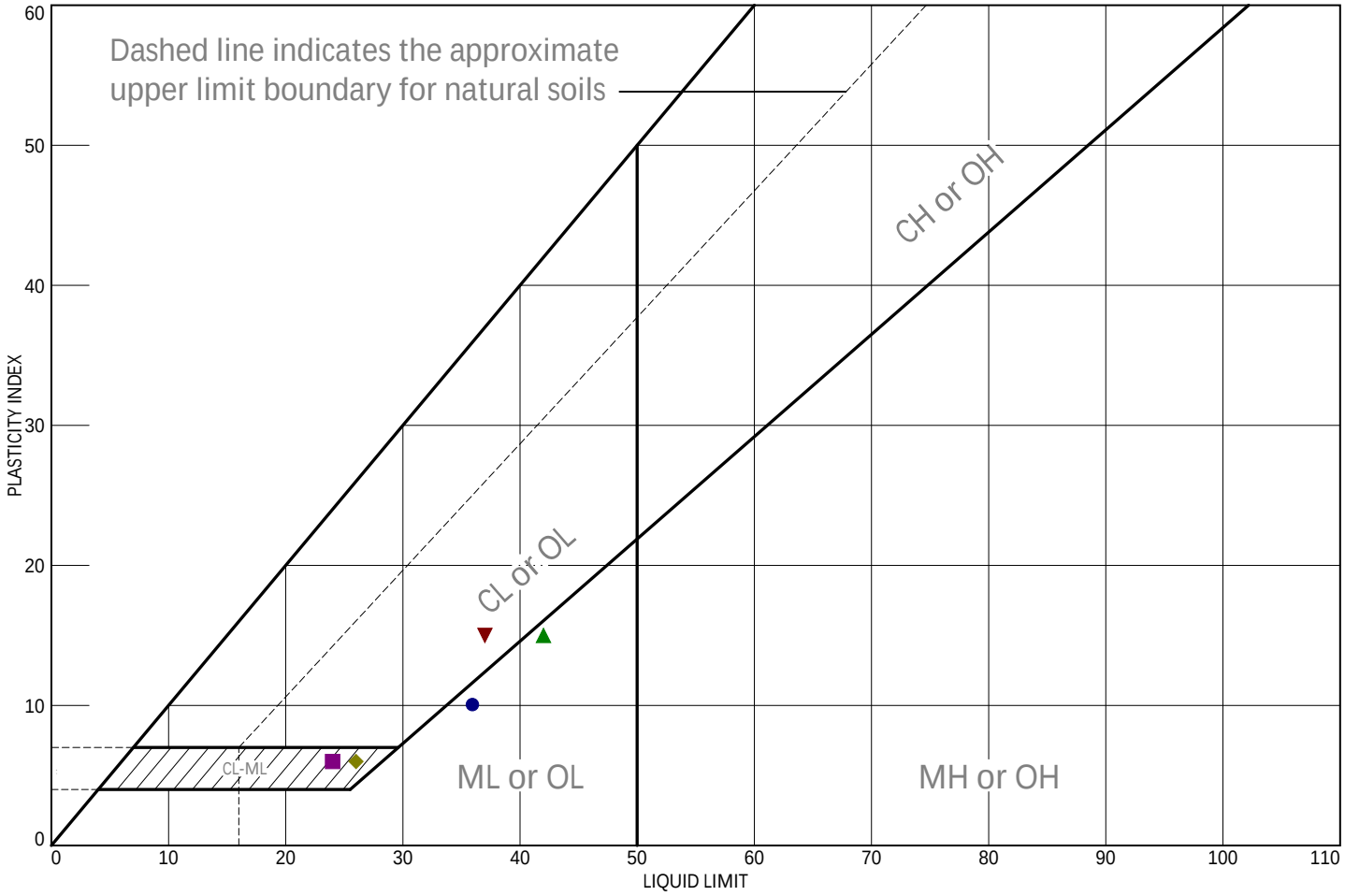
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/24/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Light Brown sandy silt with gravel | 36 | 26 | 10 | 70.9 | 53.6 | ML |
| ■ | Light Brown silty clay with sand | 24 | 18 | 6 | 97.3 | 72.8 | CL-ML |
| ▲ | Brown silty sand with gravel | 42 | 27 | 15 | 27.7 | 18.5 | SM |
| ◆ | Light Brown silty clay with sand | 26 | 20 | 6 | 91.8 | 80.0 | CL-ML |
| ▼ | Dark Brown clayey sand with gravel | 37 | 22 | 15 | 26.8 | 15.2 | SC |

Project No. IRN 25-T-215 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-058, TRT

■Depth: 2'-5' Sample Number: PV-064, TRT

▲Depth: 2'-5' Sample Number: PV-068, TRT

◆Depth: 2'-5' Sample Number: PV-071, TRT

▼Depth: 2'-5' Sample Number: PV-074, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

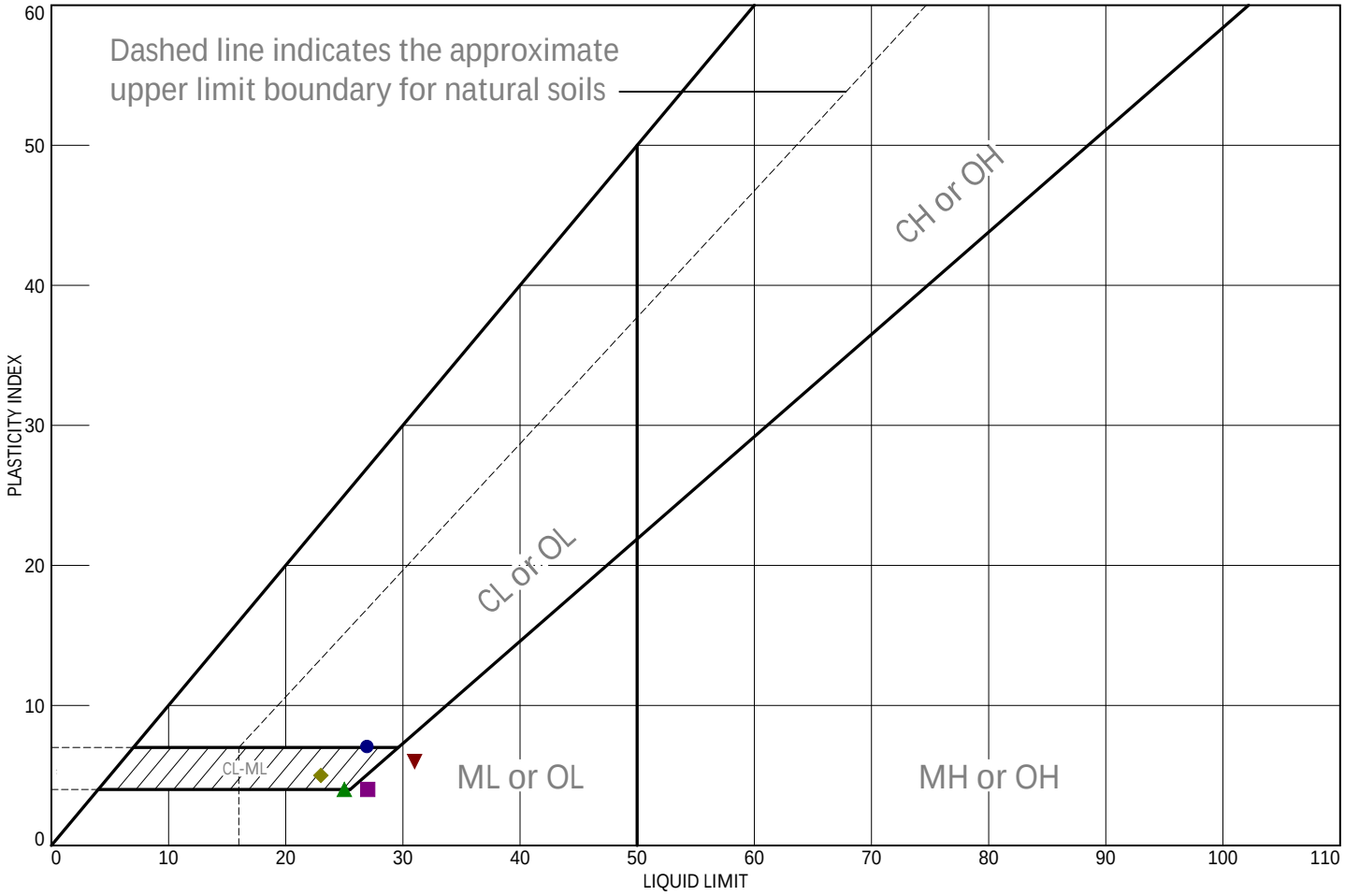
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/11/2025

Figure

Tested By: ES Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown silty clay with sand | 27 | 20 | 7 | 96.7 | 75.6 | CL-ML |
| ■ | Brown silty sand with gravel | 27 | 23 | 4 | 39.8 | 29.4 | SM |
| ▲ | Brown silty, clayey sand with gravel | 25 | 21 | 4 | 47.6 | 30.7 | SC-SM |
| ◆ | Brown sandy silty clay | 23 | 18 | 5 | 94.9 | 53.0 | CL-ML |
| ▼ | Brown silty sand | 31 | 25 | 6 | 55.2 | 29.9 | SM |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-097, TRT
■Depth: 1'-2' Sample Number: PV-105, TRT
▲Depth: 2'-5' Sample Number: PV-109, TRT
◆Depth: 2'-5' Sample Number: PV-111, TRT
▼Depth: 2'-5' Sample Number: PV-114, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

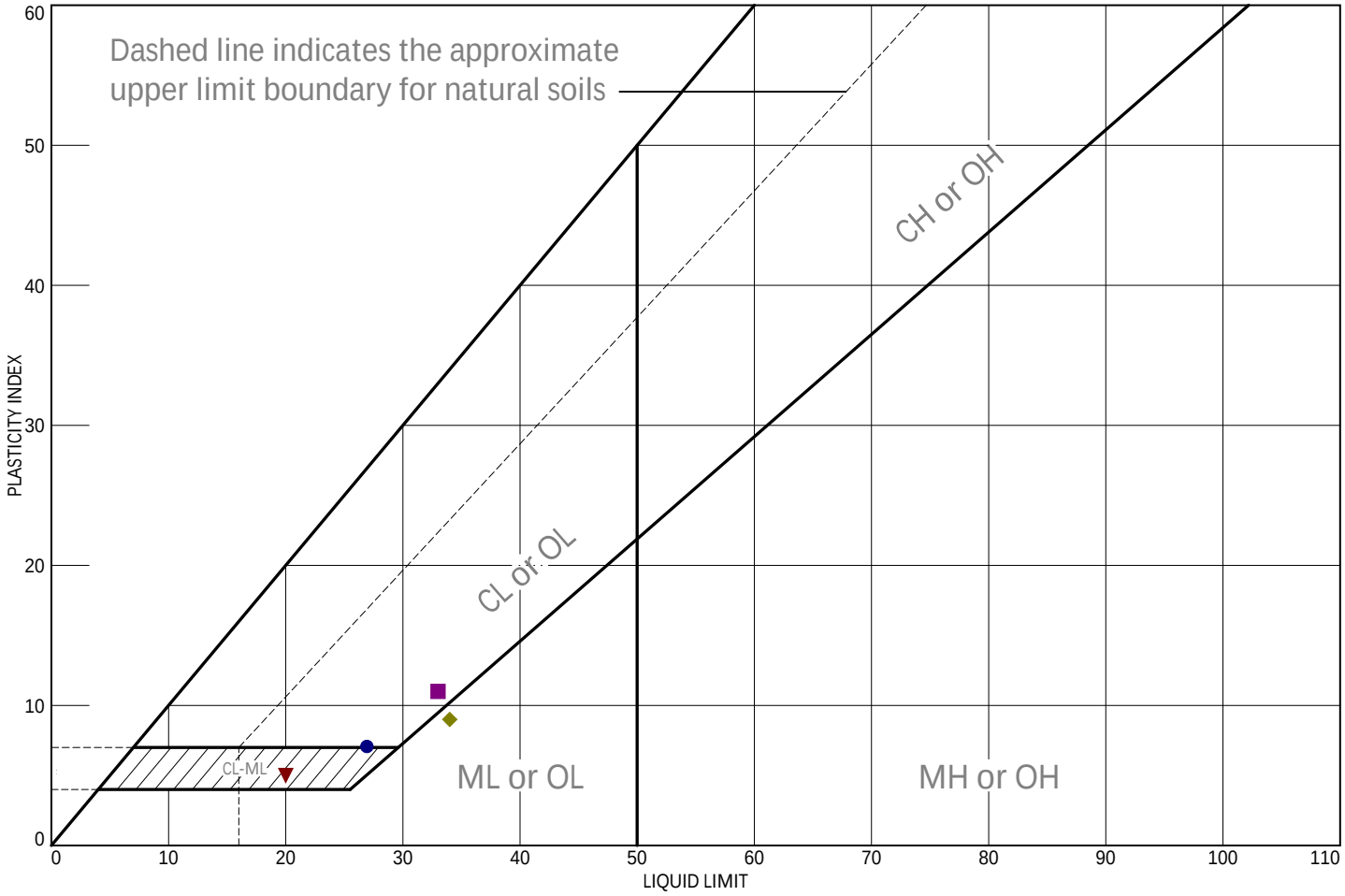
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/24/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown silty clay with sand | 27 | 20 | 7 | 83.2 | 70.9 | CL-ML |
| ■ | Brown clayey sand with gravel | 33 | 22 | 11 | 51.7 | 34.1 | SC |
| ▲ | Brown sandy silt | NV | NP | NP | 86.9 | 58.7 | ML |
| ◆ | Brown sandy silt | 34 | 25 | 9 | 67.7 | 54.7 | ML |
| ▼ | Brown sandy silty clay | 20 | 15 | 5 | 89.9 | 58.4 | CL-ML |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 1'-2' Sample Number: PV-119, TRT
■Depth: 2'-5' Sample Number: PV-121, TRT
▲Depth: 2'-5' Sample Number: PV-123, TRT
◆Depth: 1'-2' Sample Number: PV-126, TRT
▼Depth: 2'-5' Sample Number: PV-127, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

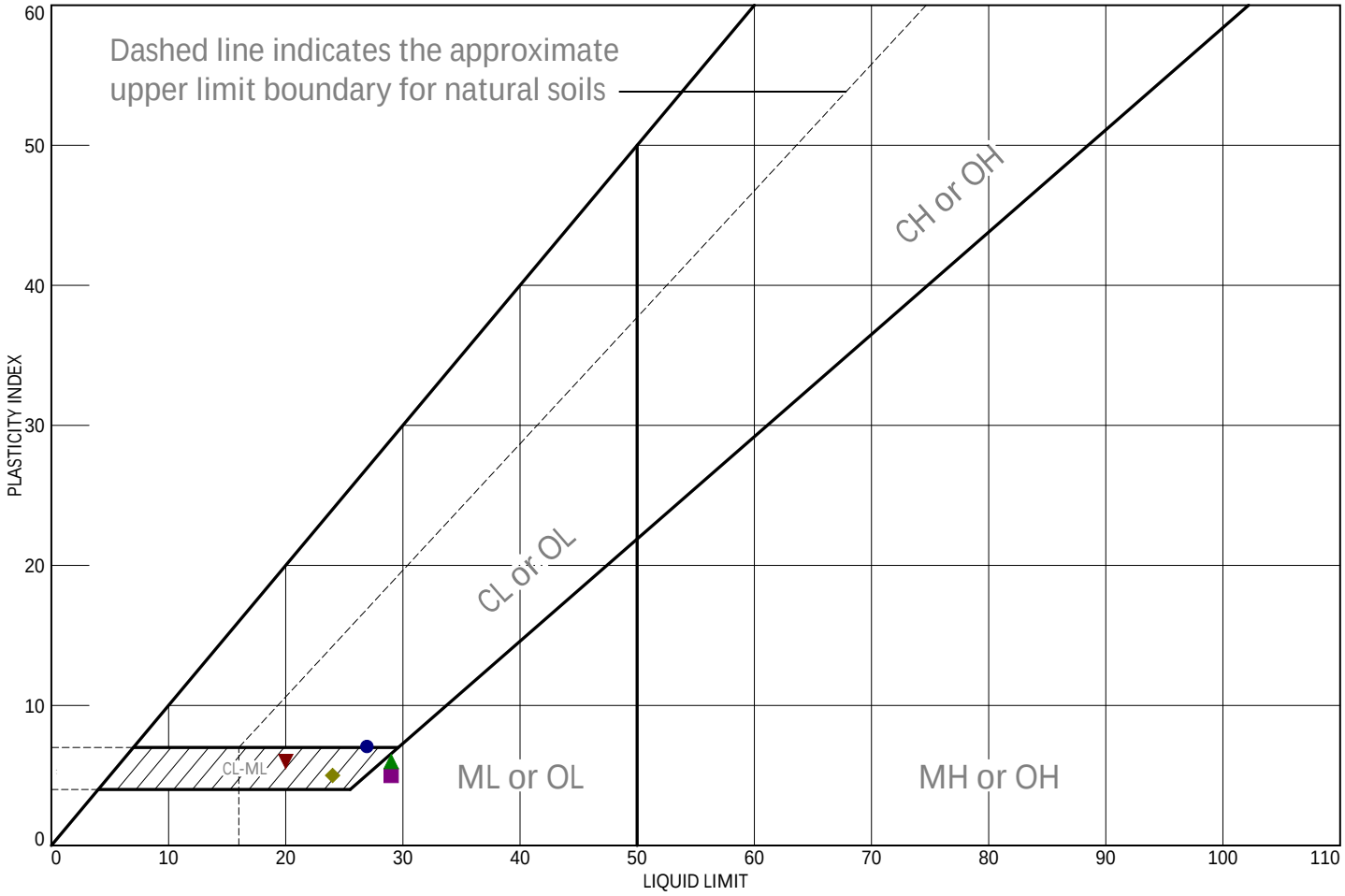
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/24/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown silty, clayey sand with gravel | 27 | 20 | 7 | 57.6 | 36.4 | SC-SM |
| ■ | Brown silty sand with gravel | 29 | 24 | 5 | 56.0 | 43.4 | SM |
| ▲ | Brown sandy silt with gravel | 29 | 23 | 6 | 67.7 | 60.0 | ML |
| ◆ | Brown sandy silty clay | 24 | 19 | 5 | 90.9 | 65.0 | CL-ML |
| ▼ | Brown sandy silty clay | 20 | 14 | 6 | 87.0 | 57.9 | CL-ML |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-132, TRT
■Depth: 2'-5' Sample Number: PV-137, TRT
▲Depth: 1'-2' Sample Number: PV-142, TRT
◆Depth: 2'-5' Sample Number: PV-144, TRT
▼Depth: 2'-5' Sample Number: PV-145, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

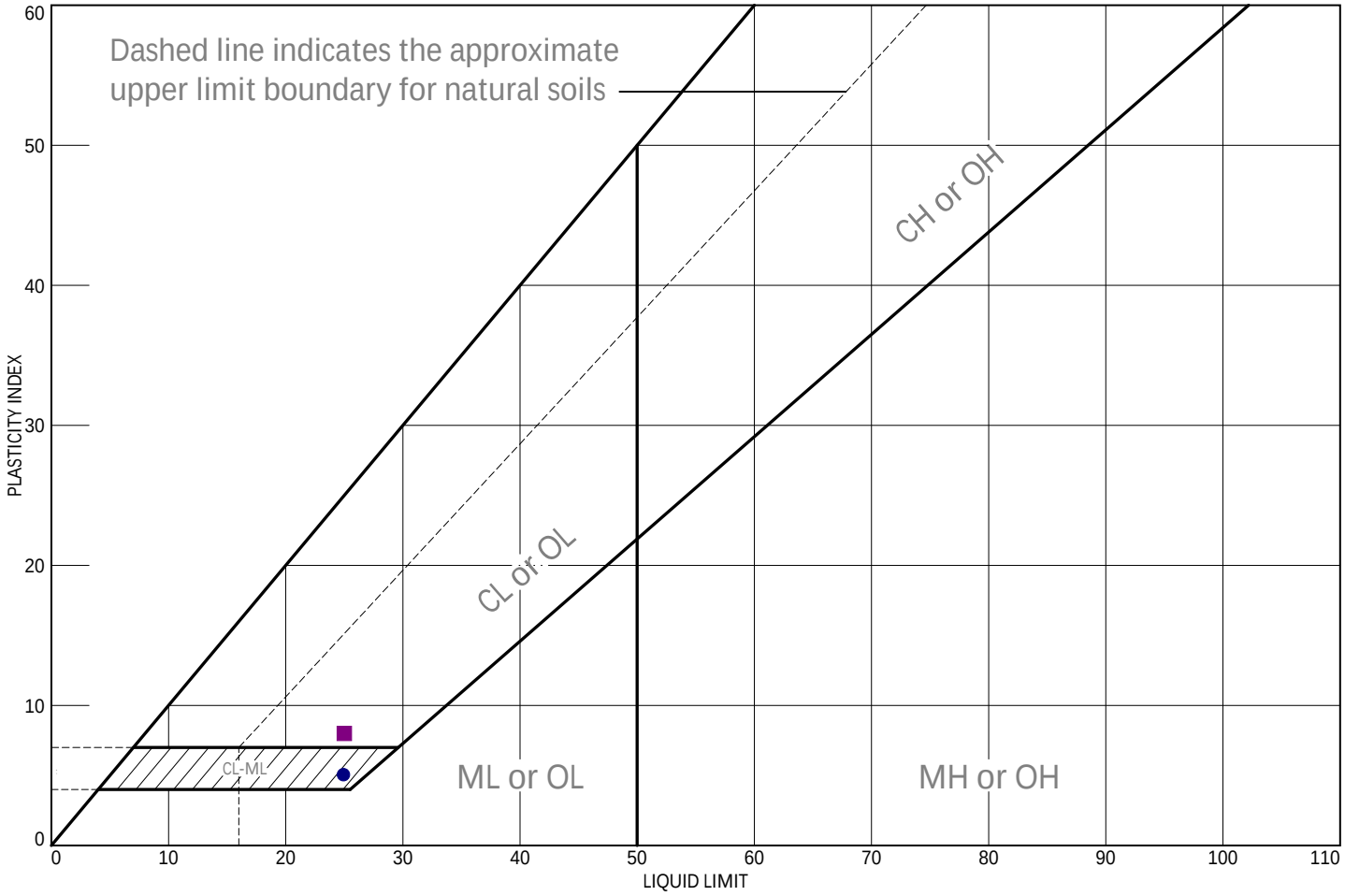
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
10/24/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown sandy silty clay | 25 | 20 | 5 | 72.6 | 52.5 | CL-ML |
| ■ | Brown clayey sand | 25 | 17 | 8 | 71.8 | 48.0 | SC |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Project No. IRN 25-N-653 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-158, TRT

■Depth: 2'-5' Sample Number: PV-160, TRT

Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/18/2025

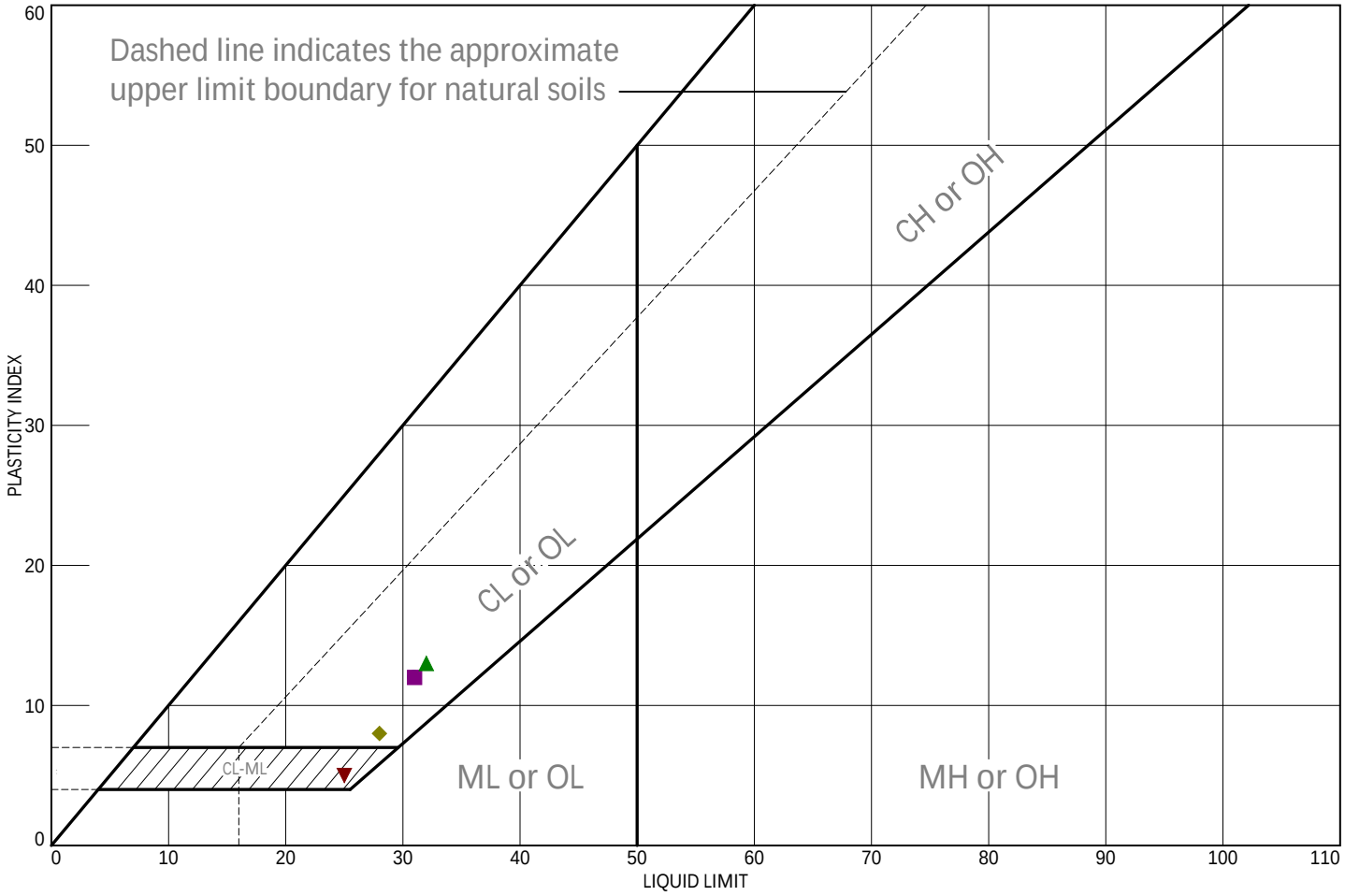
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown gravelly lean clay with sand | 31 | 19 | 12 | 68.2 | 57.5 | CL |
| ■ | Brown sandy lean clay | 31 | 19 | 12 | 87.3 | 68.8 | CL |
| ▲ | Brown lean clay with sand | 32 | 19 | 13 | 98.5 | 82.2 | CL |
| ◆ | Brown lean clay with sand | 28 | 20 | 8 | 95.8 | 75.1 | CL |
| ▼ | Pale Brown silty clay with sand | 25 | 20 | 5 | 92.5 | 74.9 | CL-ML |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 1'-2' Sample Number: PV-151, CBR/TRT
■Depth: 2'-5' Sample Number: PV-154, TRT
▲Depth: 2'-5' Sample Number: PV-164, CBR/TRT
◆Depth: 2'-5' Sample Number: PV-169, TRT
▼Depth: 2'-5' Sample Number: PV-172, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

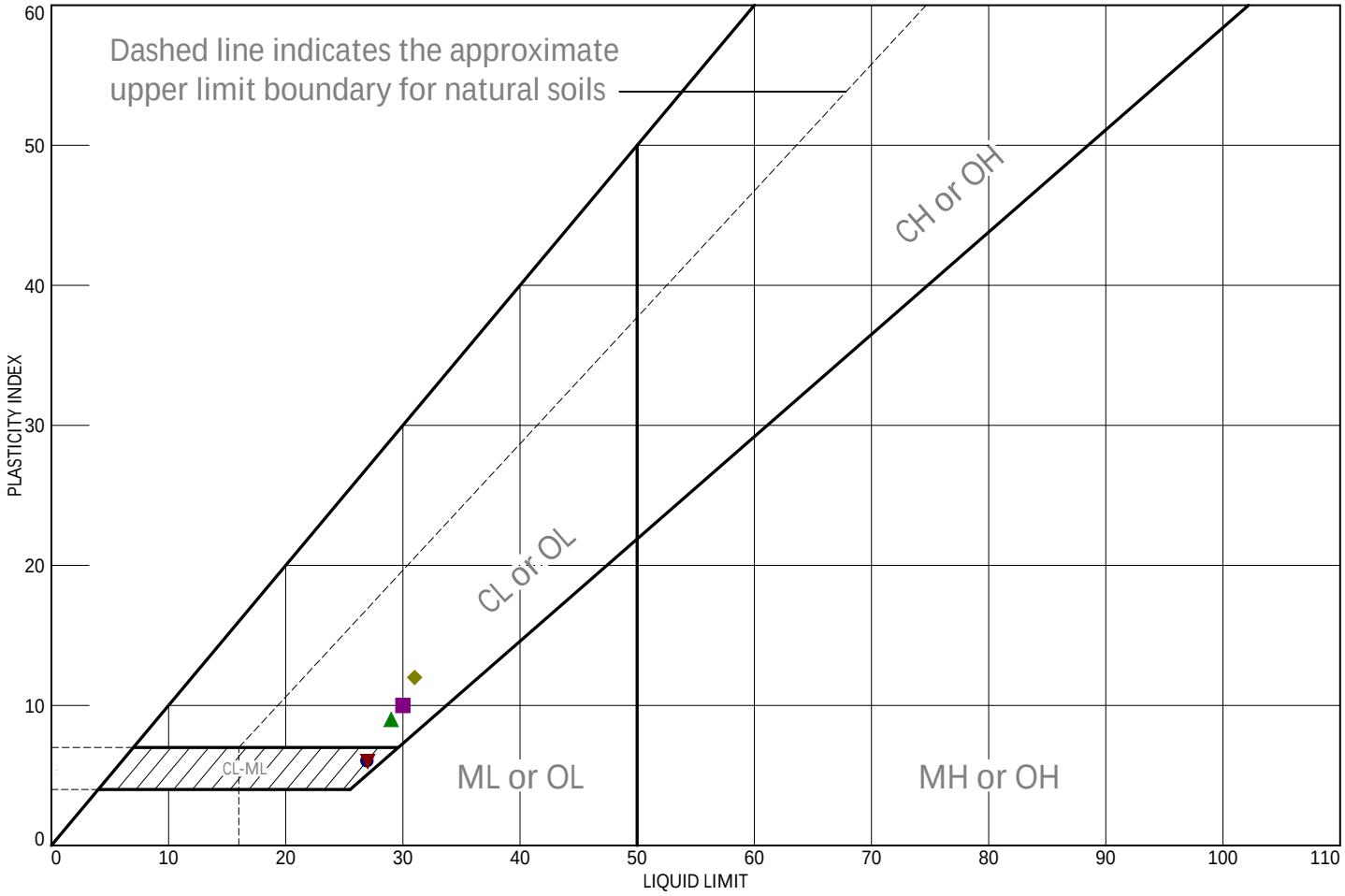
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/6/2025

Figure

Tested By: CC Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Pale Brown silty, clayey sand with gravel | 27 | 21 | 6 | 66.7 | 46.2 | SC-SM |
| ■ | Brown sandy lean clay | 30 | 20 | 10 | 85.6 | 69.1 | CL |
| ▲ | Brown lean clay with sand | 29 | 20 | 9 | 95.1 | 79.0 | CL |
| ◆ | Brown lean clay | 31 | 19 | 12 | 98.7 | 88.1 | CL |
| ▼ | Pale Brown sandy silty clay | 27 | 21 | 6 | 84.0 | 60.4 | CL-ML |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-178, CBR/TRT
■Depth: 2'-5' Sample Number: PV-179, TRT
▲Depth: 2'-5' Sample Number: PV-181, TRT
◆Depth: 2'-5' Sample Number: PV-183, CBR/TRT
▼Depth: 2'-5' Sample Number: PV-188, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

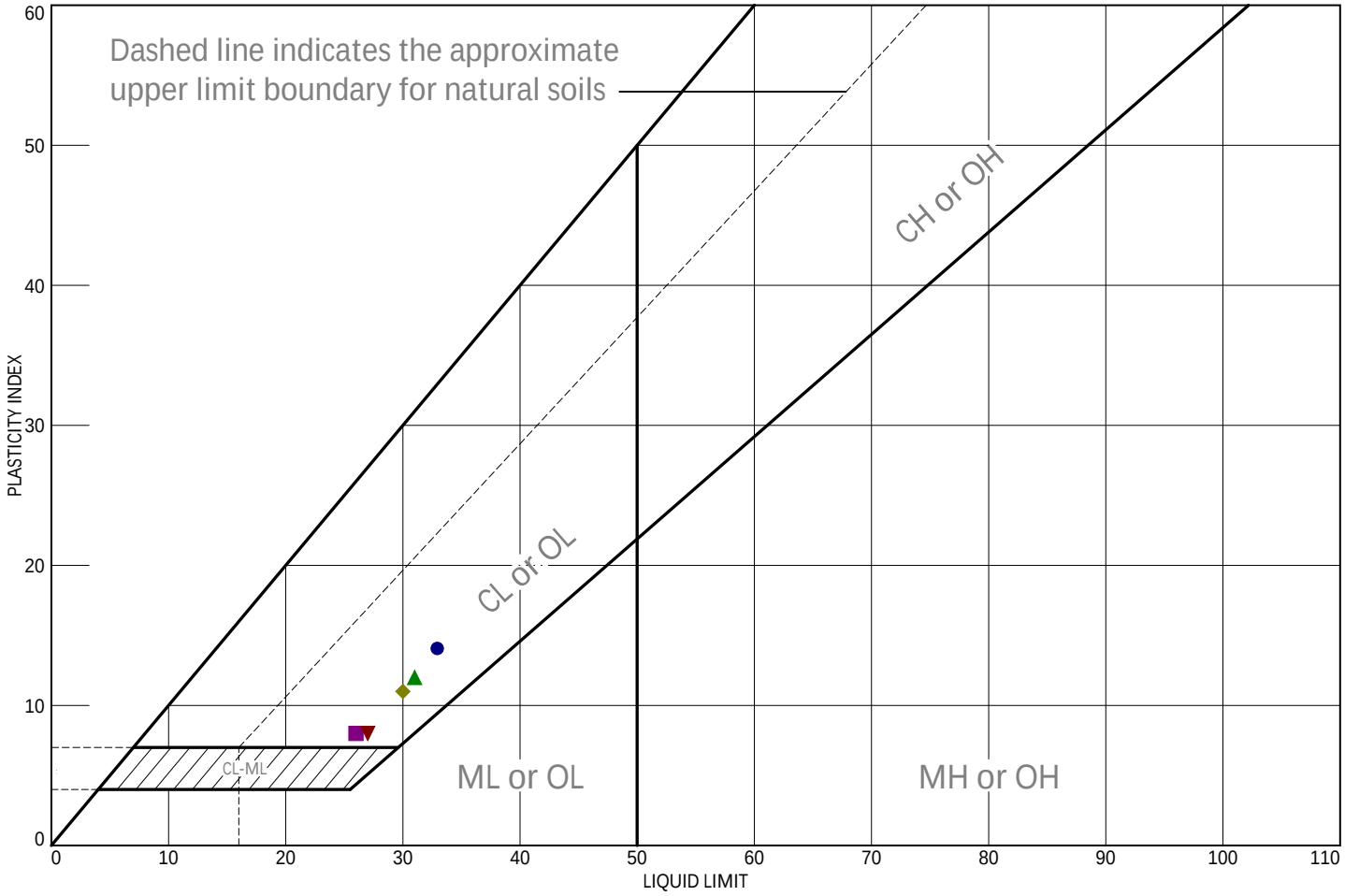
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/6/2025

Figure

Tested By: CC Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown lean clay with sand | 33 | 19 | 14 | 91.8 | 77.6 | CL |
| ■ | Brown lean clay with sand | 26 | 18 | 8 | 95.3 | 78.9 | CL |
| ▲ | Brown sandy lean clay | 31 | 19 | 12 | 95.2 | 69.7 | CL |
| ◆ | Brown sandy lean clay | 30 | 19 | 11 | 88.3 | 68.5 | CL |
| ▼ | Brown clayey sand with gravel | 27 | 19 | 8 | 68.9 | 49.5 | SC |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-189, TRT

■Depth: 2'-5' Sample Number: PV-193, TRT

▲Depth: 2'-5' Sample Number: PV-195, CBR/TRT

◆Depth: 2'-5' Sample Number: PV-198, TRT

▼Depth: 2'-5' Sample Number: PV-204, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

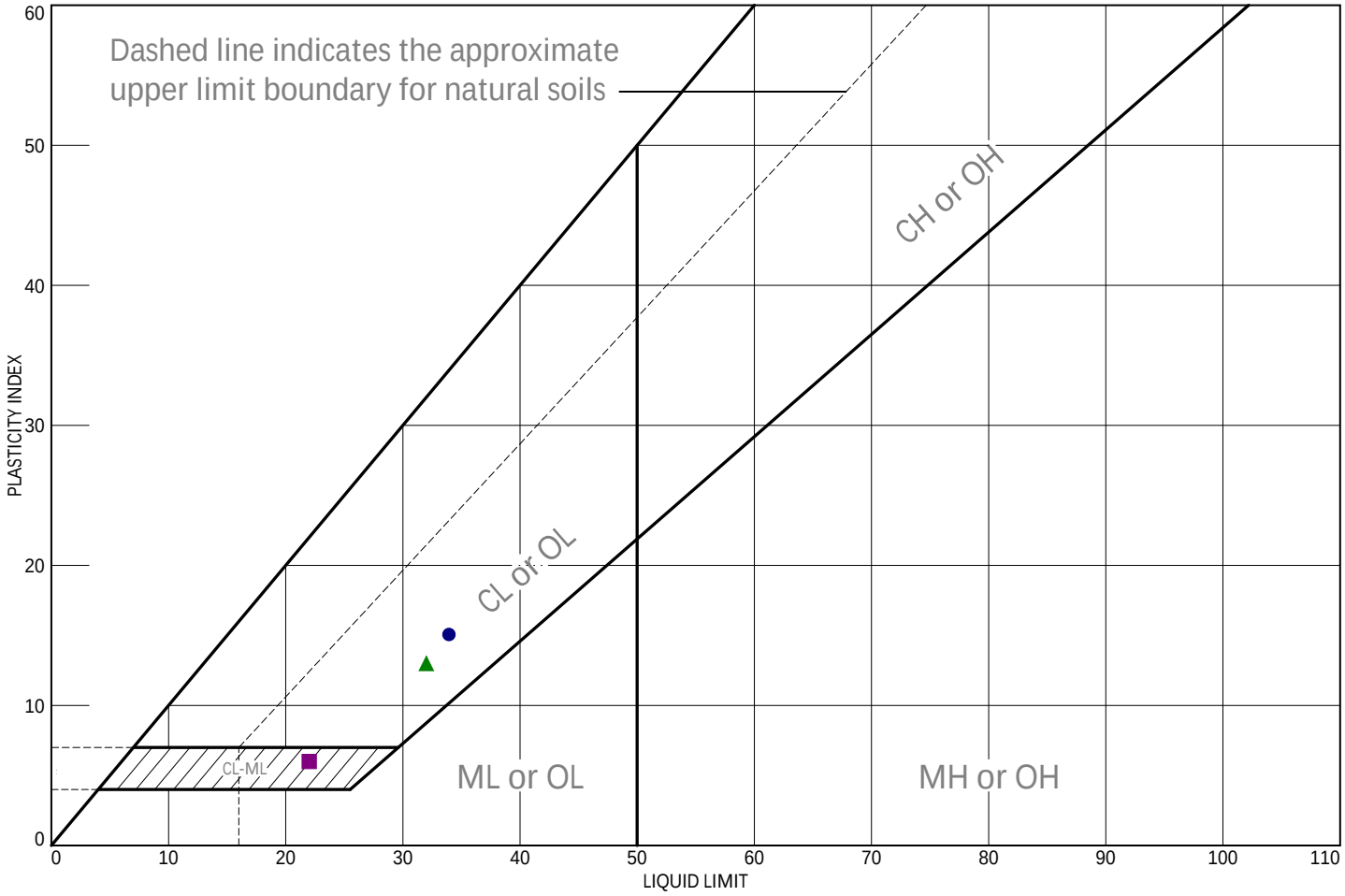
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/6/2025

Figure

Tested By: FM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Dark Brown lean clay with sand | 34 | 19 | 15 | 90.1 | 77.0 | CL |
| ■ | Brown silty, clayey sand | 22 | 16 | 6 | 81.6 | 46.4 | SC-SM |
| ▲ | Dark Brown gravelly lean clay | 32 | 19 | 13 | 63.5 | 56.1 | CL |
| | | | | | | | |
| | | | | | | | |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 2'-5' Sample Number: PV-207, CBR/TRT

■Depth: 2'-5' Sample Number: PV-210, TRT

▲Depth: 1'-2' Sample Number: PV-212, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

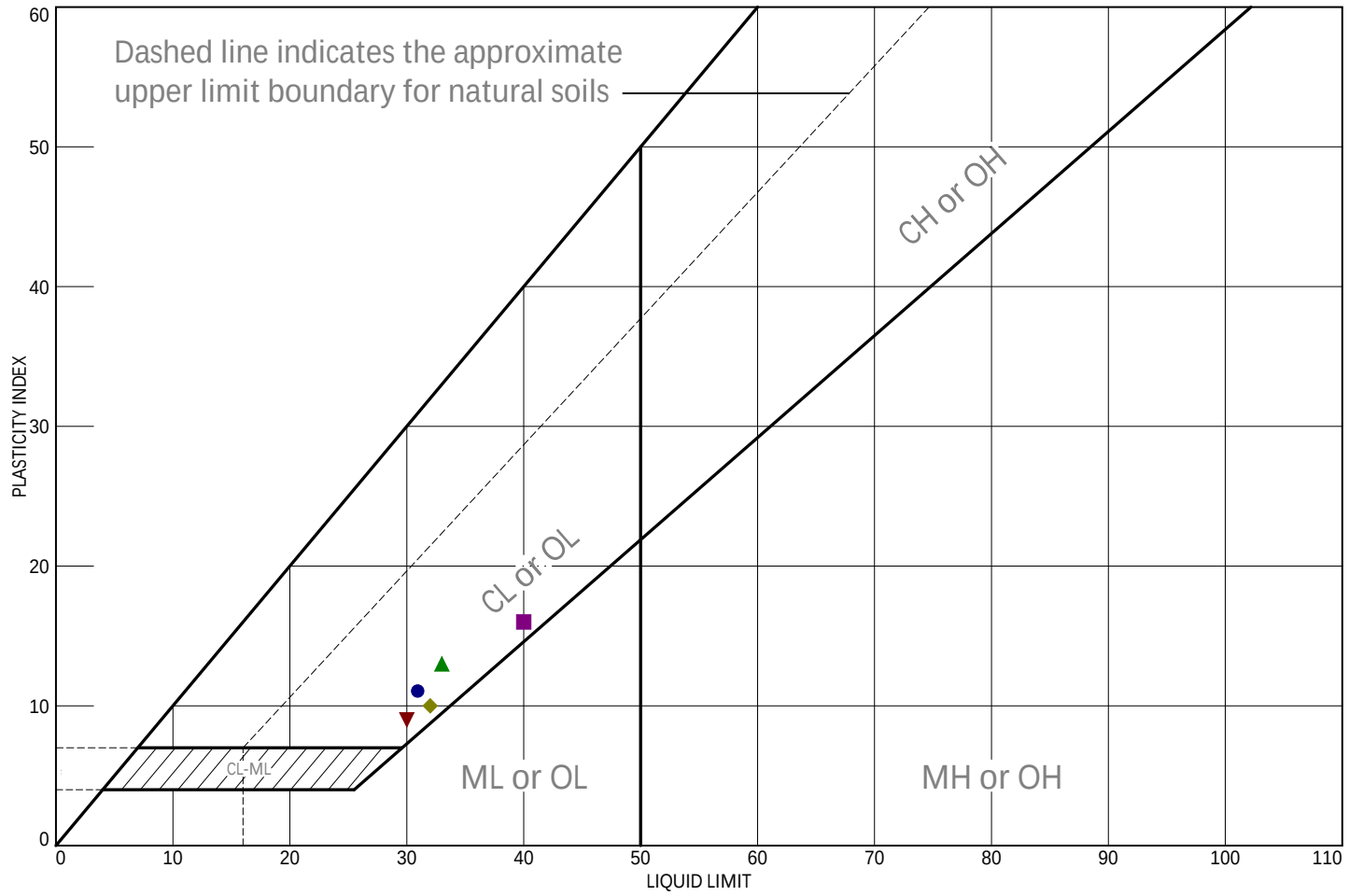
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/6/2025

Figure

Tested By: FM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown clayey sand with gravel | 31 | 20 | 11 | 37.5 | 28.7 | SC |
| ■ | Brown clayey sand with gravel | 40 | 24 | 16 | 40.5 | 30.1 | SC |
| ▲ | Brown lean clay with sand | 33 | 20 | 13 | 92.1 | 80.8 | CL |
| ◆ | Brown lean clay with sand | 32 | 22 | 10 | 89.0 | 79.4 | CL |
| ▼ | Brown lean clay with sand | 30 | 21 | 9 | 91.9 | 81.0 | CL |

Project No. IRN 25-N-599 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 1'-2' Sample Number: PV-214, TRT
■Depth: 1'-3' Sample Number: PV-217, TRT
▲Depth: 1'-2' Sample Number: PV-223, TRT
◆Depth: 1'-2' Sample Number: PV-226, TRT
▼Depth: 1'-2' Sample Number: PV-230, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

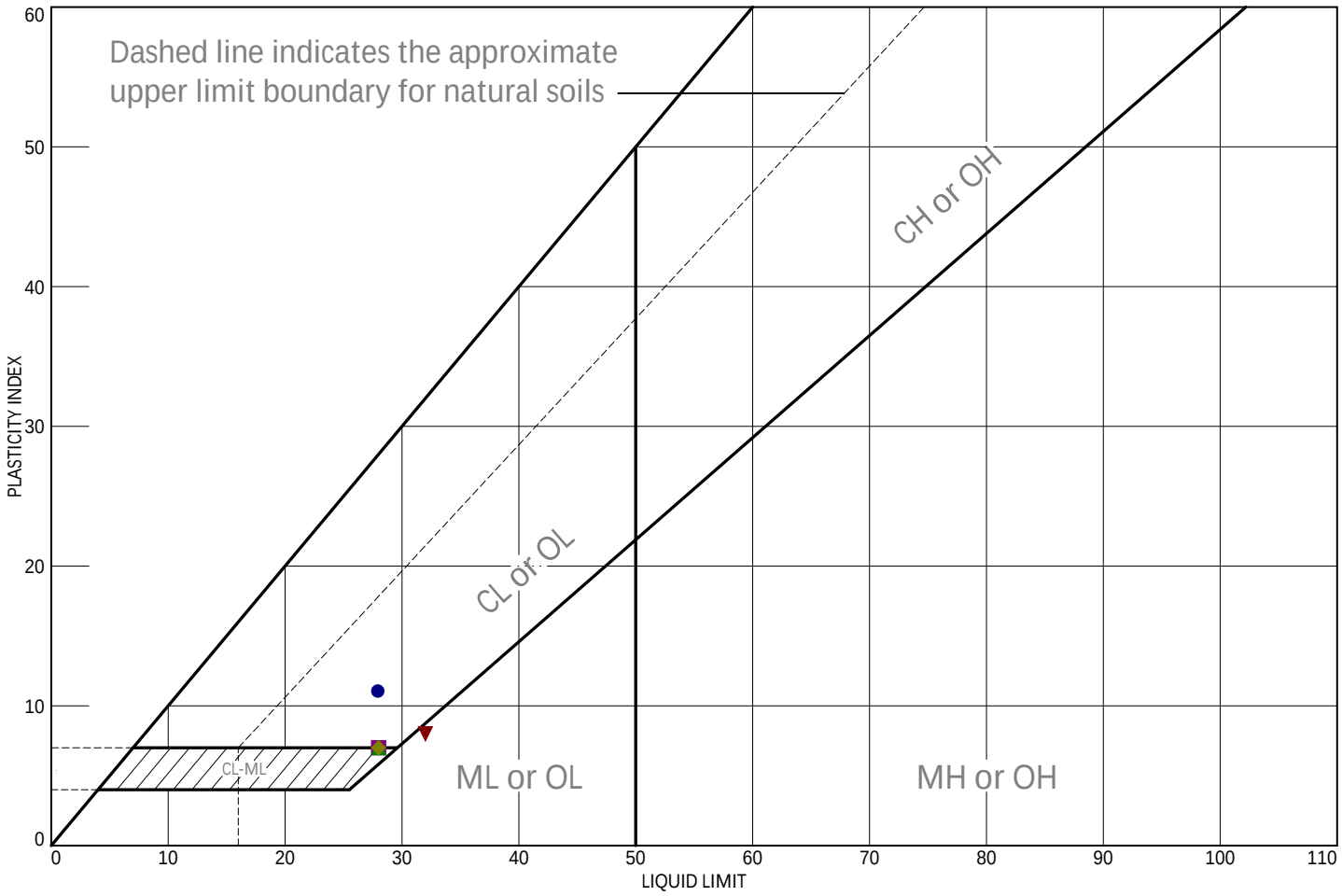
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
11/6/2025

Figure

Tested By: MM Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Dark Brown sandy lean clay | 28 | 17 | 11 | 74.6 | 58.2 | CL |
| ■ | Brown silty clay with sand | 28 | 21 | 7 | 95.5 | 77.9 | CL-ML |
| ▲ | Brown sandy silty clay | 28 | 21 | 7 | 82.0 | 53.4 | CL-ML |
| ◆ | Grayish Brown silty, clayey sand | 28 | 21 | 7 | 73.1 | 48.1 | SC-SM |
| ▼ | Grayish Brown silty sand | 32 | 24 | 8 | 34.5 | 21.8 | SM |

Project No. IRN 25-N-742 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 0'-6' Sample Number: PV-004, S-1 - S-3
■Depth: 0'-8' Sample Number: PV-005, S-1 - S-4
▲Depth: 8'-15' Sample Number: PV-005, S-5 - S-6
◆Depth: 0'-6' Sample Number: PV-017, S-1 - S-3
▼Depth: 6'-13.9' Sample Number: PV-017, S-4 - S-6

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

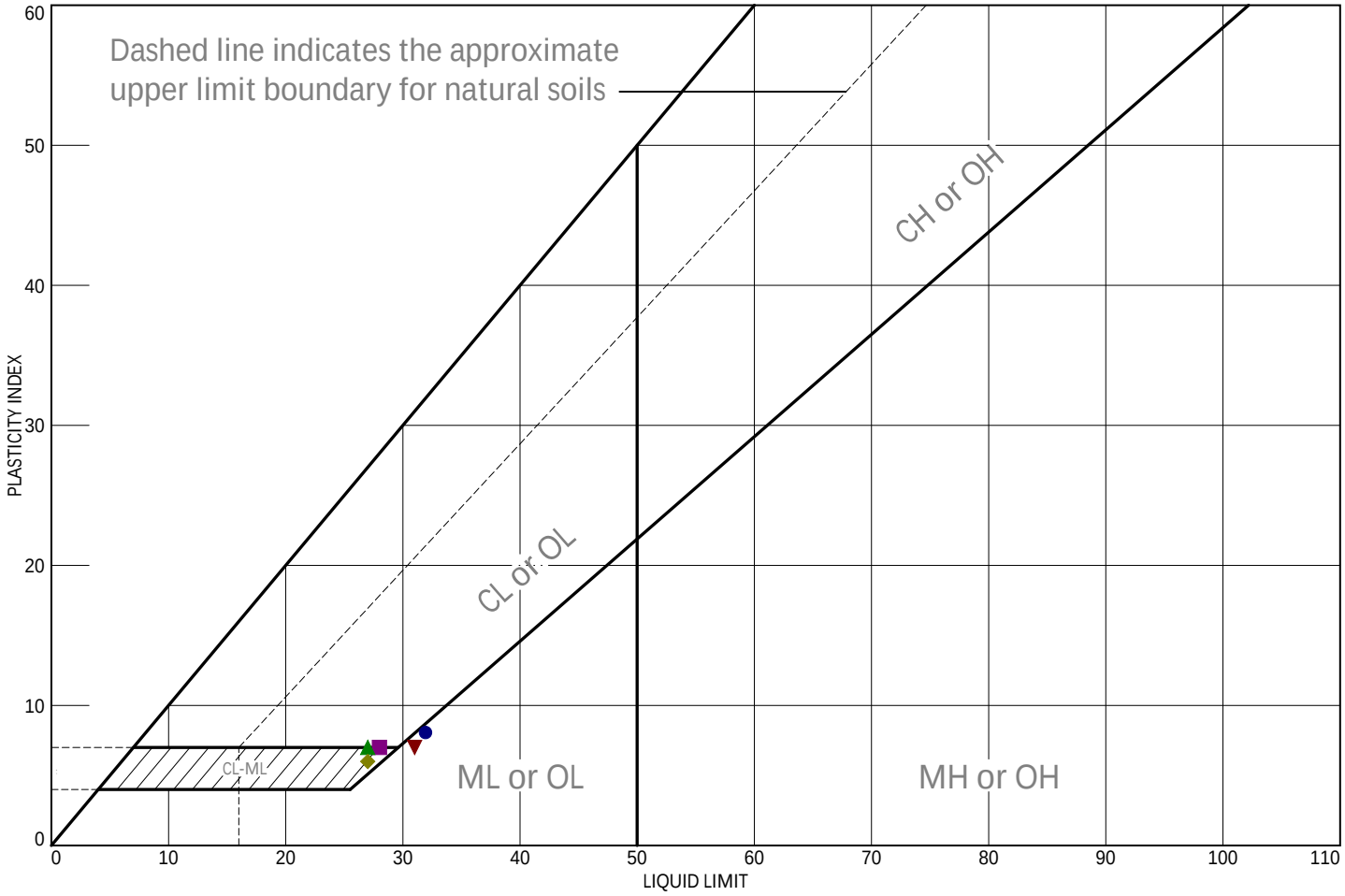
Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
12/17/2025

Figure

Tested By: GE Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown silty sand | 32 | 24 | 8 | 48.8 | 31.0 | SM |
| ■ | Brown silty, clayey sand with gravel | 28 | 21 | 7 | 61.6 | 47.3 | SC-SM |
| ▲ | Brown silty, clayey sand with gravel | 27 | 20 | 7 | 65.1 | 36.8 | SC-SM |
| ◆ | Brown sandy silty clay | 27 | 21 | 6 | 74.8 | 52.1 | CL-ML |
| ▼ | Brown sandy silt | 31 | 24 | 7 | 88.1 | 62.8 | ML |

Project No. IRN 25-N-742 Client: Tetra Tech

Project: Speedway, Sherman County, OR

● Depth: 4'-8.4' Sample Number: PV-019, S-3 - S-5

■ Depth: 2'-7.3' Sample Number: PV-020, S-2 - S-4

▲ Depth: 4'-8' Sample Number: PV-028, S-3 - S-4

◆ Depth: 0'-6' Sample Number: PV-030, S-1 - S-3

▼ Depth: 0'-6' Sample Number: PV-031, S-1 - S-3

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

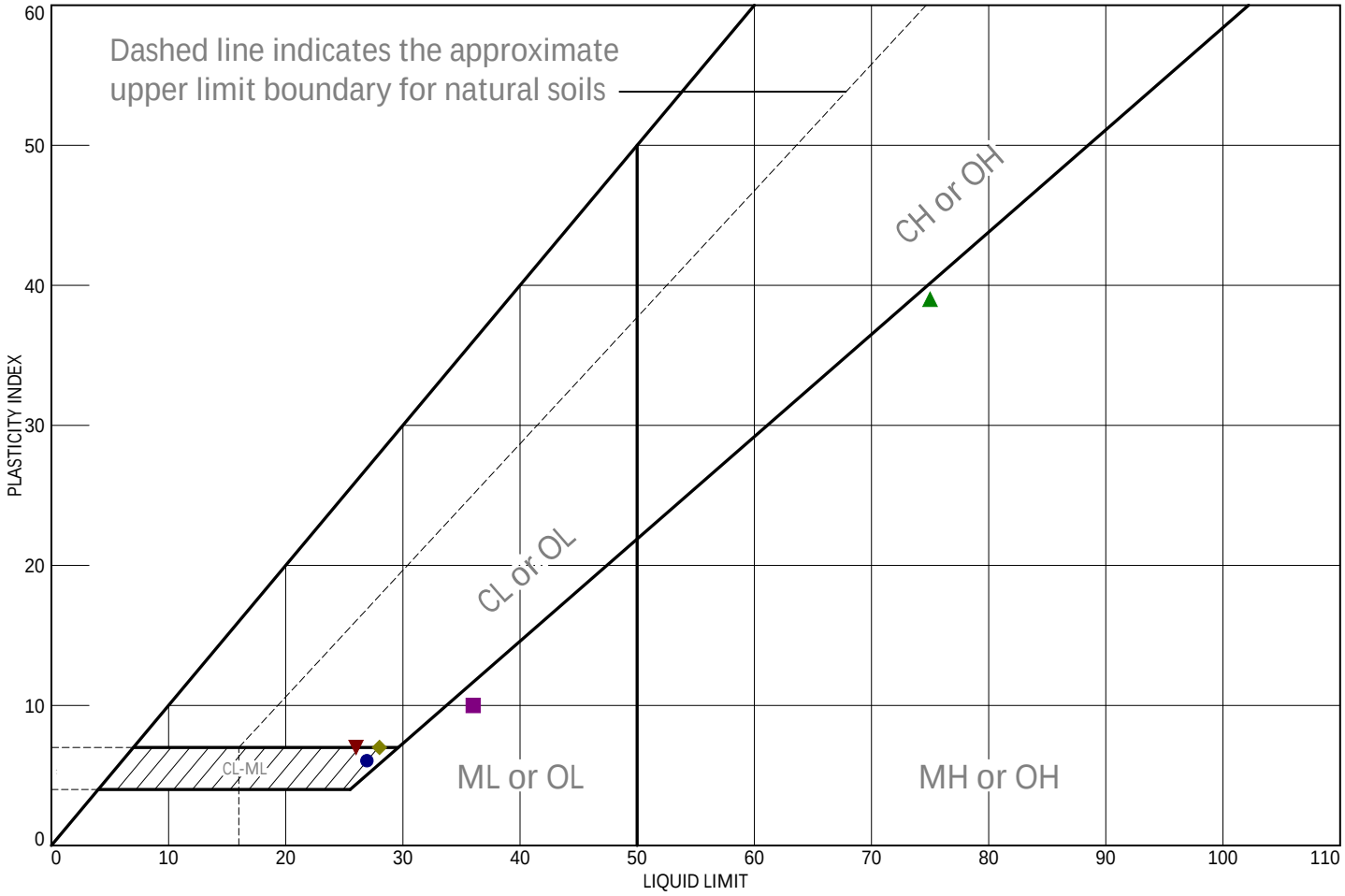
Remarks:

● ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
12/17/2025

Figure

Tested By: CB Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Brown silty, clayey sand | 27 | 21 | 6 | 61.5 | 35.6 | SC-SM |
| ■ | Grayish Brown sandy silt | 36 | 26 | 10 | 89.2 | 59.7 | ML |
| ▲ | Yellowish Brown silty sand | 75 | 36 | 39 | 77.4 | 49.0 | SM |
| ◆ | Dark Brown sandy silty clay | 28 | 21 | 7 | 88.1 | 60.4 | CL-ML |
| ▼ | Dark Brown silty, clayey sand | 26 | 19 | 7 | 74.9 | 46.9 | SC-SM |

Project No. IRN 25-N-742 Client: Tetra Tech

Project: Speedway, Sherman County, OR

- ● Depth: 8'-18.8' Sample Number: PV-045, S-5 - S-7
- ■ Depth: 4'-8.5' Sample Number: PV-077, S-2 - S-5
- ▲ Depth: 4'-9.3' Sample Number: PV-084, S-3 - S-5
- ◆ Depth: 0'-6' Sample Number: PV-093, S-1 - S-3
- ▼ Depth: 0'-6' Sample Number: PV-098, S-1 - S-3

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

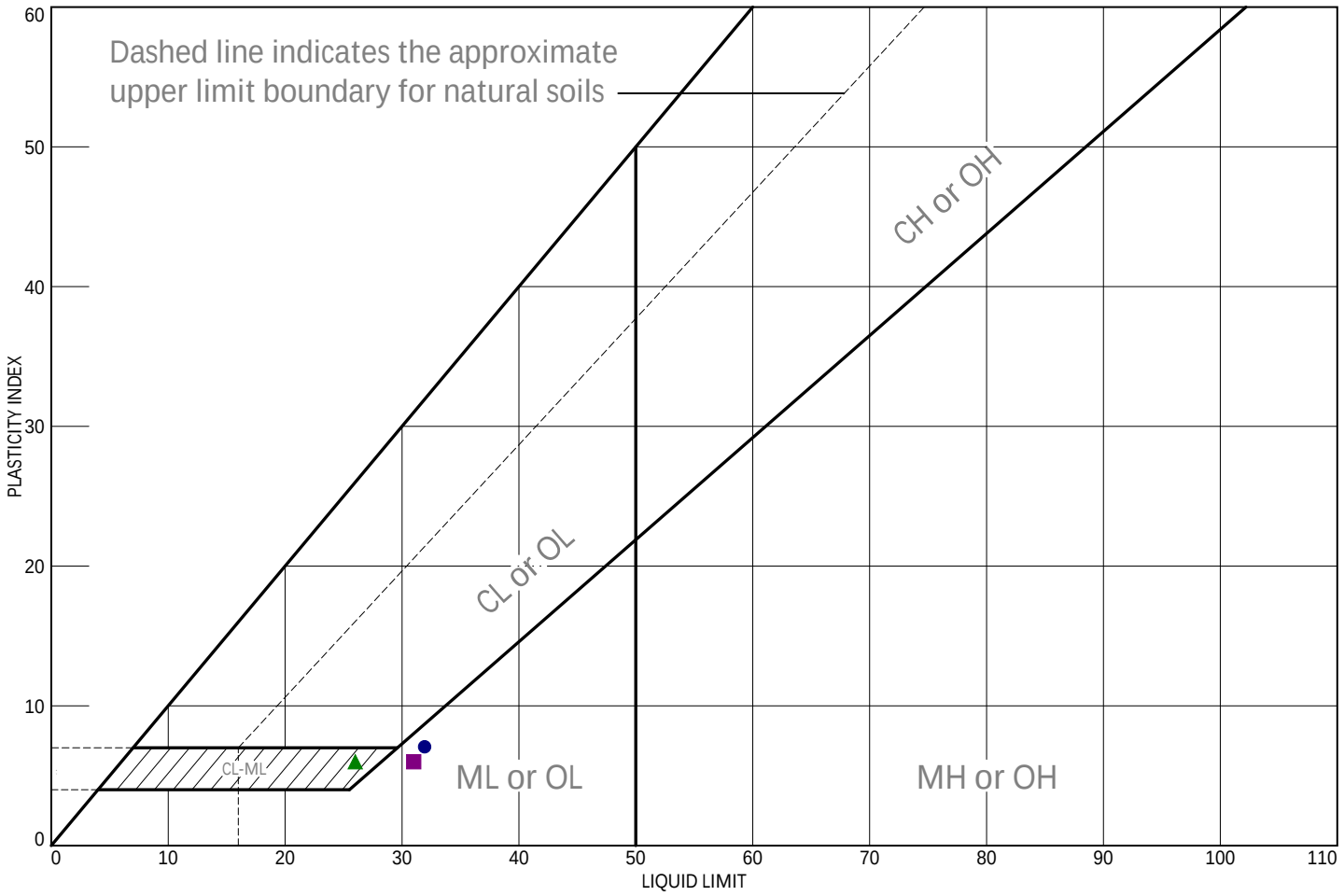
Remarks:

● ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
12/17/2025

Figure

Tested By: GE Checked By: ANS

# LIQUID AND PLASTIC LIMITS TEST REPORT (ASTM D4318)




| | MATERIAL DESCRIPTION | LL | PL | PI | %<#40 | %<#200 | USCS |
|---|---|---|---|---|---|---|---|
| ● | Dark Brown sandy silt | 32 | 25 | 7 | 93.2 | 68.1 | ML |
| ■ | Olive Brown silty sand | 31 | 25 | 6 | 77.2 | 47.1 | SM |
| ▲ | Grayish Brown sandy silty clay | 26 | 20 | 6 | 93.0 | 64.7 | CL-ML |
| | | | | | | | |
| | | | | | | | |

Project No. IRN 25-N-742 Client: Tetra Tech

Project: Speedway, Sherman County, OR

●Depth: 0'-6' Sample Number: PV-101, S-1 - S-3

■Depth: 4'-7.1' Sample Number: PV-111, S-3 - S-4

▲Depth: 0'-4' Sample Number: PV-140, S-1 - S-2

Remarks:

●ASTM D4318 - Sample Air-Dried, LL Device: Manual, PL Rolling Method: Hand-Rolled, Grooving Tool: Metal
12/17/2025

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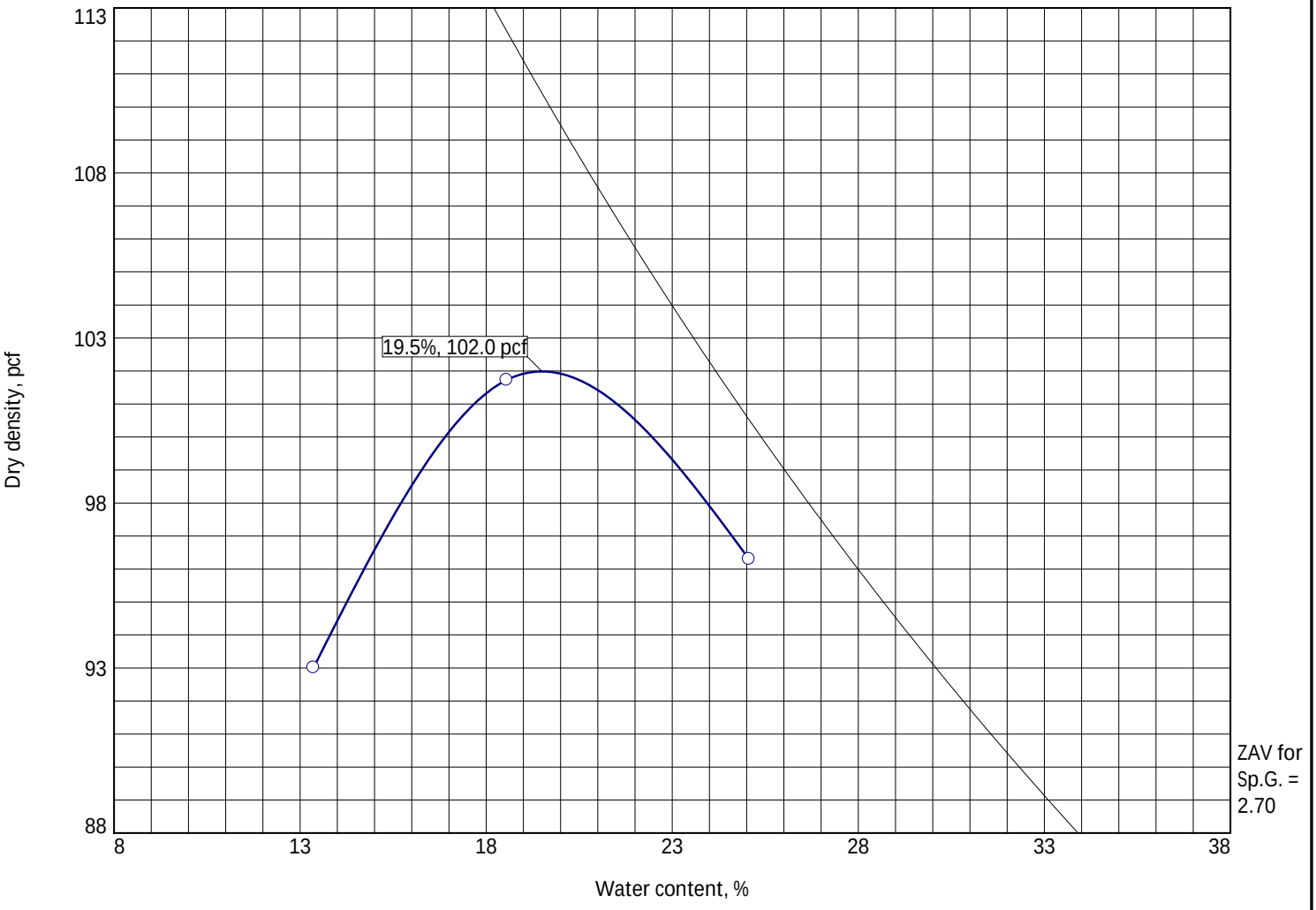
South Plainfield, New Jersey

Figure

Tested By: CB Checked By: ANS

# STANDARD PROCTOR COMPACTION

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 24 | 5 | 0.0 | 46.8 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 102.0 pcf<br>Optimum moisture = 19.5 % | Brown silty, clayey sand |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

Date: 10/21/2025

○ Sample Number: WTG-01, TRT/CBR

ANS CONSULTANTS, INC.

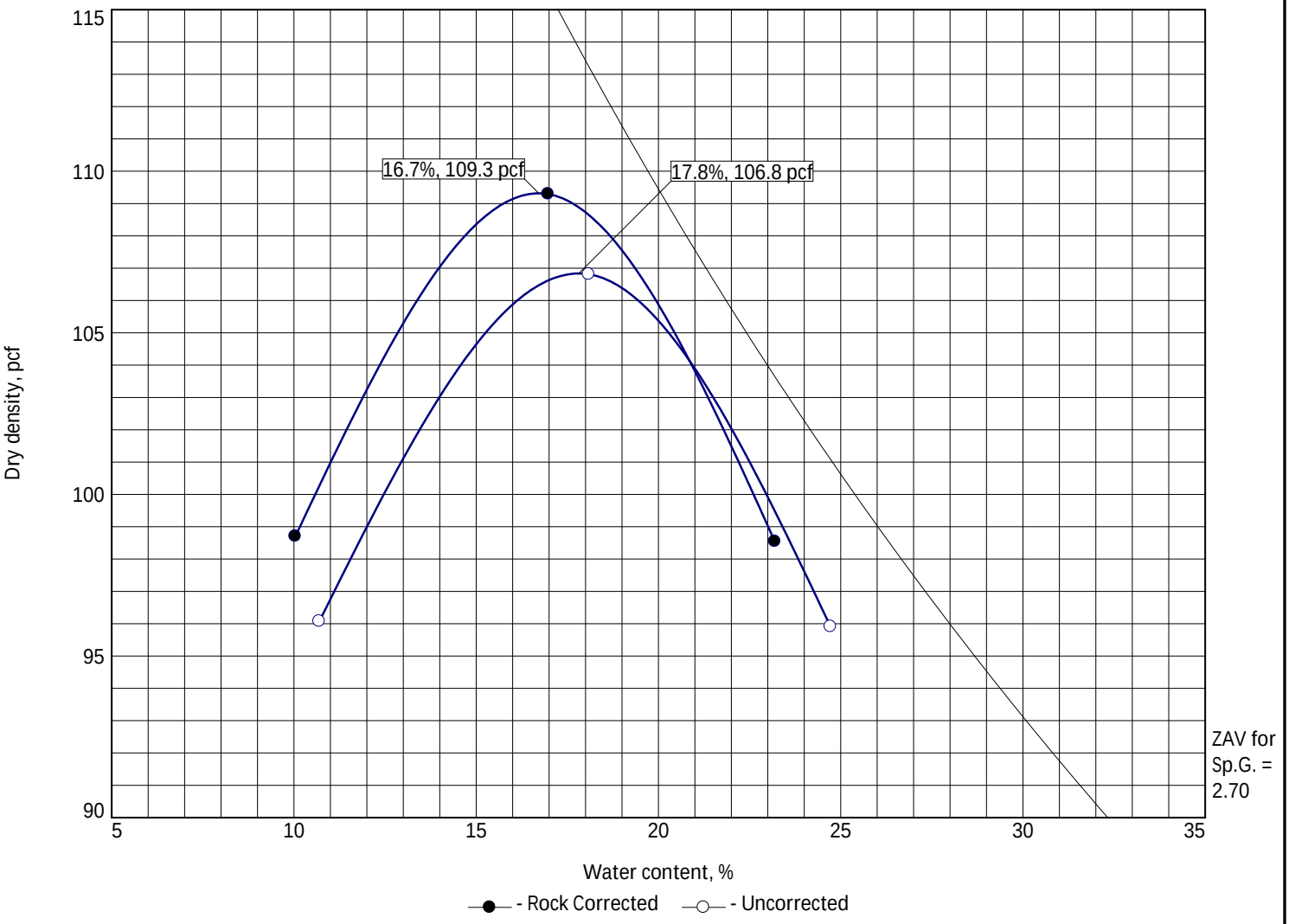
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 22 | 5 | 6.2 | 42.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 109.3 pcf | 106.8 pcf | Grayish Brown silty, clayey sand |
| Optimum moisture = 16.7 % | 17.8 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: WTG-02, TRT/CBR

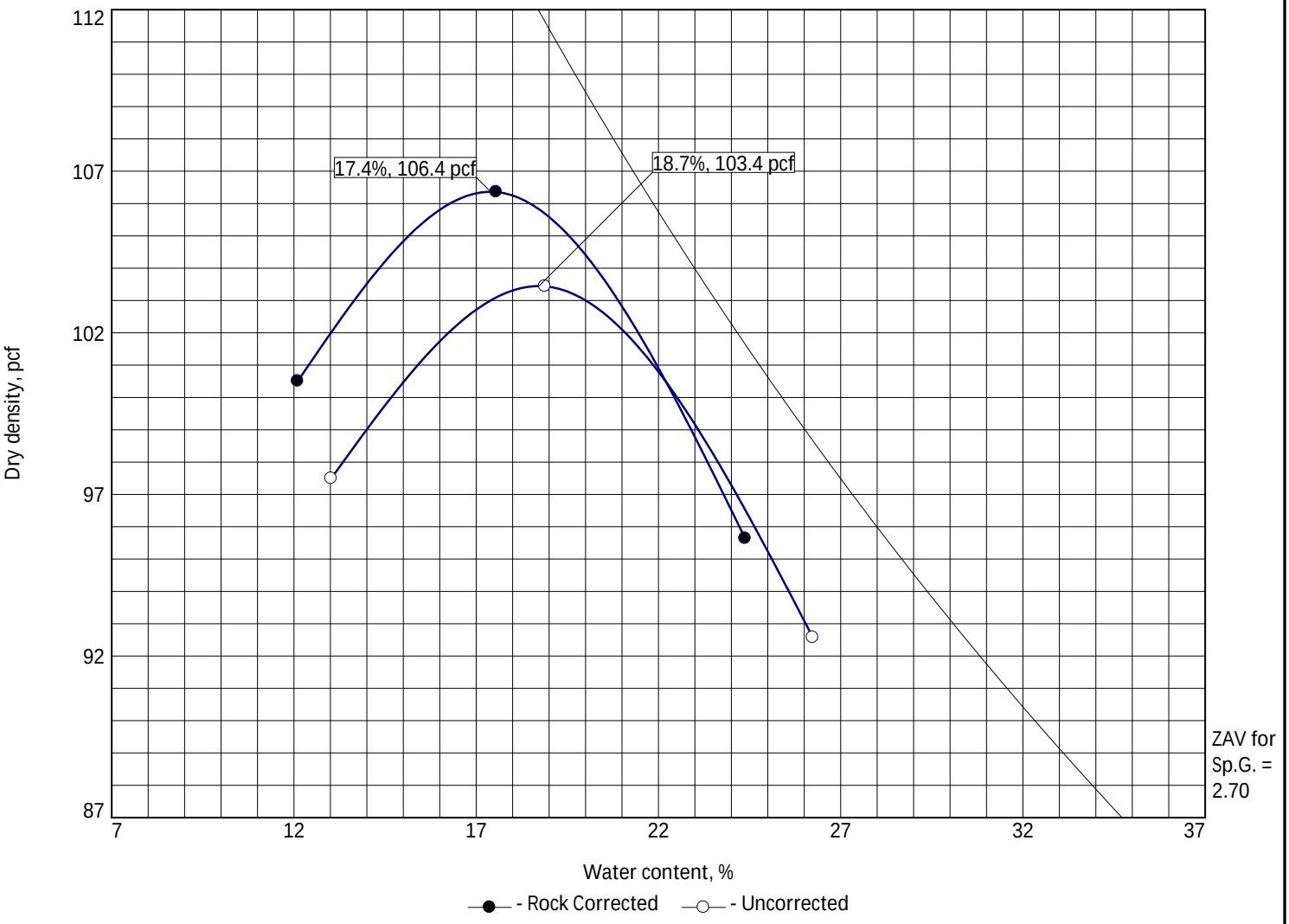
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 27 | 6 | 7.1 | 45.9 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 106.4 pcf | 103.4 pcf | Brown silty, clayey sand |
| Optimum moisture = 17.4 % | 18.7 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: WTG-03, TRT/CBR

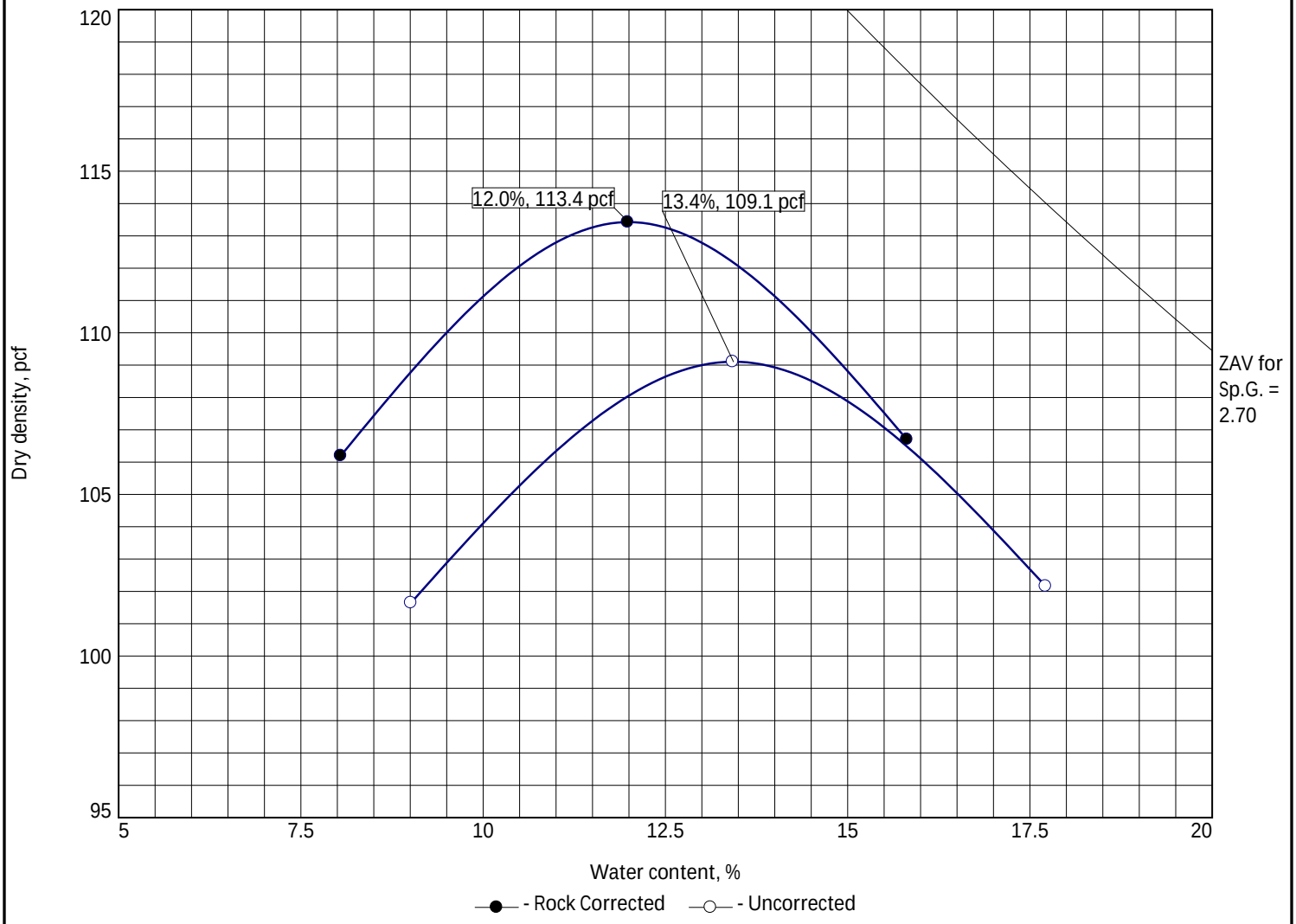
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(2) | | 2.7 | 28 | 9 | 10.8 | 51.2 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 113.4 pcf | 109.1 pcf | Brown sandy lean clay with gravel |
| Optimum moisture = 12.0 % | 13.4 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: WTG-04, TRT

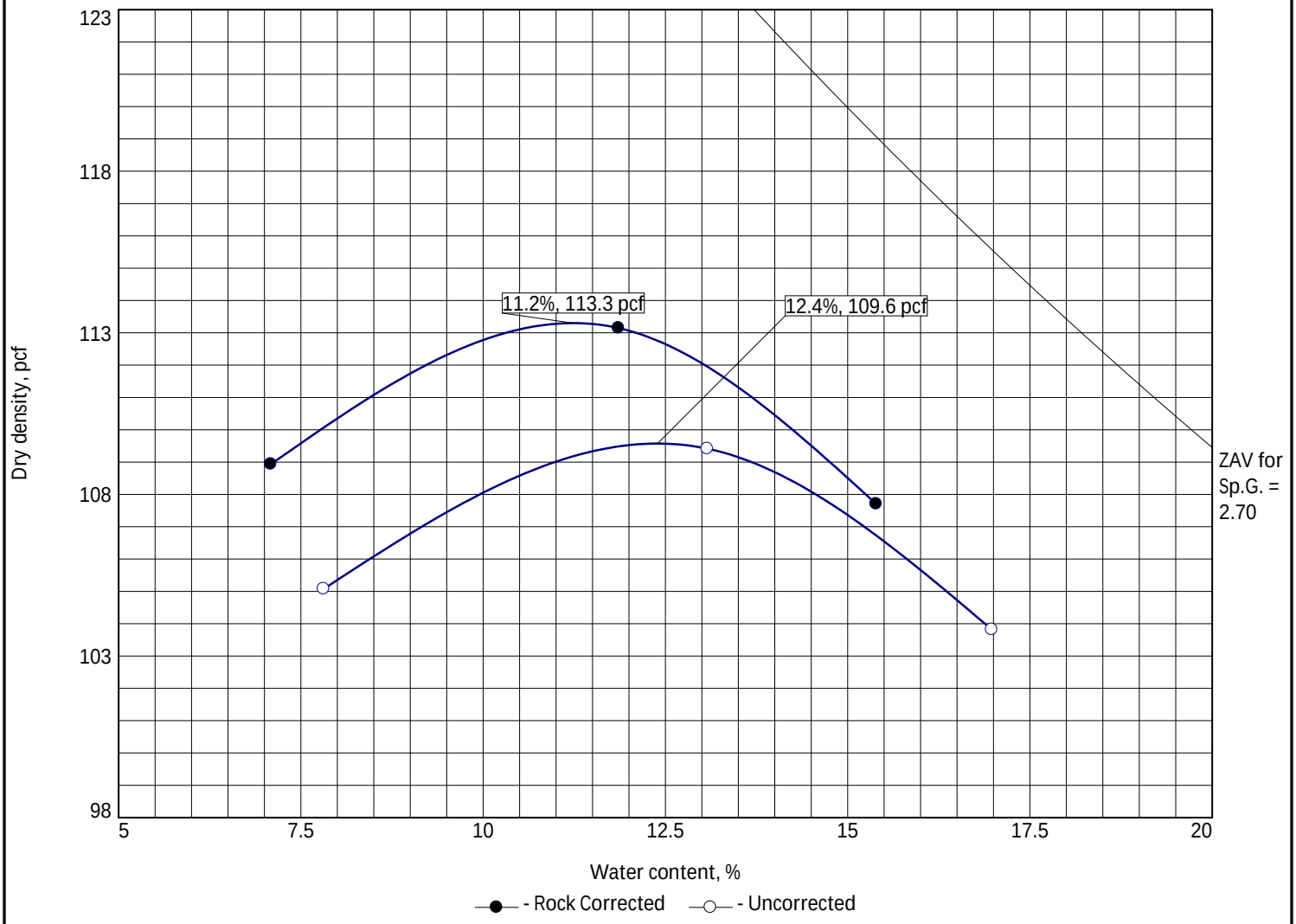
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: RS Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC | A-6(1) | | 2.7 | 32 | 11 | 9.4 | 42.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 113.3 pcf | 109.6 pcf | Brown clayey sand with gravel |
| Optimum moisture = 11.2 % | 12.4 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: WTG-05, TRT

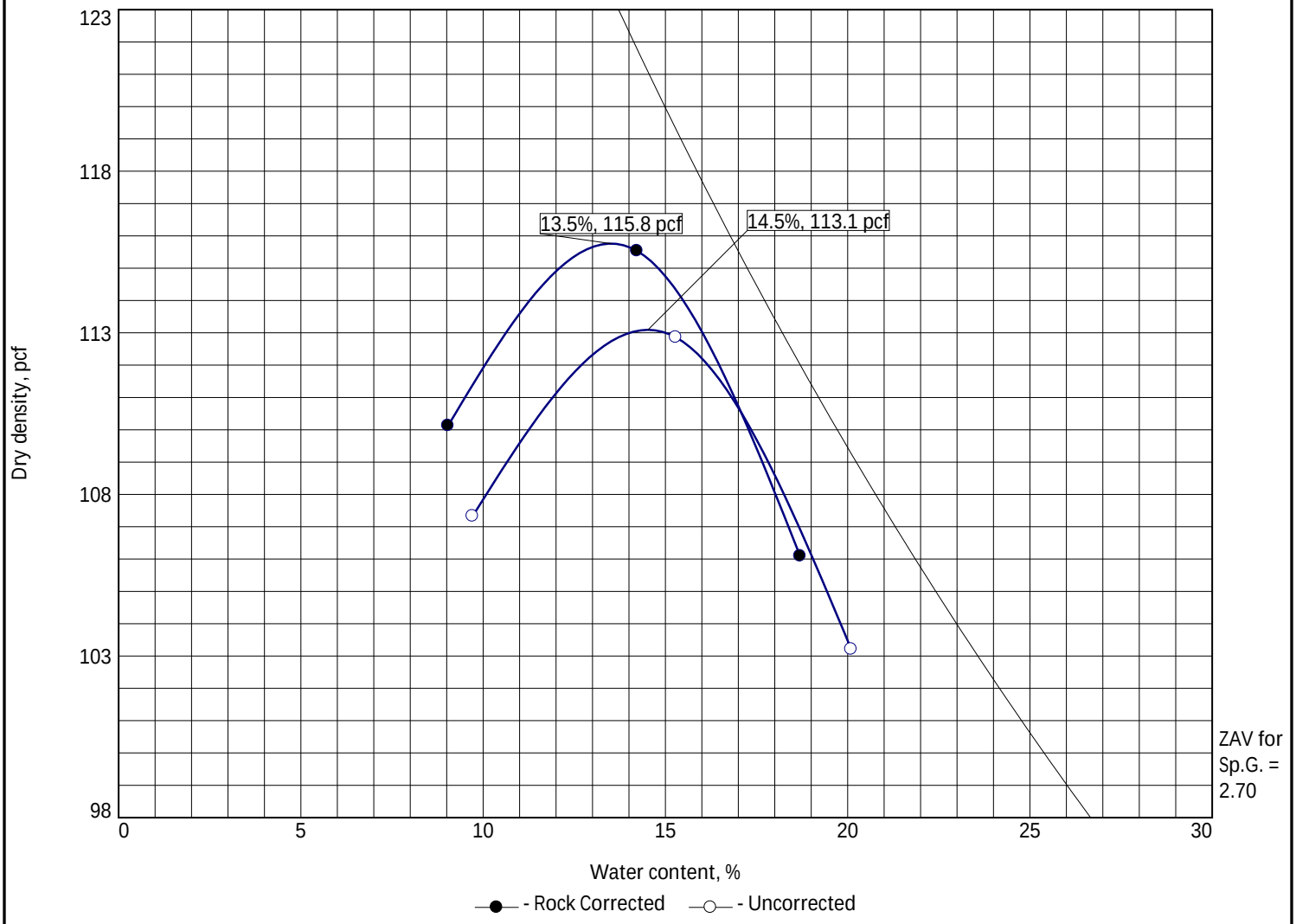
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(3) | | 2.7 | 33 | 10 | 7.0 | 54.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 115.8 pcf | 113.1 pcf | Brown sandy lean clay |
| Optimum moisture = 13.5 % | 14.5 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: WTG-06, TRT

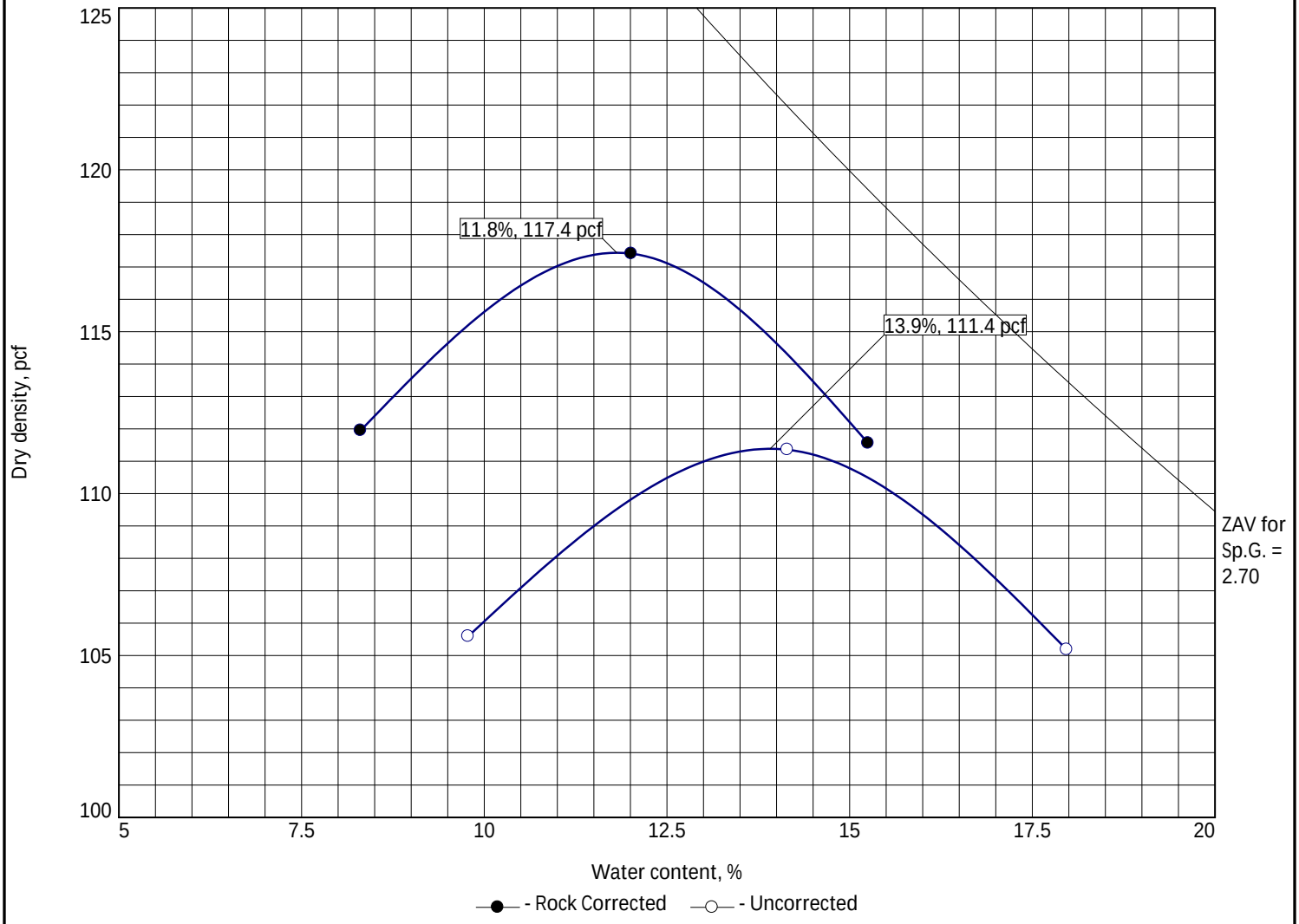
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(2) | | 2.7 | 28 | 9 | 15.2 | 55.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 117.4 pcf | 111.4 pcf | Brown sandy lean clay with gravel |
| Optimum moisture = 11.8 % | 13.9 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: WTG-07, TRT

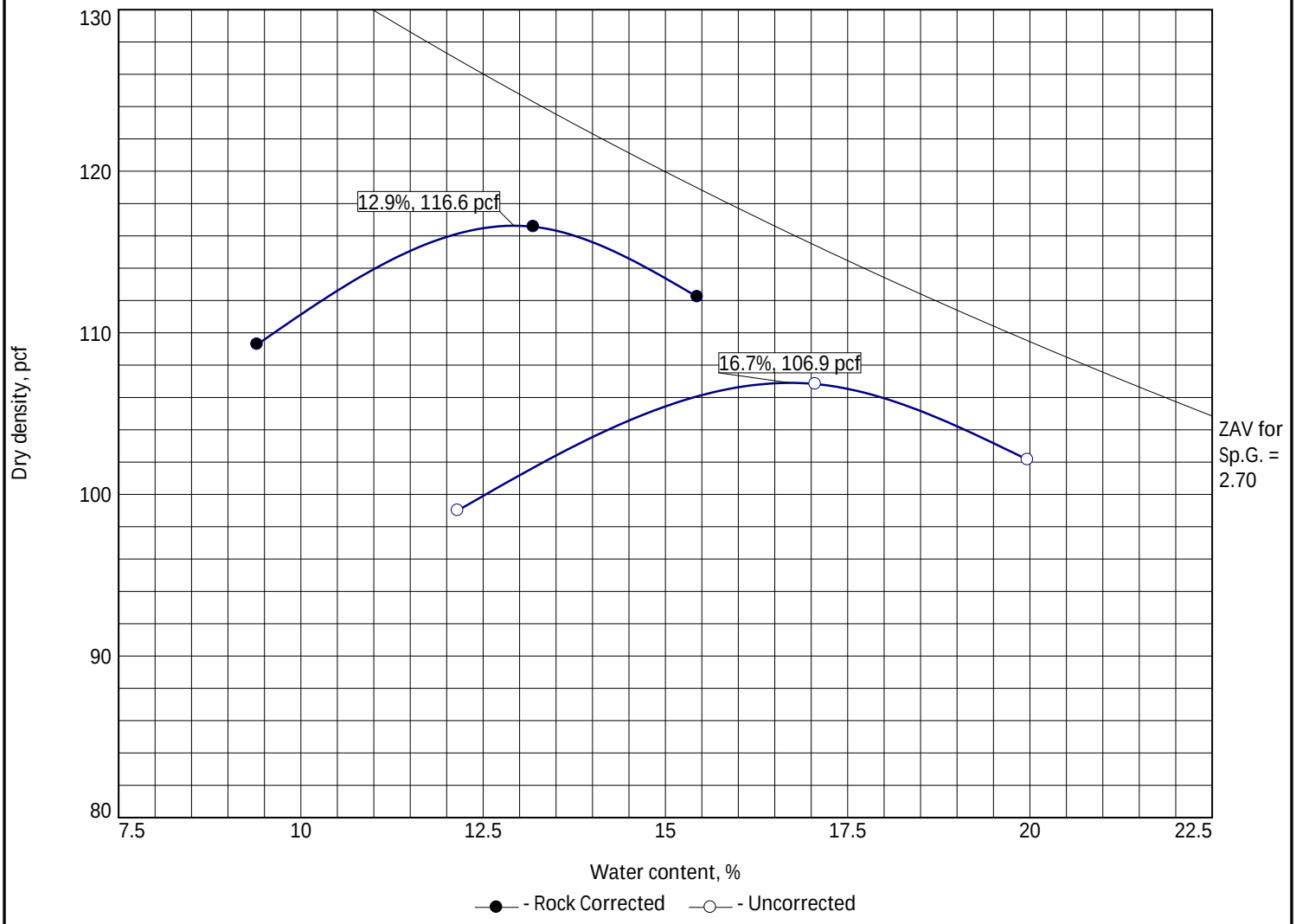
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | GC | A-6(3) | | 2.7 | 36 | 14 | 22.8 | 47.3 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 116.6 pcf | 106.9 pcf | Brown clayey gravel with sand |
| Optimum moisture = 12.9 % | 16.7 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: WTG-08, TRT

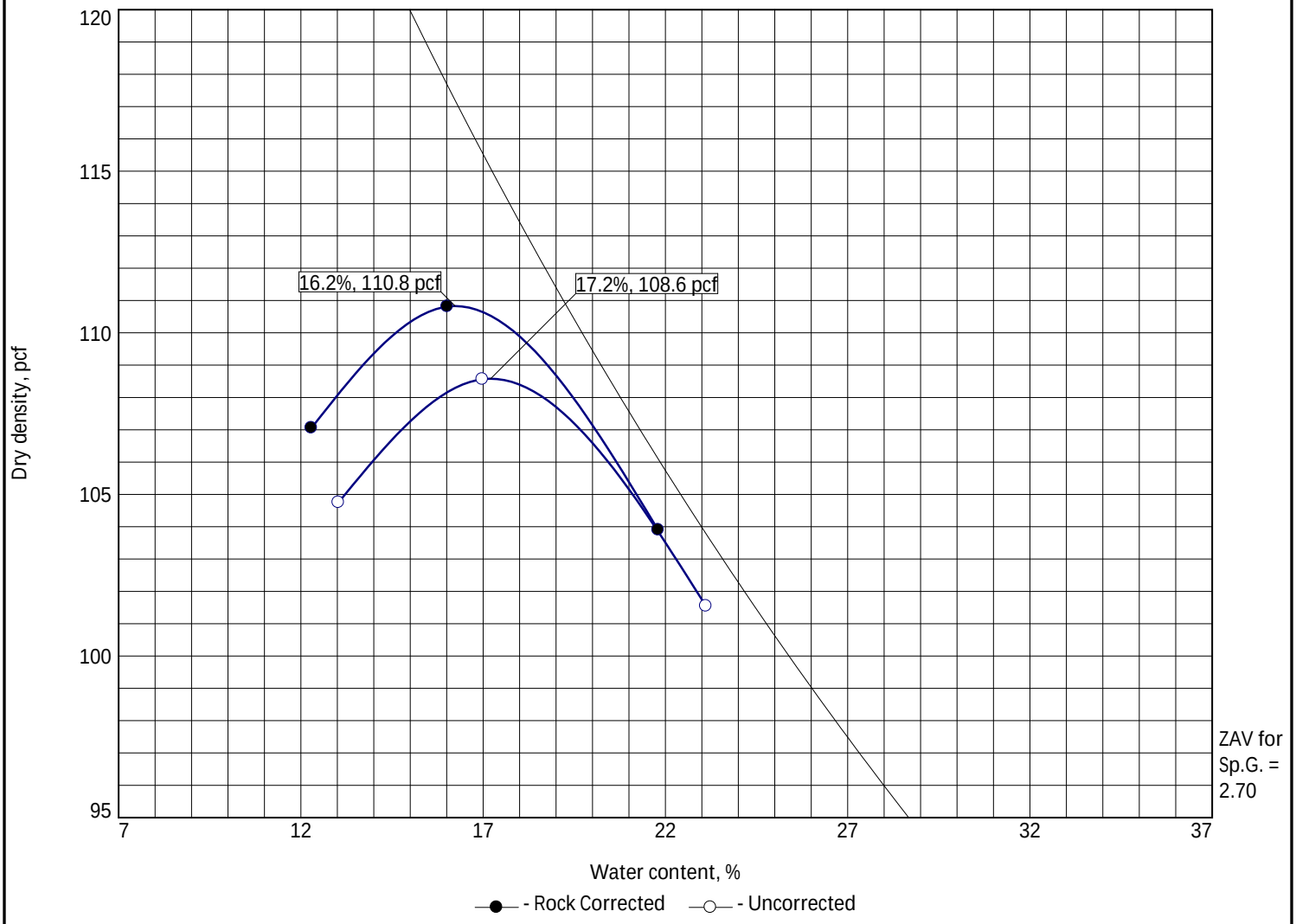
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: RS Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SM | A-4(0) | | 2.7 | NV | NP | 5.7 | 42.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.8 pcf | 108.6 pcf | Brown silty sand |
| Optimum moisture = 16.2 % | 17.2 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: SB-01, TRT

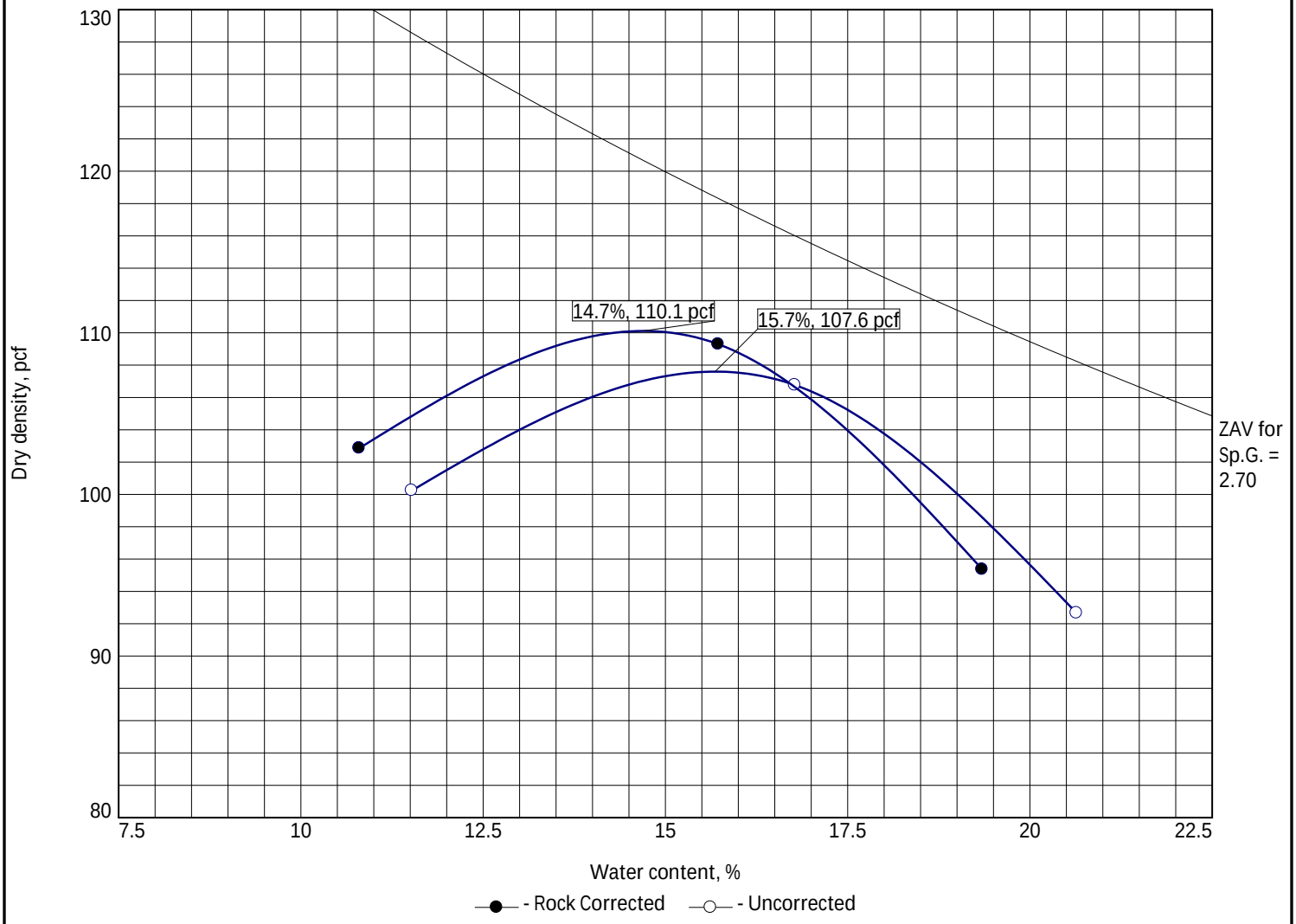
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(4) | | 2.7 | 32 | 10 | 6.3 | 60.3 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.1 pcf | 107.6 pcf | Brown sandy lean clay |
| Optimum moisture = 14.7 % | 15.7 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: SB-02, TRT

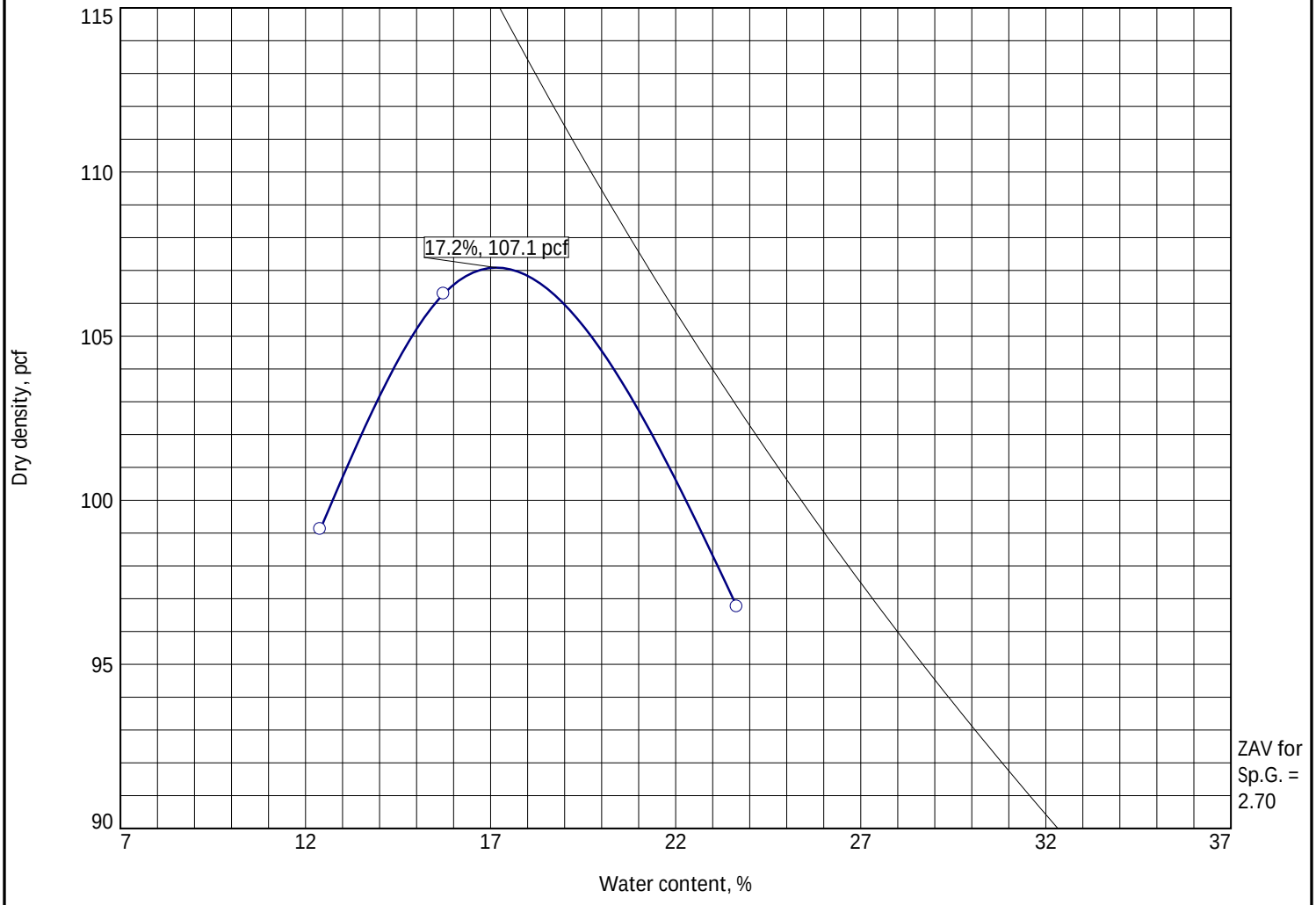
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(0) | | 2.7 | 21 | 5 | 0.0 | 60.4 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 107.1 pcf<br>Optimum moisture = 17.2 % | Dark Brown sandy silty clay |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

Date: 10/21/2025

○ Sample Number: PV-01, TRT

ANS CONSULTANTS, INC.

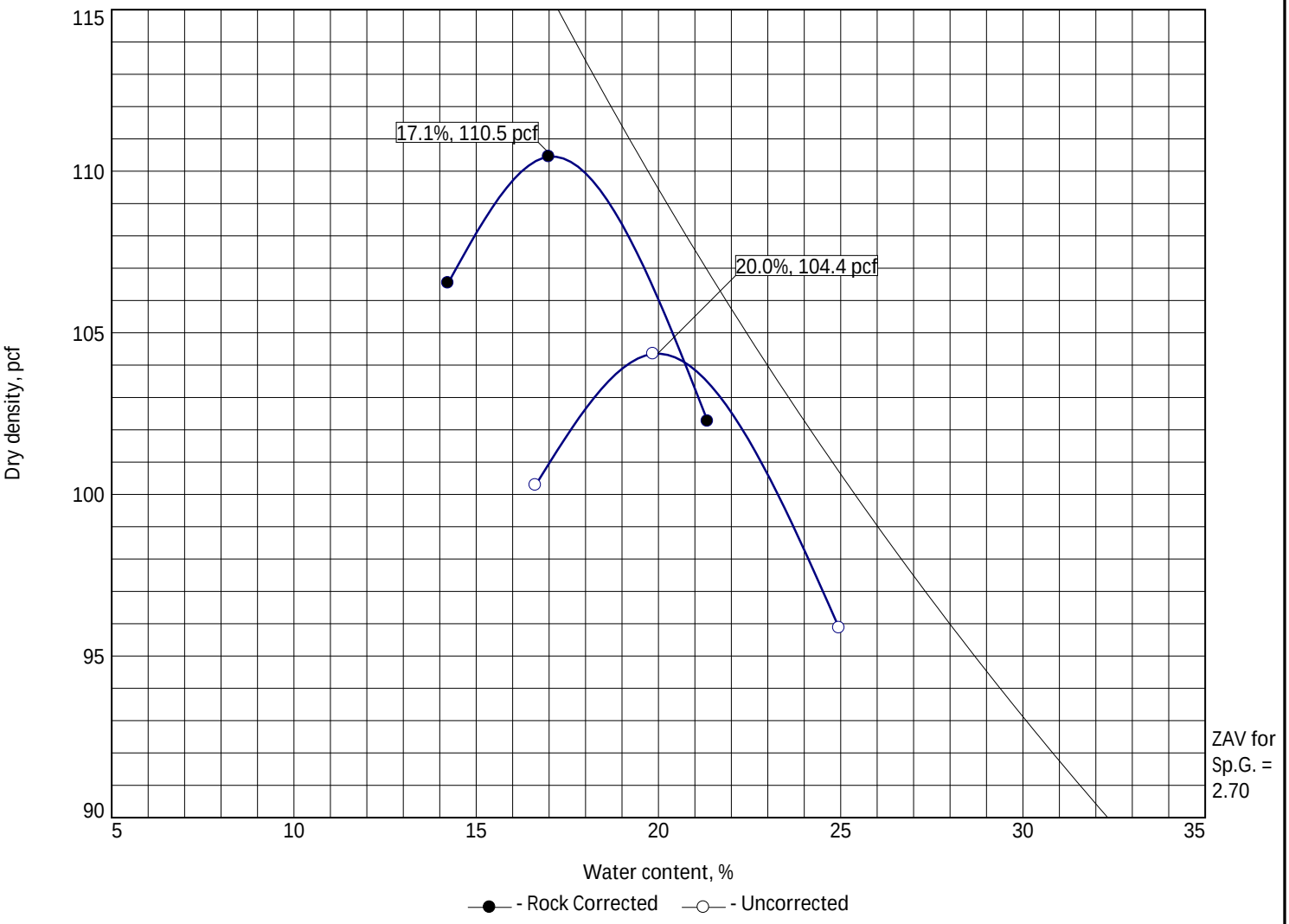
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(2) | | 2.7 | 28 | 6 | 14.5 | 59.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.5 pcf | 104.4 pcf | Dark Brown sandy silty clay with gravel |
| Optimum moisture = 17.1 % | 20.0 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-03, TRT

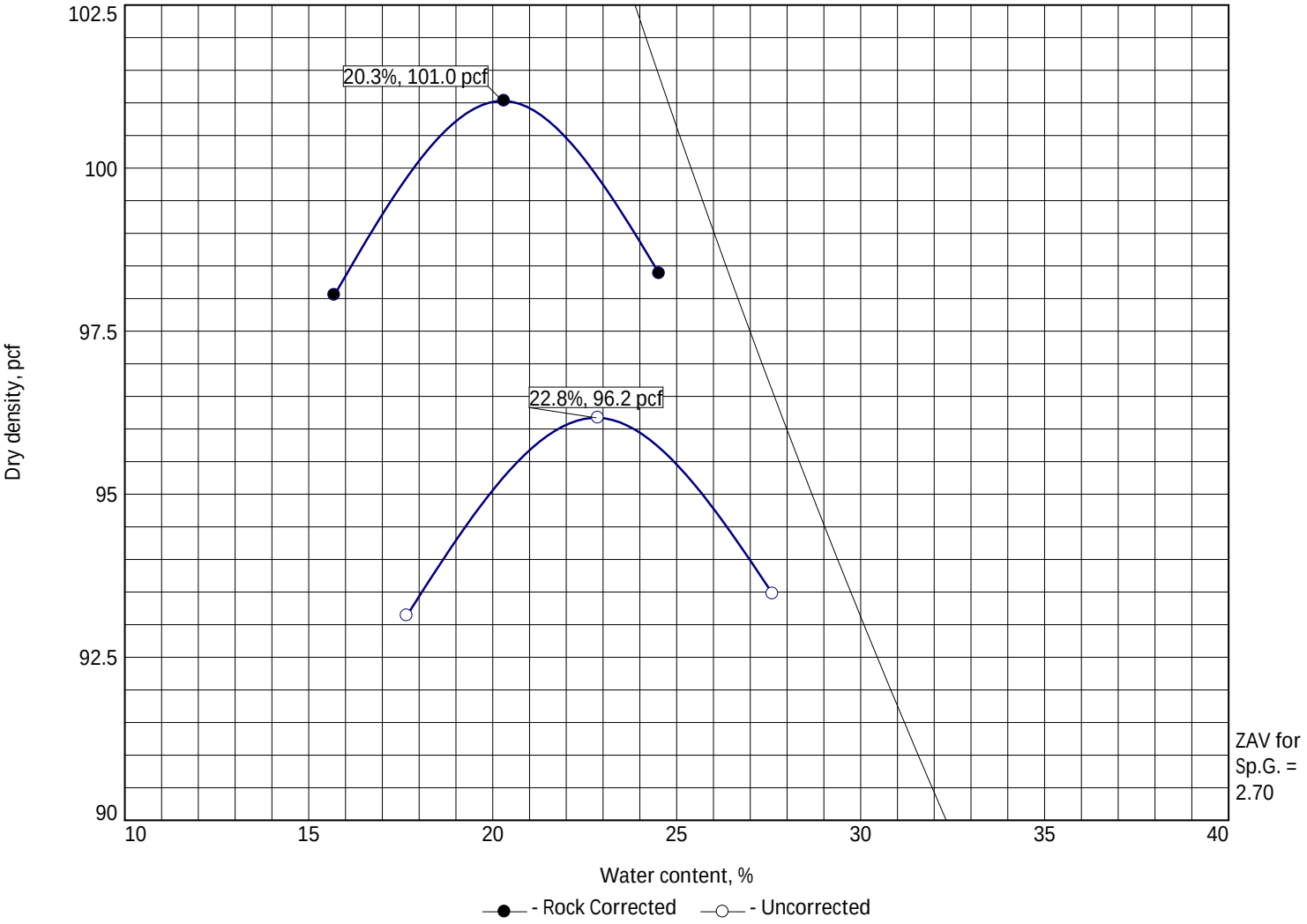
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 26 | 5 | 11.2 | 63.5 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 101.0 pcf | 96.2 pcf | Light Brown sandy silty clay |
| Optimum moisture = 20.3 % | 22.8 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-08, TRT/CBR

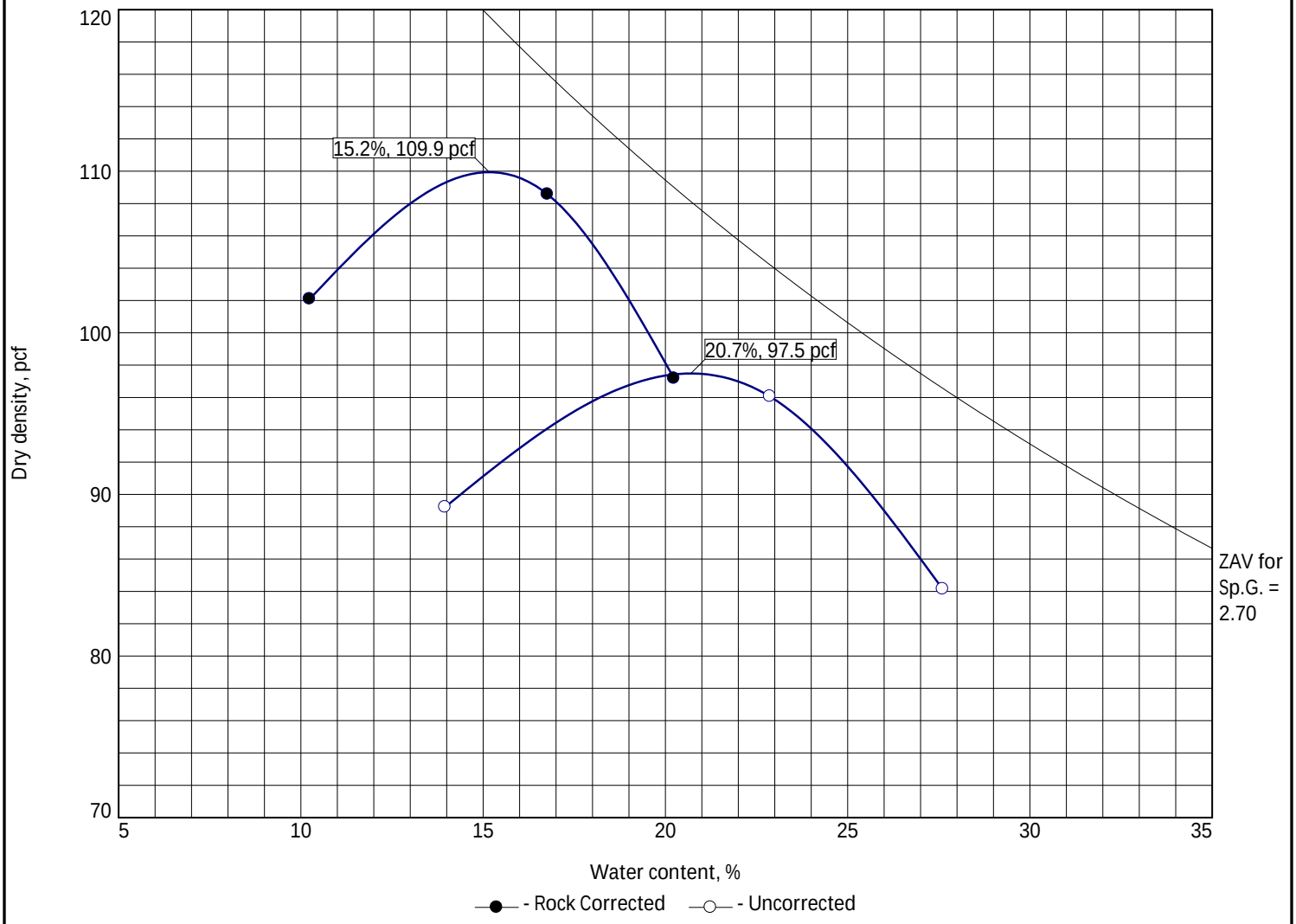
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | GC-GM | A-4(0) | | 2.7 | 26 | 6 | 26.8 | 47.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 109.9 pcf | 97.5 pcf | Light Brown silty clayey gravel with sand |
| Optimum moisture = 15.2 % | 20.7 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-12, TRT

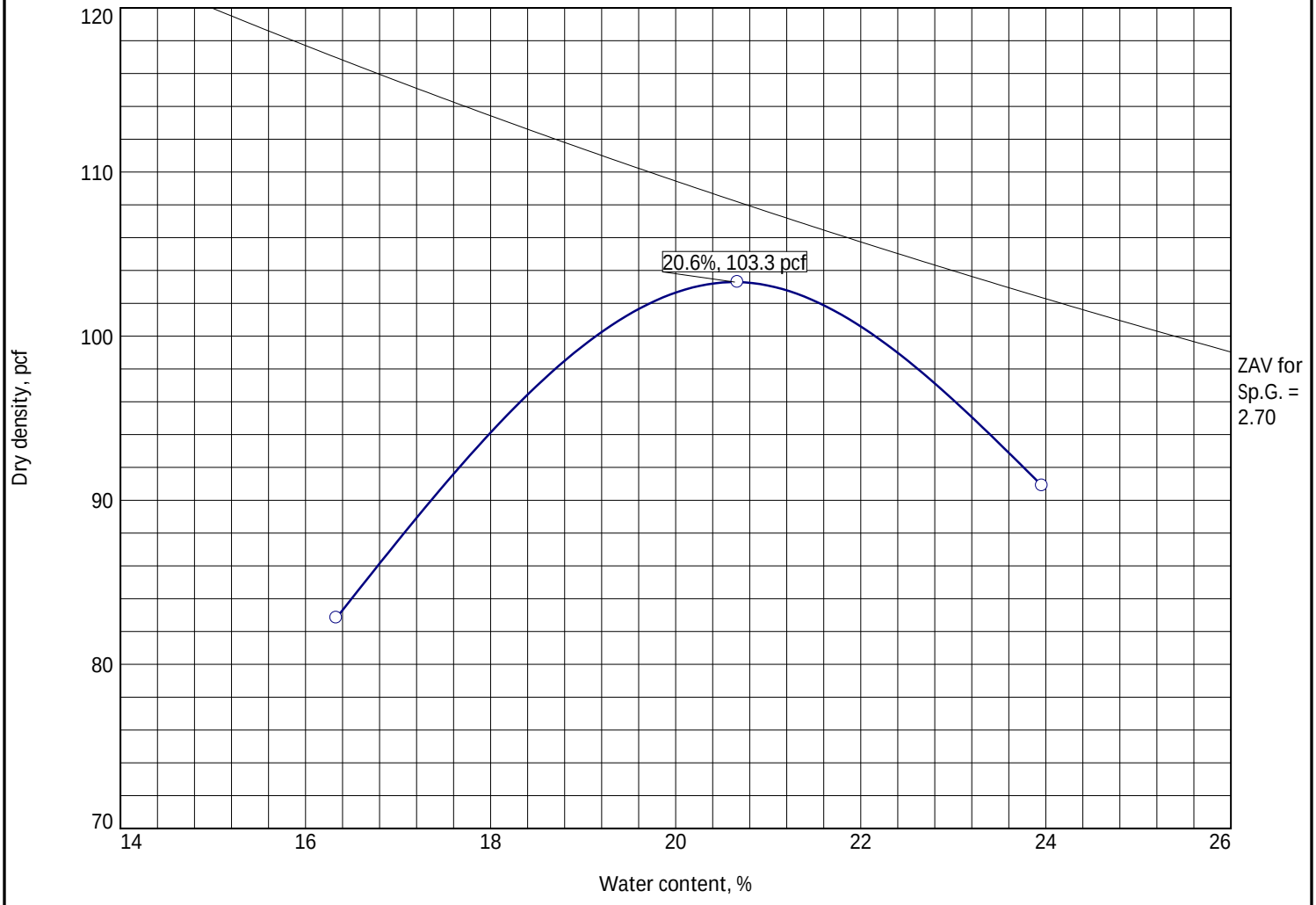
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: HP Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 22 | 5 | 0.0 | 72.2 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 103.3 pcf<br>Optimum moisture = 20.6 % | Brown silty clay with sand |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

Date: 10/21/2025

○ Sample Number: PV-15, TRT

Remarks:
SG Assumed

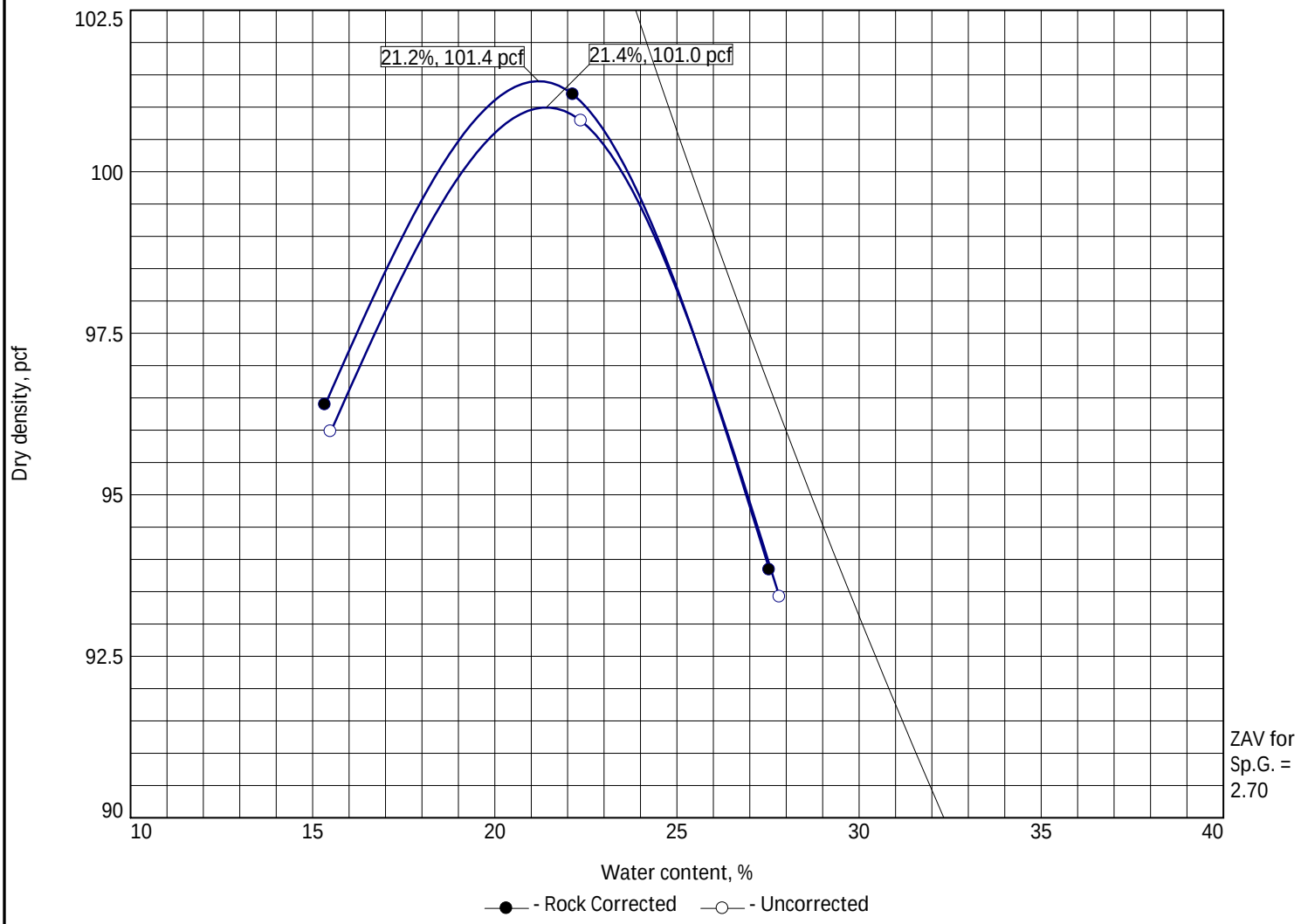
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 22 | 6 | 1.0 | 61.2 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 101.4 pcf | 101.0 pcf | Brown sandy silty clay |
| Optimum moisture = 21.2 % | 21.4 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-16, TRT

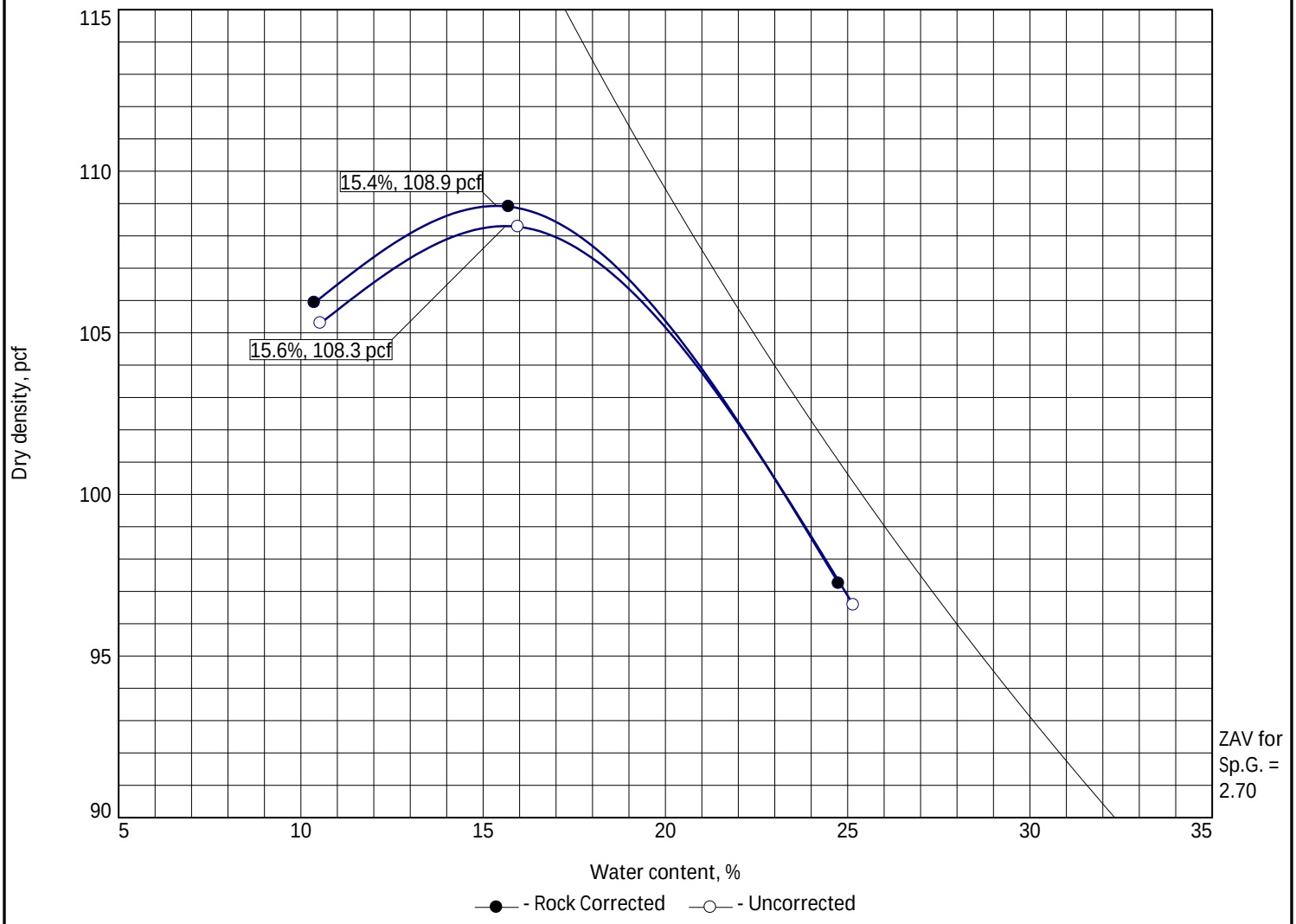
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(0) | | 2.7 | 22 | 5 | 1.6 | 54.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 108.9 pcf | 108.3 pcf | Dark Brown sandy silty clay |
| Optimum moisture = 15.4 % | 15.6 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-21, TRT/CBR

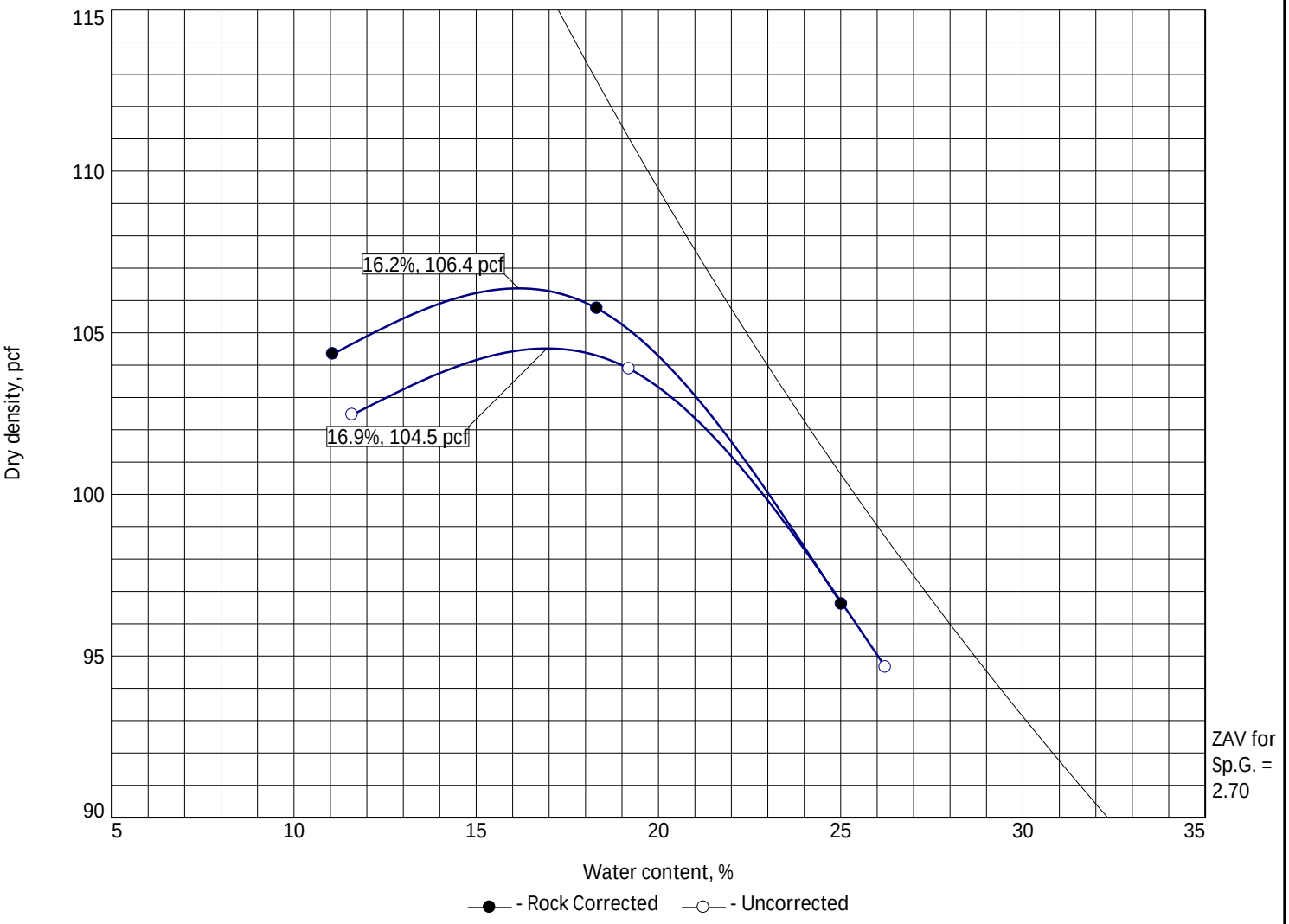
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(1) | | 2.7 | 27 | 6 | 4.6 | 48.8 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 106.4 pcf | 104.5 pcf | Light Brown silty, clayey sand |
| Optimum moisture = 16.2 % | 16.9 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-24, TRT/CBR

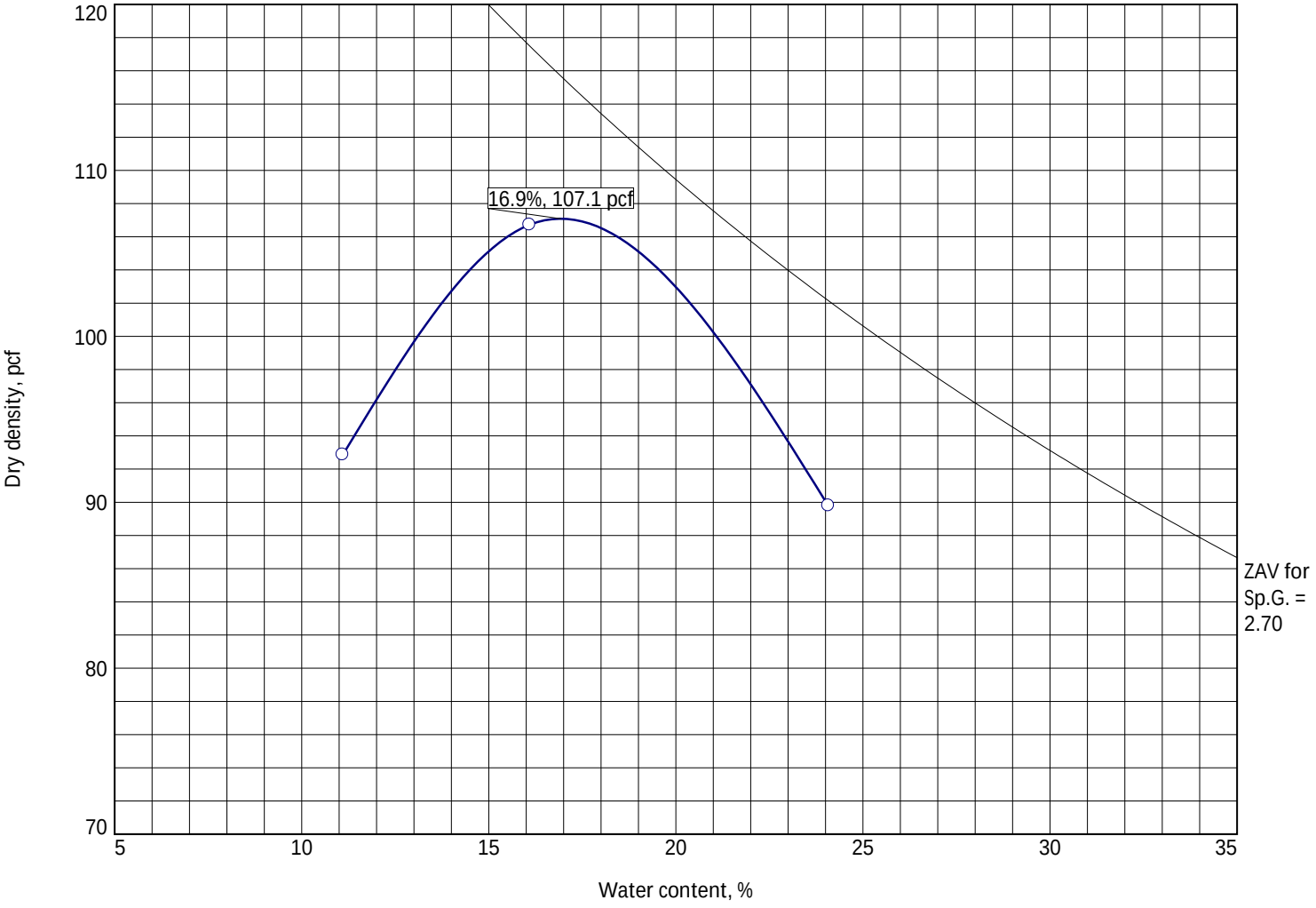
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 23 | 5 | 0.0 | 73.2 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 107.1 pcf<br>Optimum moisture = 16.9 % | Brown silty clay with sand |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

Date: 10/21/2025

○ Sample Number: PV-26, TRT

Remarks:
SG Assumed

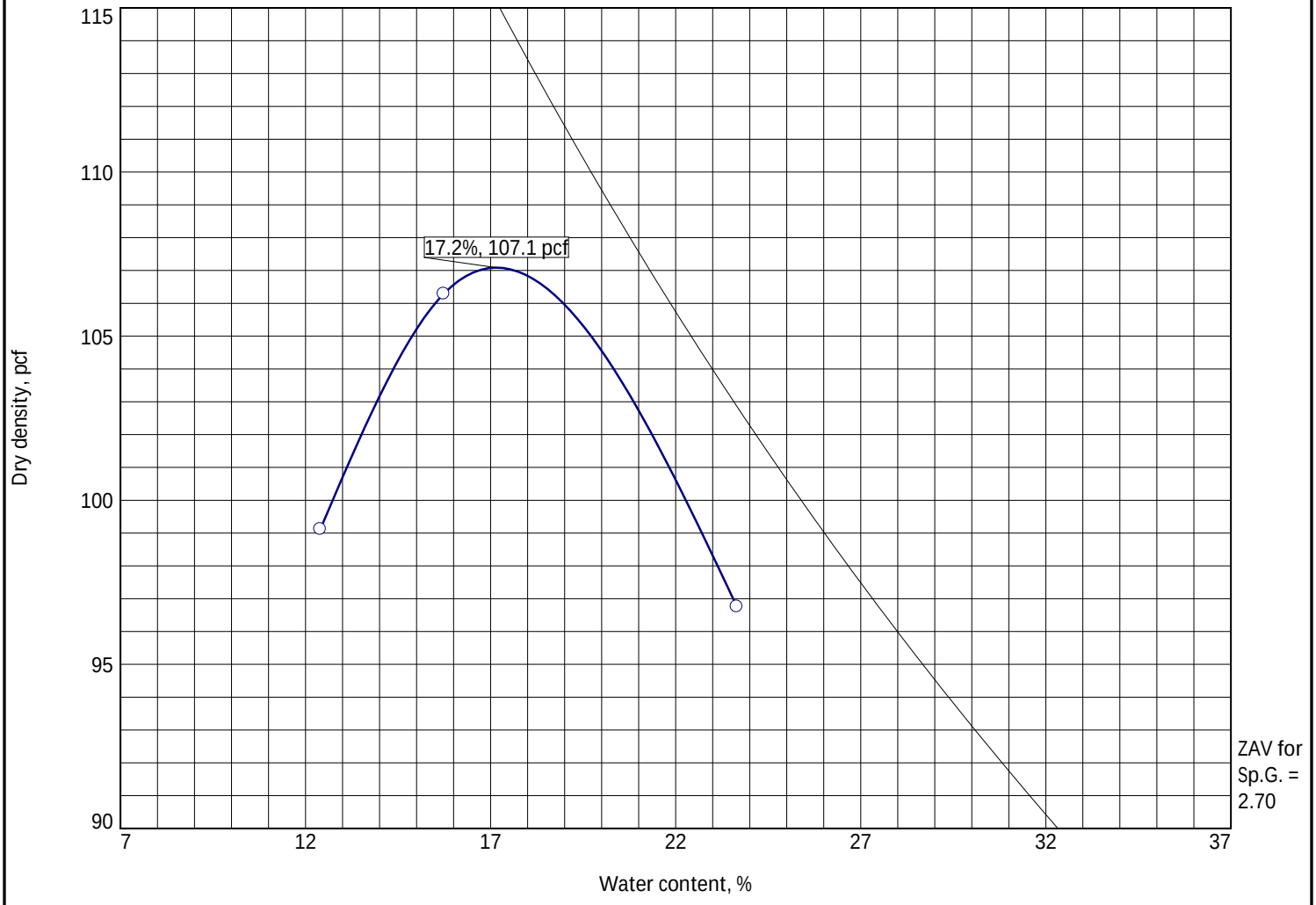
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(3) | | 2.7 | 28 | 6 | 0.0 | 72.5 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 107.1 pcf<br>Optimum moisture = 17.2 % | Brown silty clay with sand |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

Date: 10/21/2025

○ Sample Number: PV-29, TRT

Remarks:
SG Assumed

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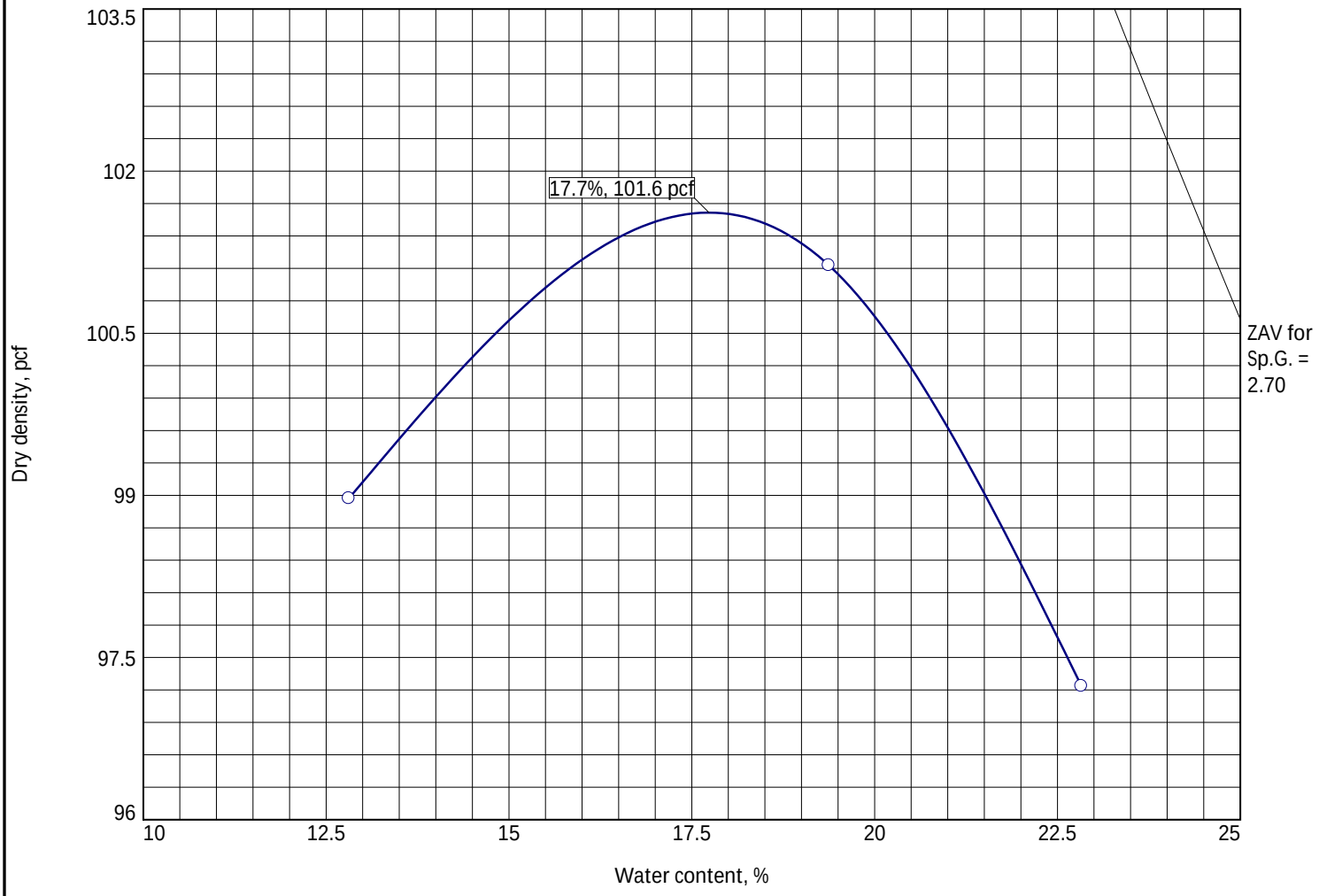
South Plainfield, New Jersey

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 24 | 5 | 0.0 | 61.6 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 101.6 pcf<br>Optimum moisture = 17.7 % | Light Brown sandy silty clay |

Project No. IRN 25-N-570 Client: TetraTech

Project: Speedway, Sherman County, OR

Date: 10/21/2025

○ Sample Number: PV-34, TRT/CBR

ANS CONSULTANTS, INC.

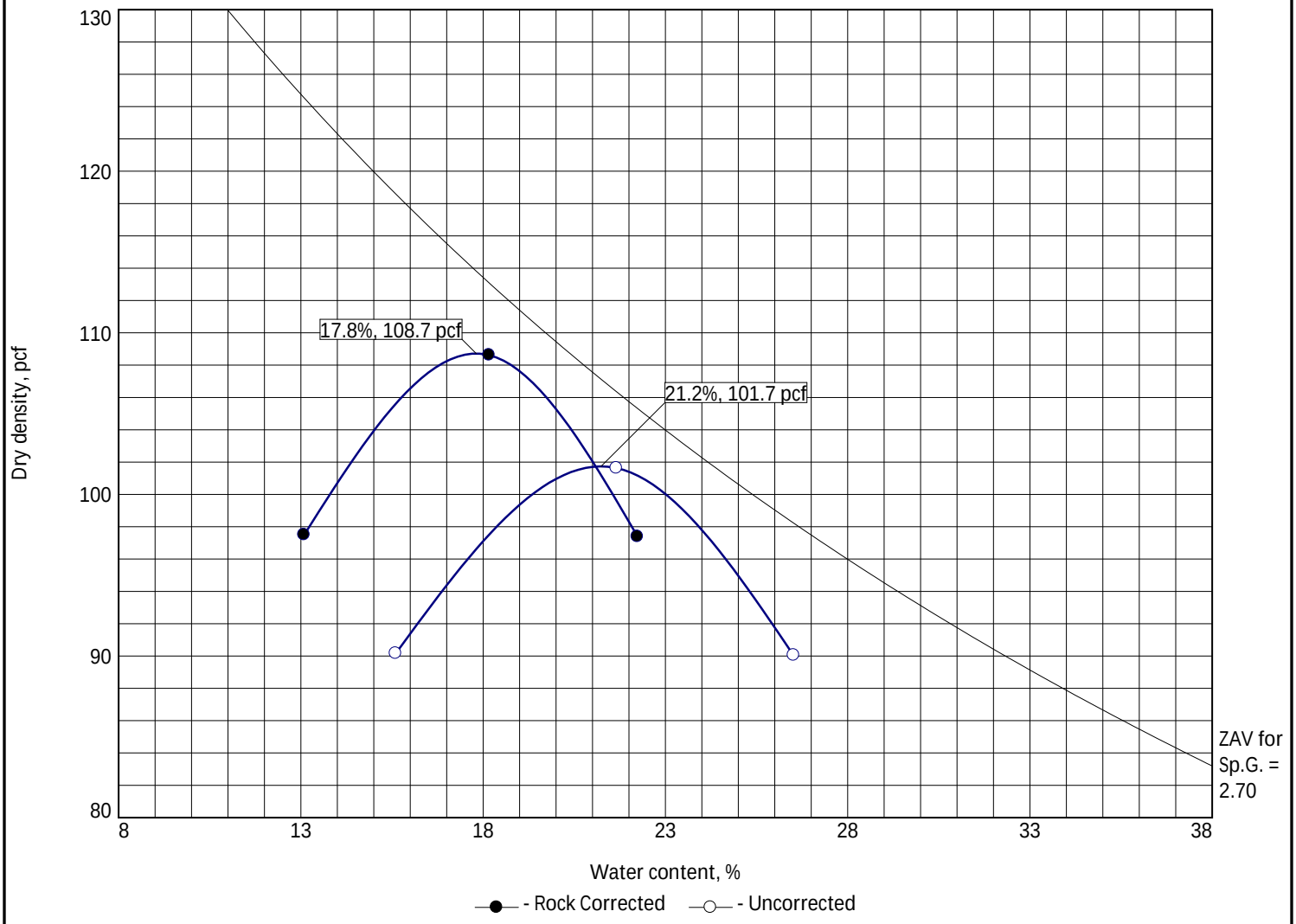
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 0.5'-2' | SC-SM | A-4(0) | | 2.7 | 28 | 6 | 16.2 | 39.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 108.7 pcf | 101.7 pcf | Brown silty, clayey sand with gravel |
| Optimum moisture = 17.8 % | 21.2 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-36, TRT

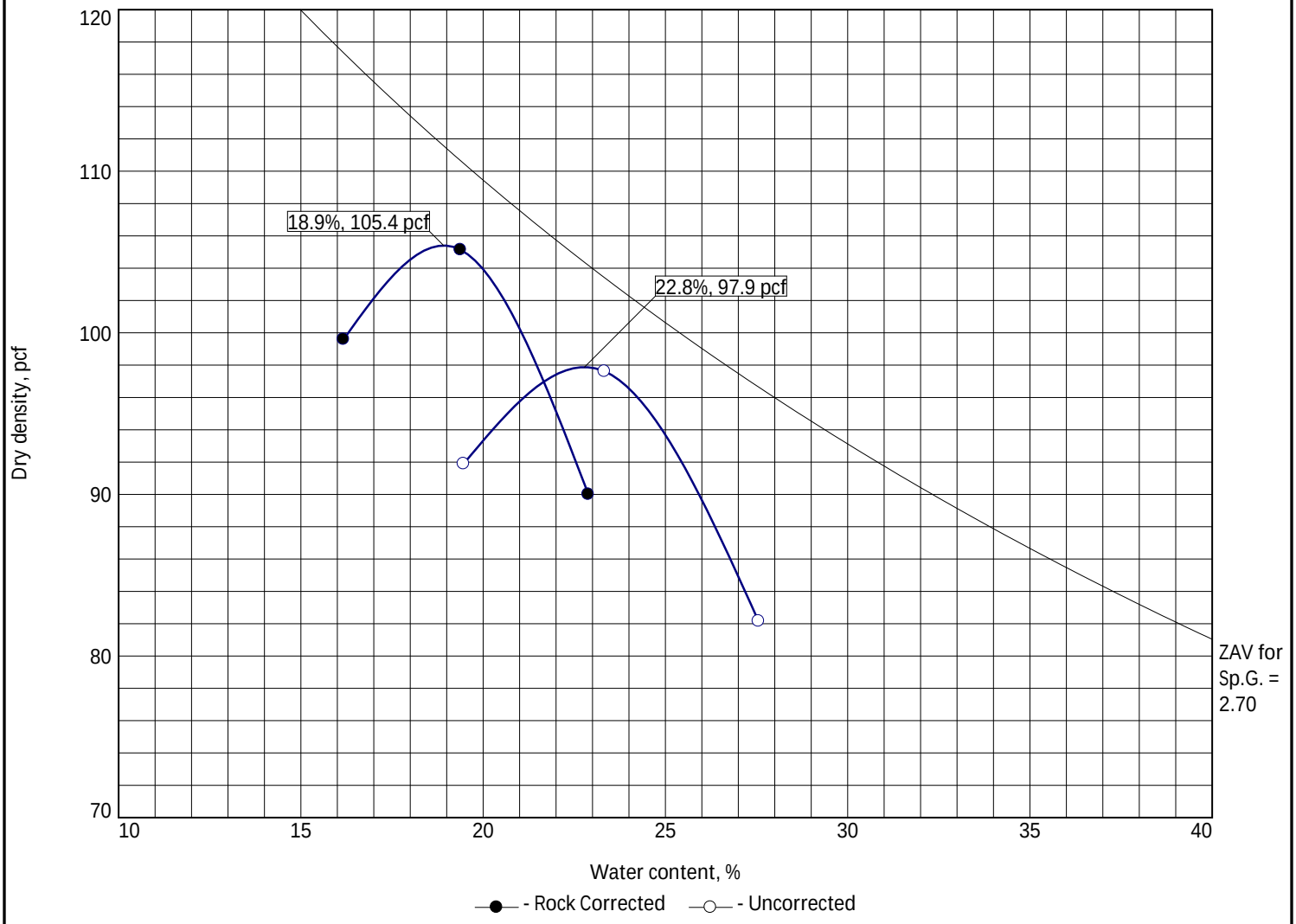
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-2-4(0) | | 2.7 | 28 | 6 | 17.0 | 33.9 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 105.4 pcf | 97.9 pcf | Dark Brown silty, clayey sand with gravel |
| Optimum moisture = 18.9 % | 22.8 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-40, TRT

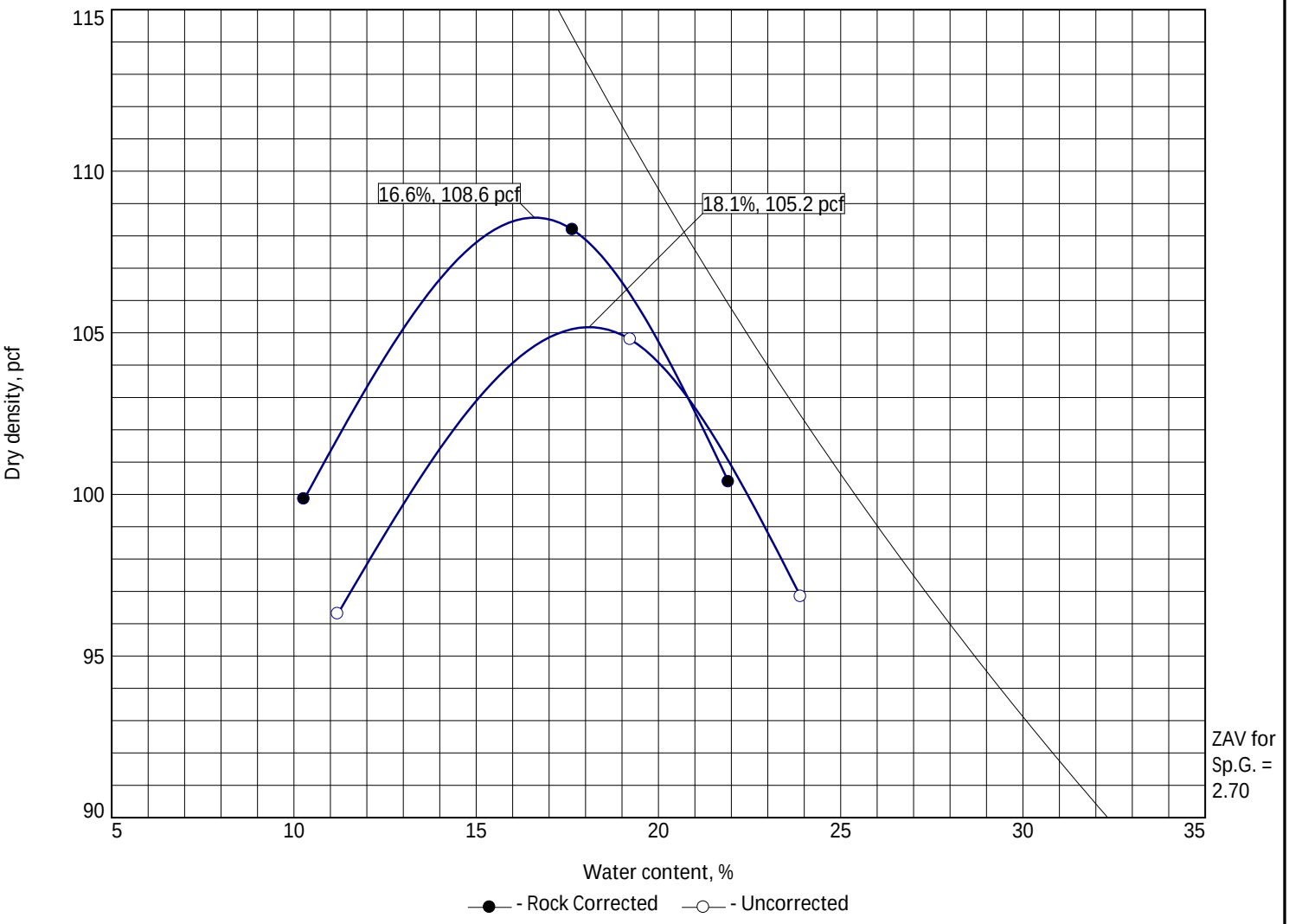
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC | A-4(1) | | 2.7 | 31 | 10 | 8.3 | 40.6 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 108.6 pcf | 105.2 pcf | Brown clayey sand |
| Optimum moisture = 16.6 % | 18.1 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-043, TRT

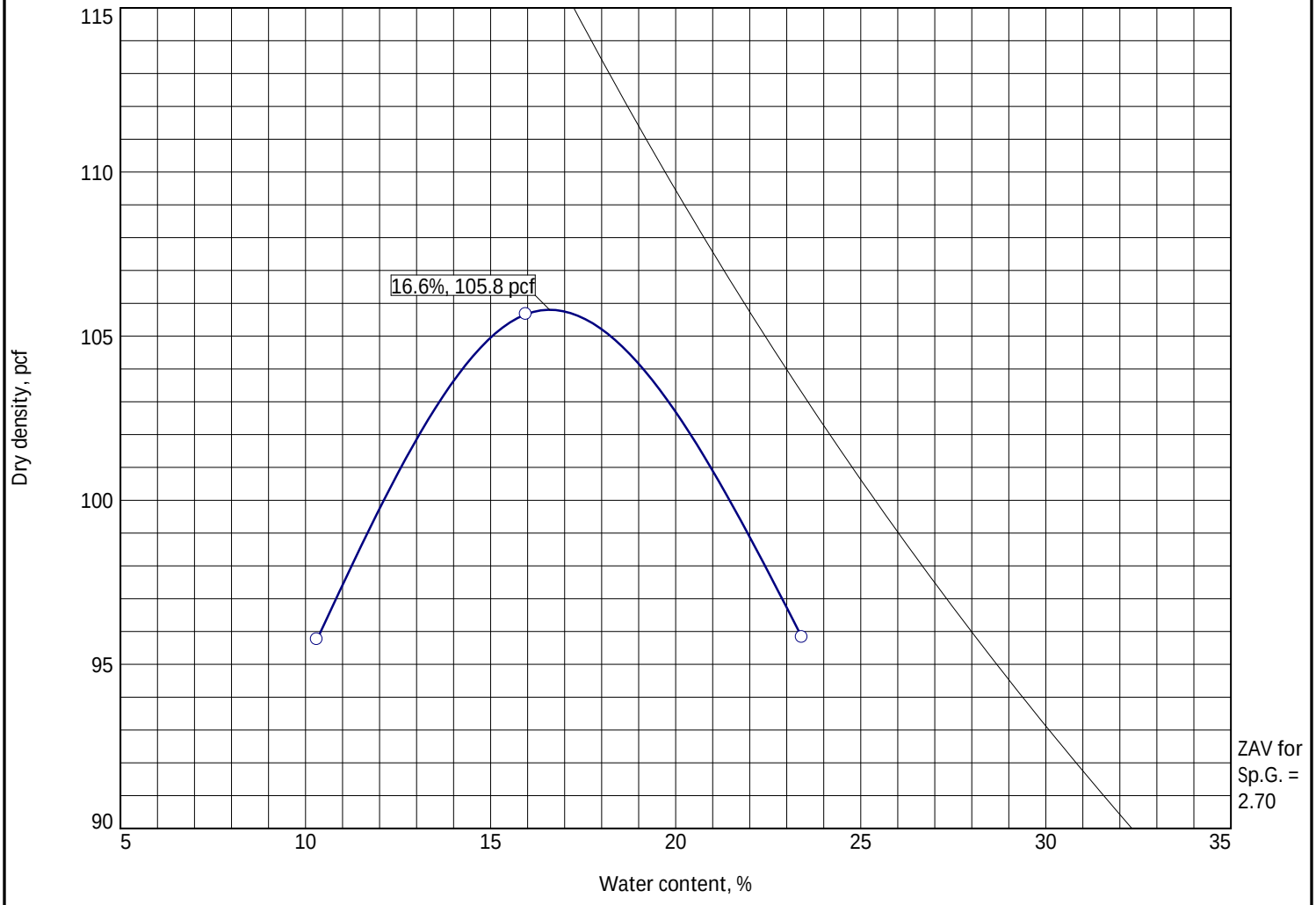
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(3) | | 2.7 | 26 | 6 | 0.0 | 73.5 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 105.8 pcf<br>Optimum moisture = 16.6 % | Brown silty clay with sand |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 10/22/2025

○ Sample Number: PV-045, TRT

ANS CONSULTANTS, INC.

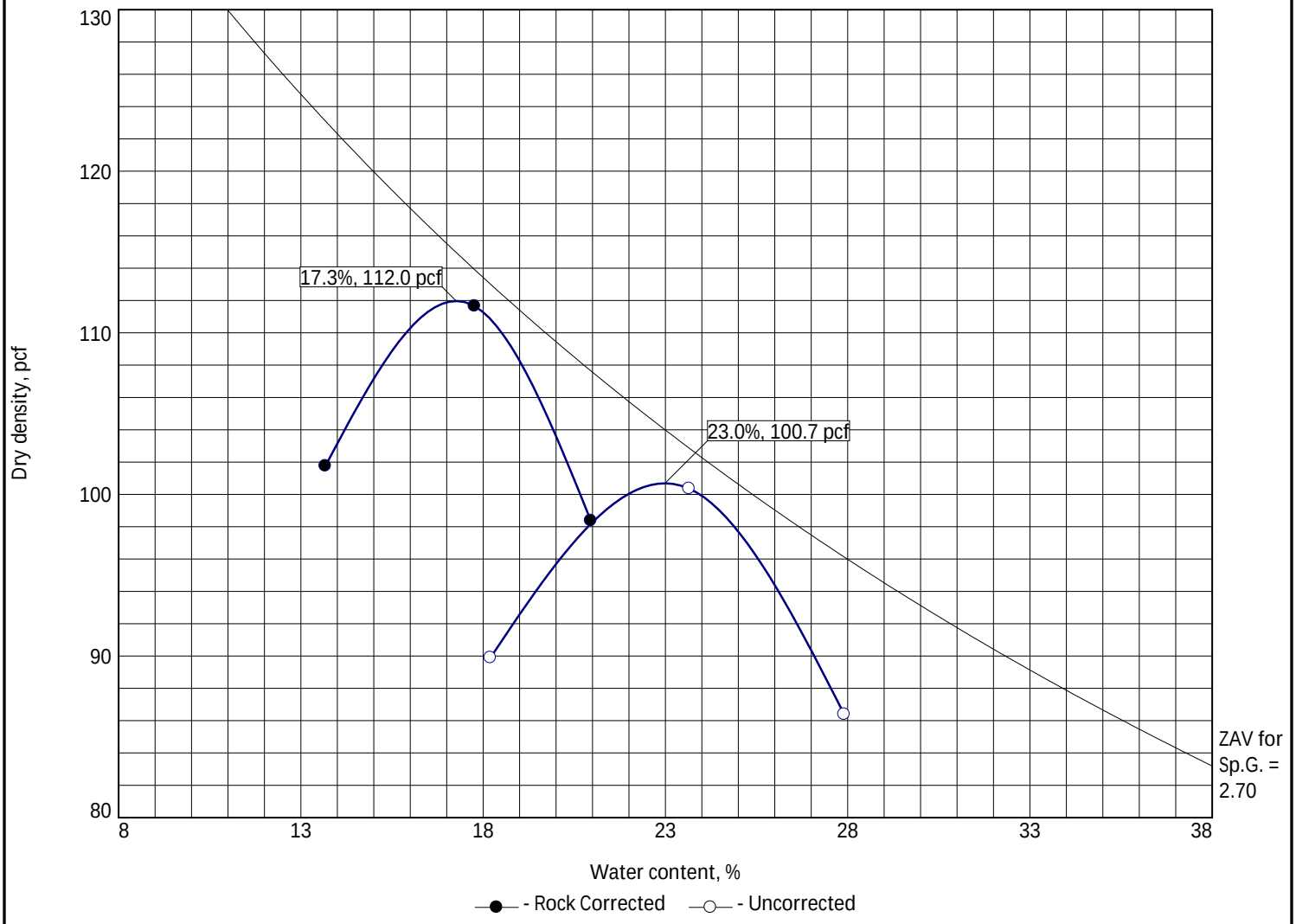
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SP-SC | A-1-a | | 2.7 | 24 | 5 | 25.0 | 5.8 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 112.0 pcf | 100.7 pcf | Dark Brown poorly graded sand with silty clay and gravel |
| Optimum moisture = 17.3 % | 23.0 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-47, TRT

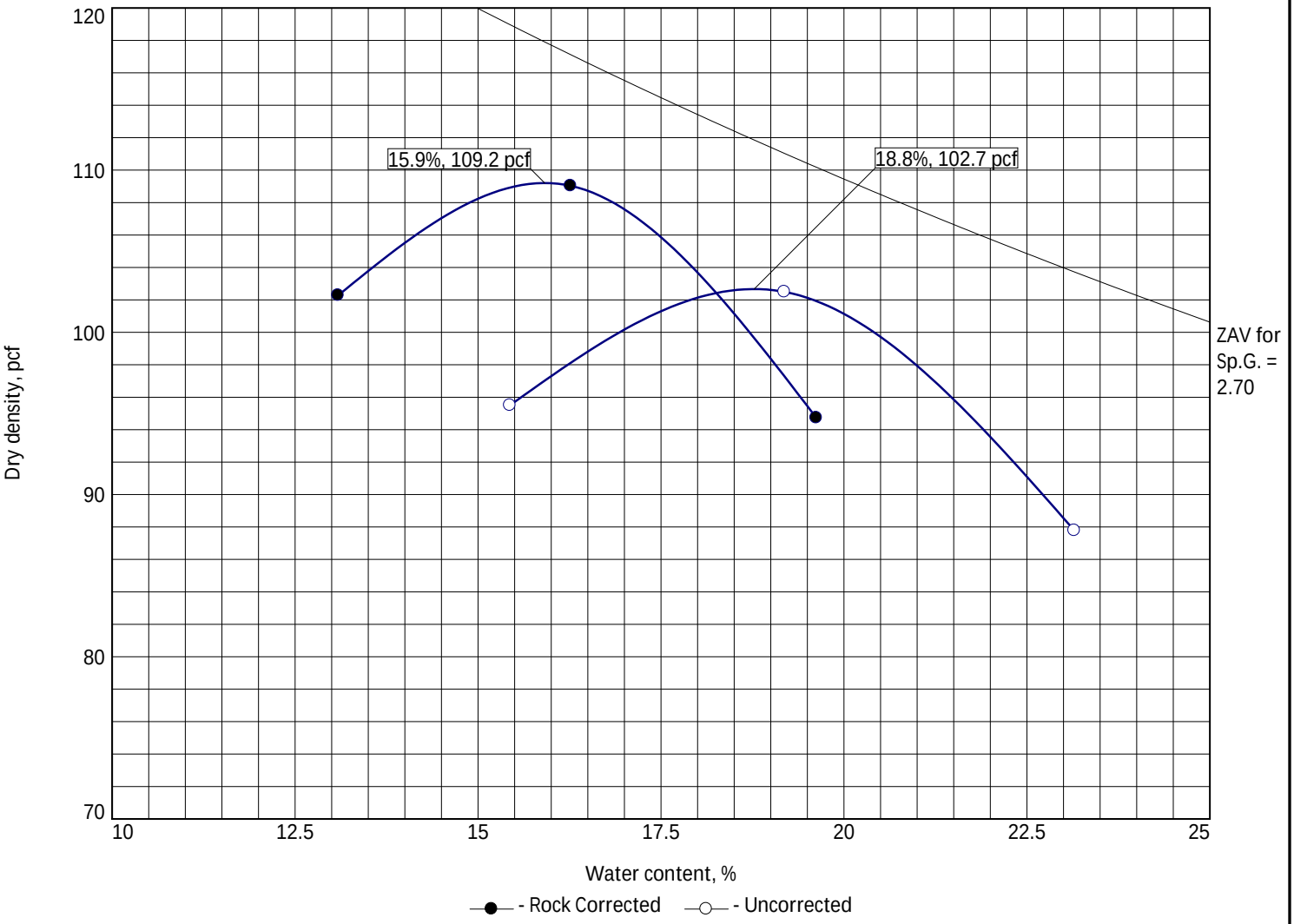
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-1-b | | 2.7 | 26 | 5 | 15.3 | 20.7 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 109.2 pcf | 102.7 pcf | Brown silty, clayey sand with gravel |
| Optimum moisture = 15.9 % | 18.8 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-49, TRT

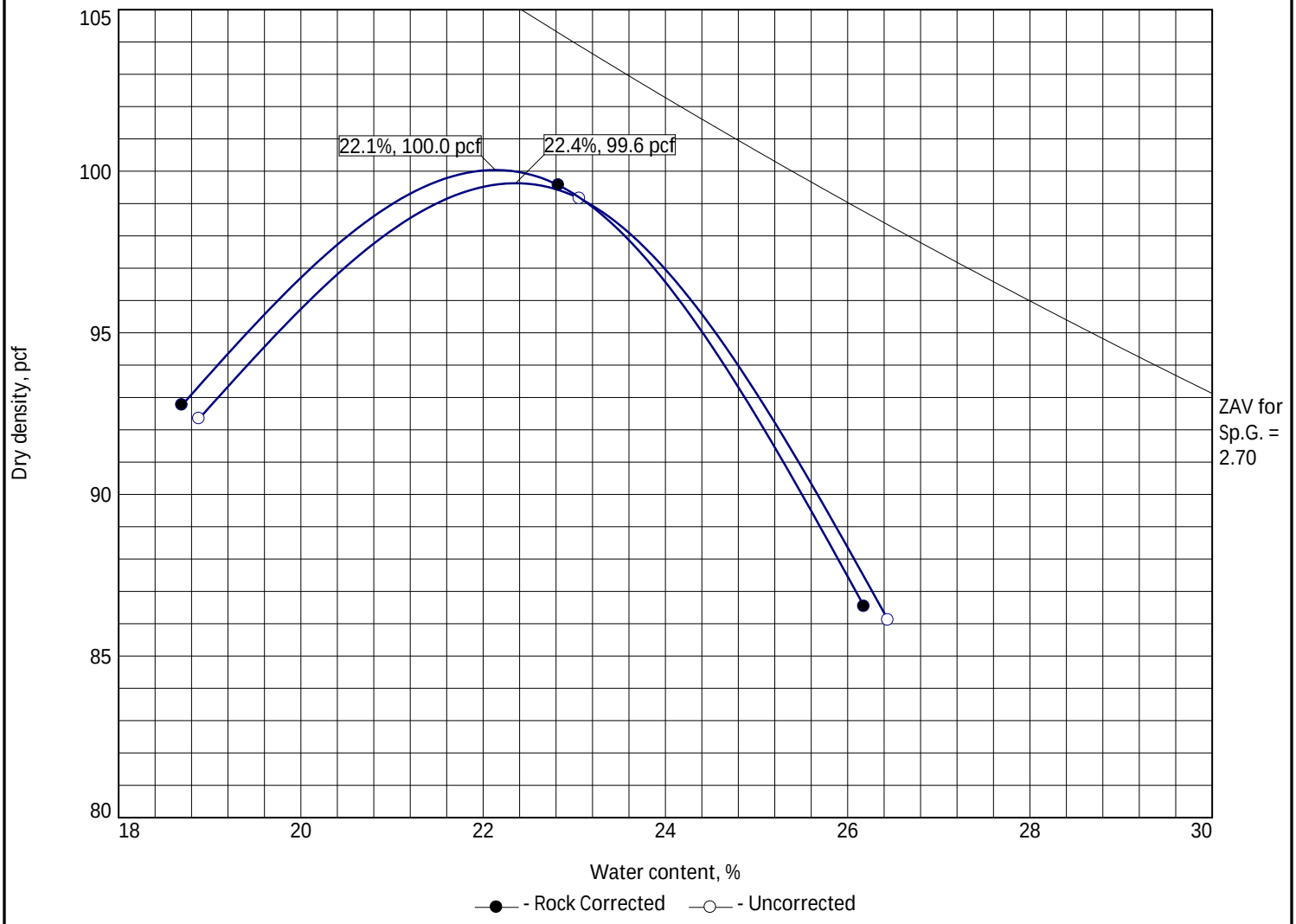
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 27 | 6 | 1.0 | 38.7 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 100.0 pcf | 99.6 pcf | Grayish Brown silty, clayey sand |
| Optimum moisture = 22.1 % | 22.4 % | |

Project No. IRN 25-N-570 Client: TetraTech
Project: Speedway, Sherman County, OR
Date: 10/21/2025
○ Sample Number: PV-52, TRT

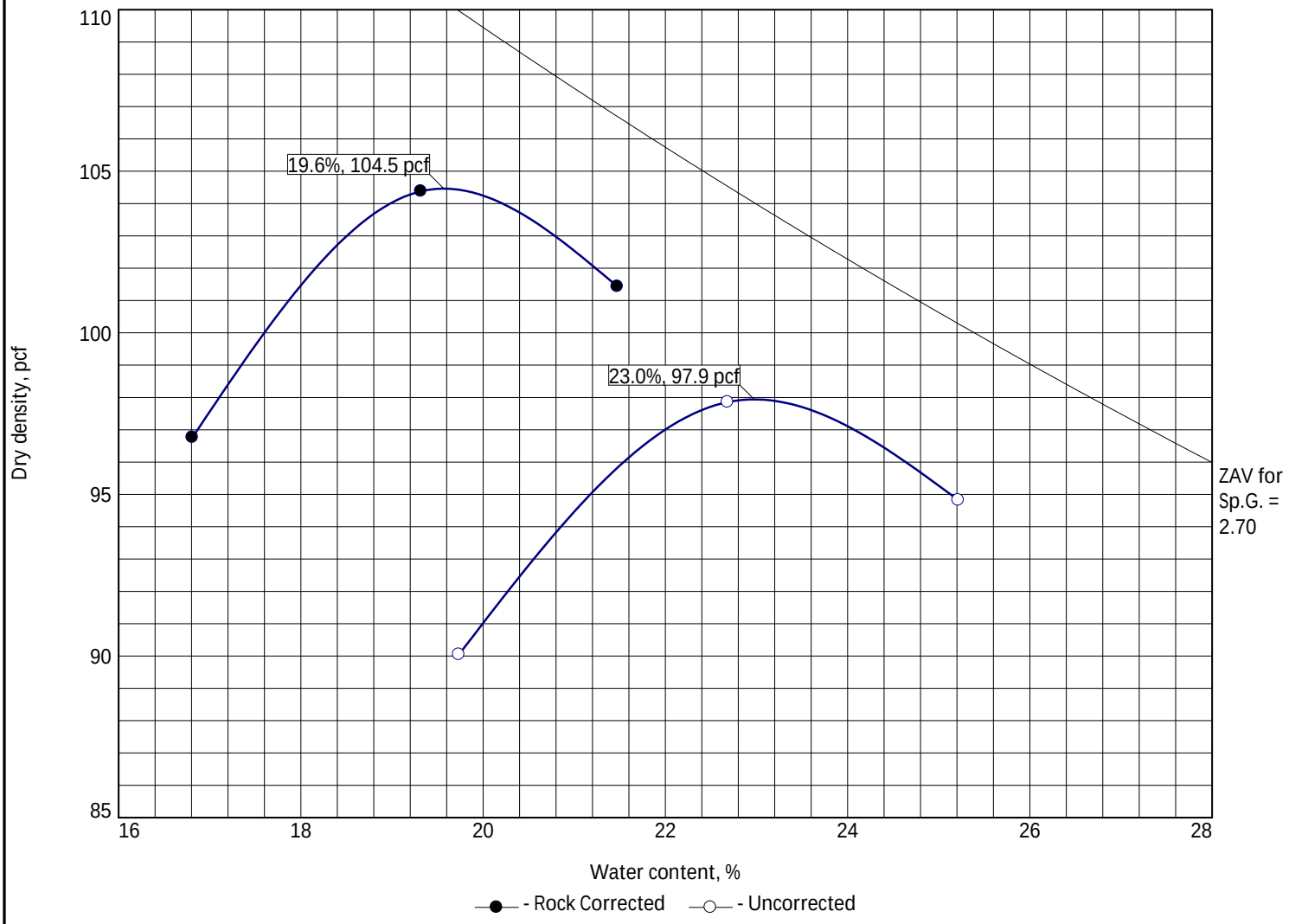
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | ML | A-4(3) | | 2.7 | 36 | 10 | 14.9 | 53.6 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 104.5 pcf | 97.9 pcf | Light Brown sandy silt with gravel |
| Optimum moisture = 19.6 % | 23.0 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: PV-058, TRT

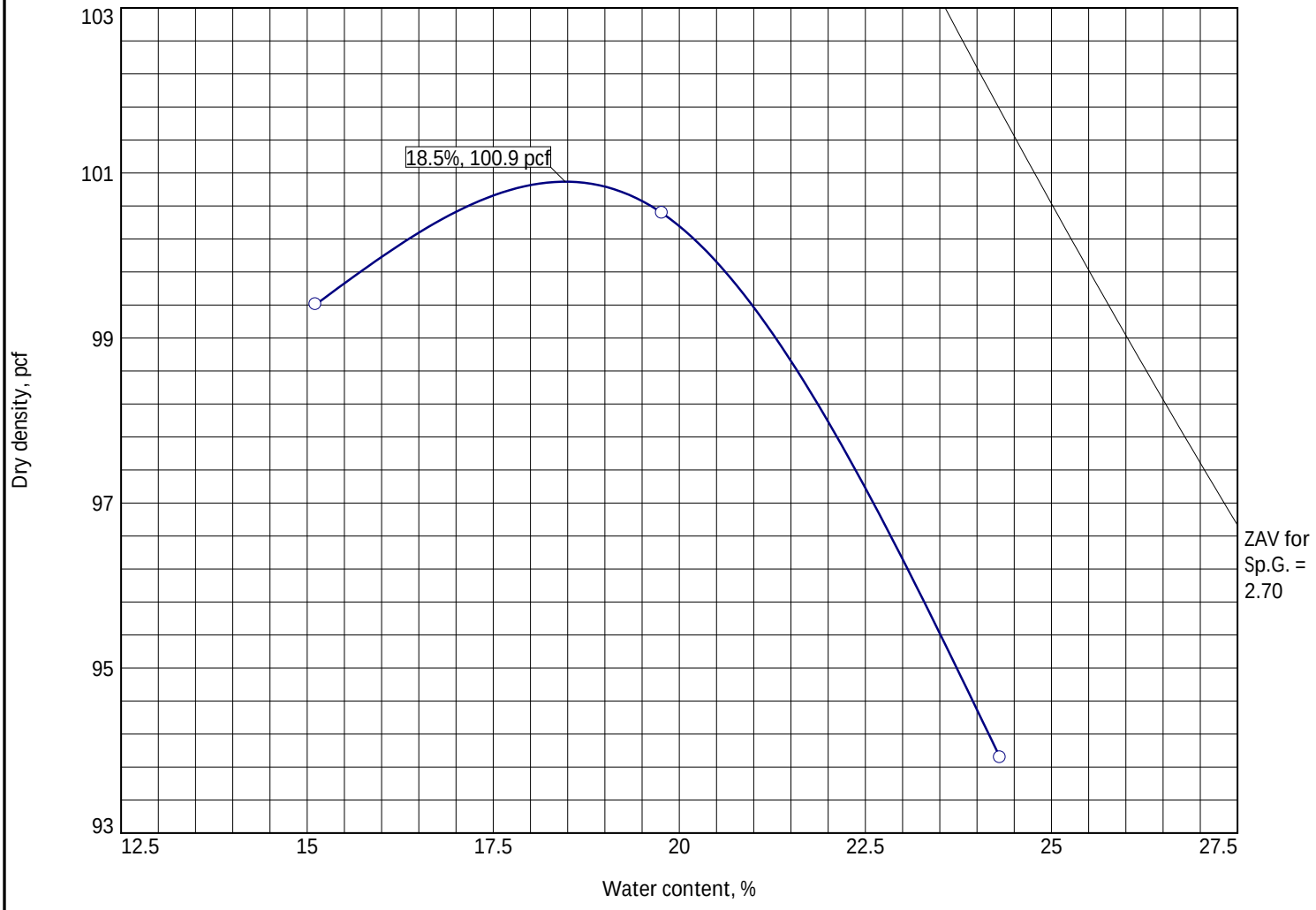
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(2) | | 2.7 | 24 | 6 | 0.0 | 72.8 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 100.9 pcf<br>Optimum moisture = 18.5 % | Light Brown silty clay with sand |

Project No. IRN 25-T-215 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/11/2025

○ Sample Number: PV-064, TRT

ANS CONSULTANTS, INC.

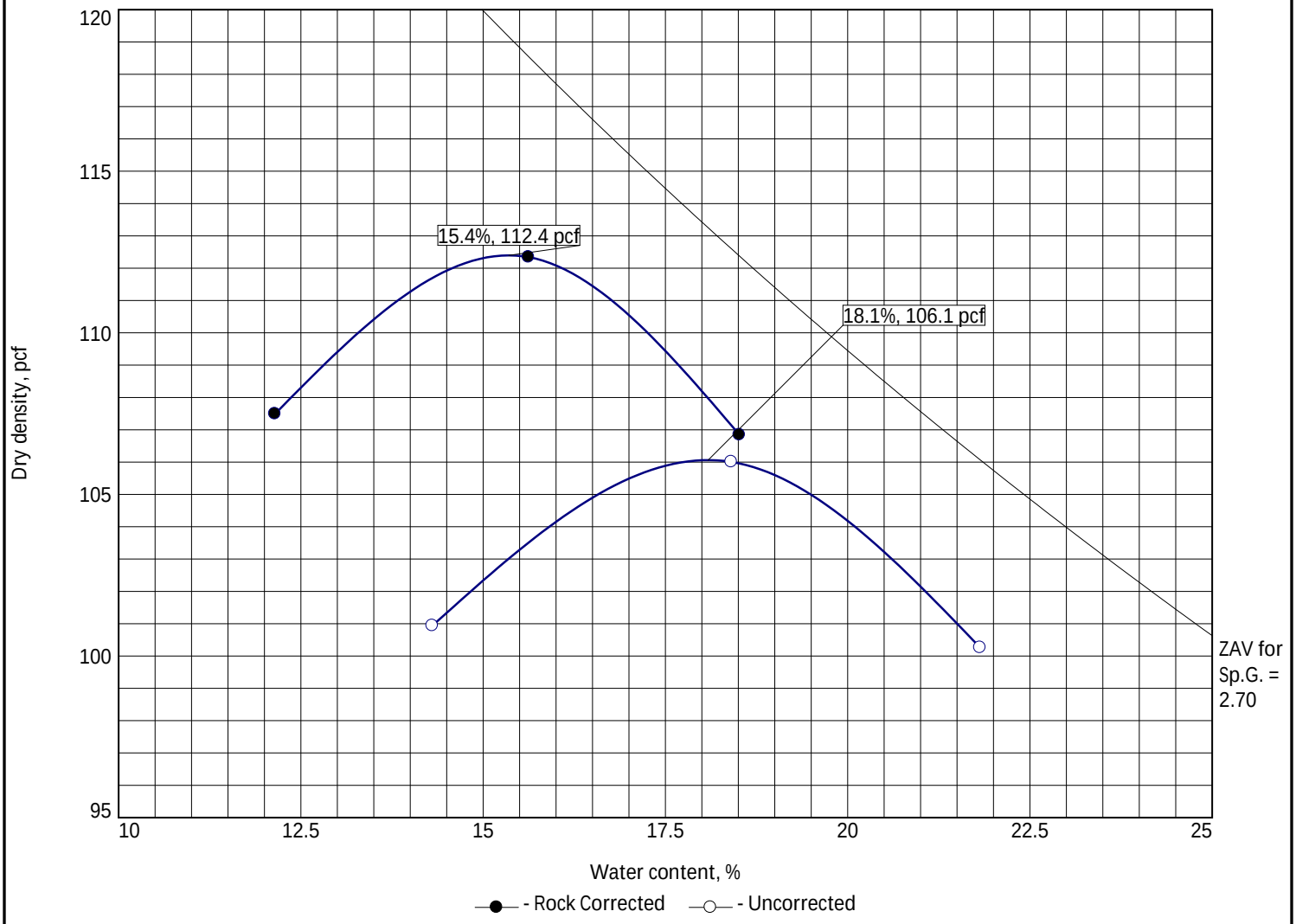
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method C Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/4 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SM | A-2-7(0) | | 2.7 | 42 | 15 | 15.2 | 18.5 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 112.4 pcf | 106.1 pcf | Brown silty sand with gravel |
| Optimum moisture = 15.4 % | 18.1 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: PV-068, TRT

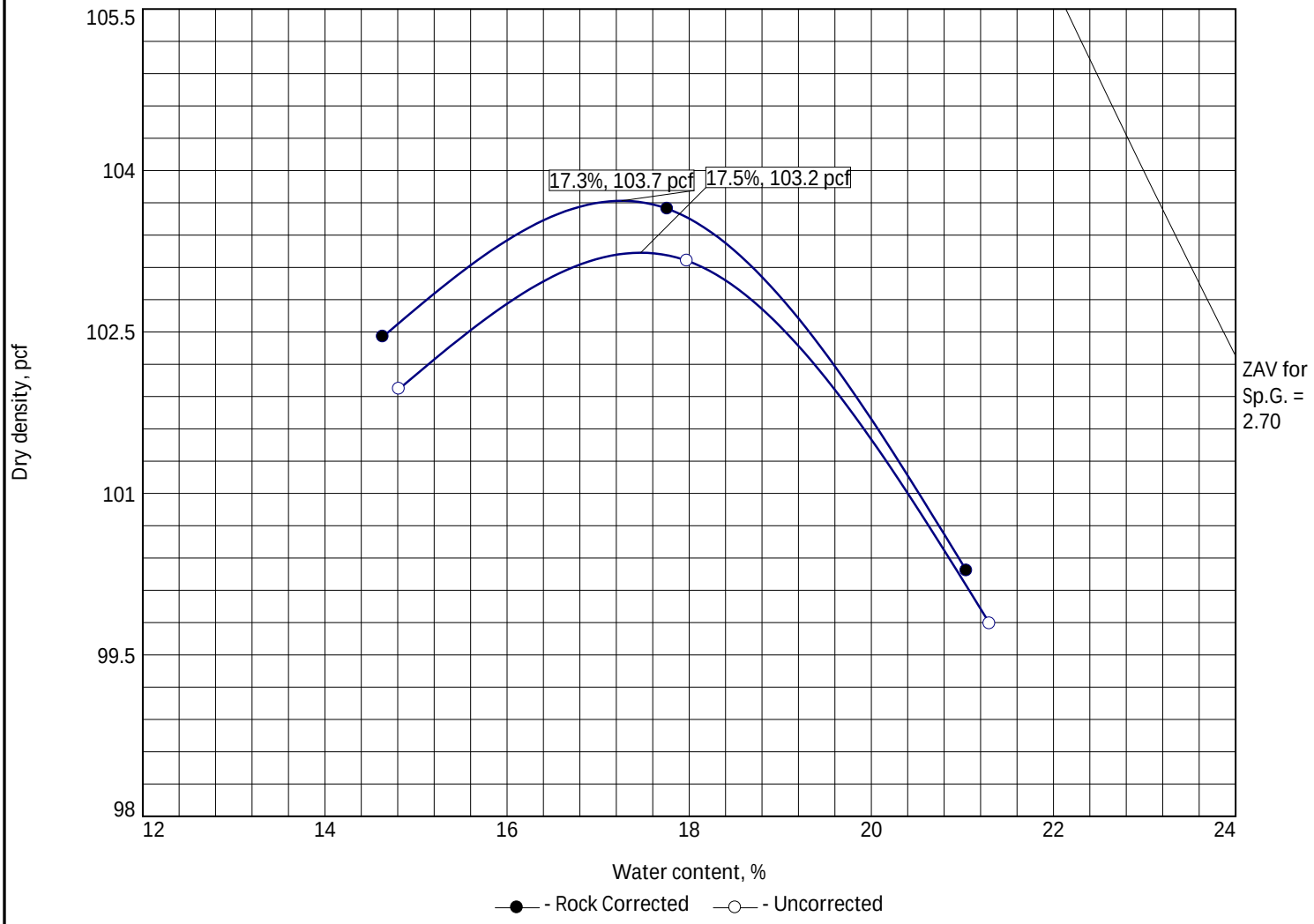
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(3) | | 2.7 | 26 | 6 | 1.2 | 80.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 103.7 pcf | 103.2 pcf | Light Brown silty clay with sand |
| Optimum moisture = 17.3 % | 17.5 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: PV-071, TRT

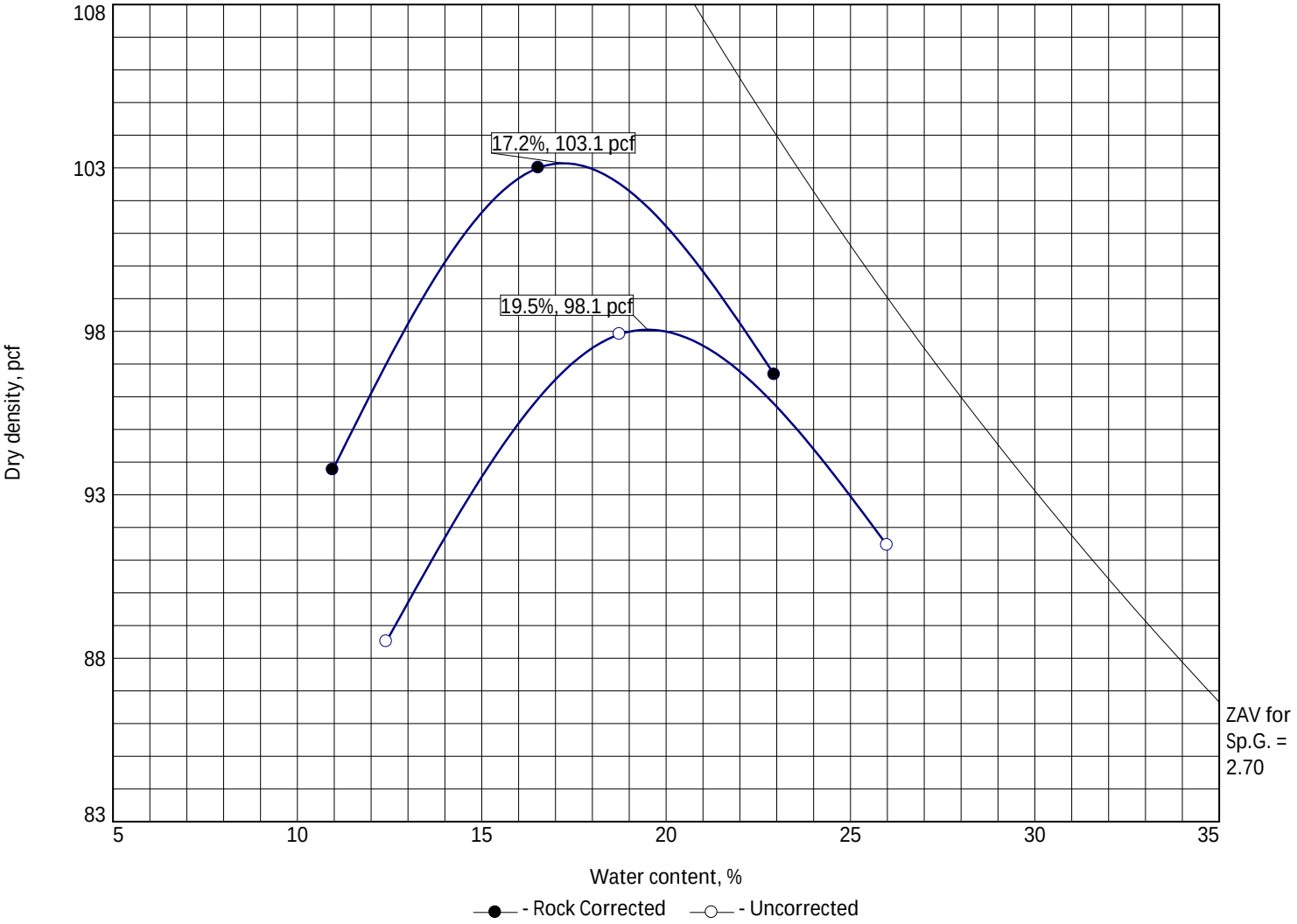
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method C Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/4 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC | A-2-6(0) | | 2.7 | 37 | 15 | 11.8 | 15.2 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 103.1 pcf | 98.1 pcf | Dark Brown clayey sand with gravel |
| Optimum moisture = 17.2 % | 19.5 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: PV-074, TRT

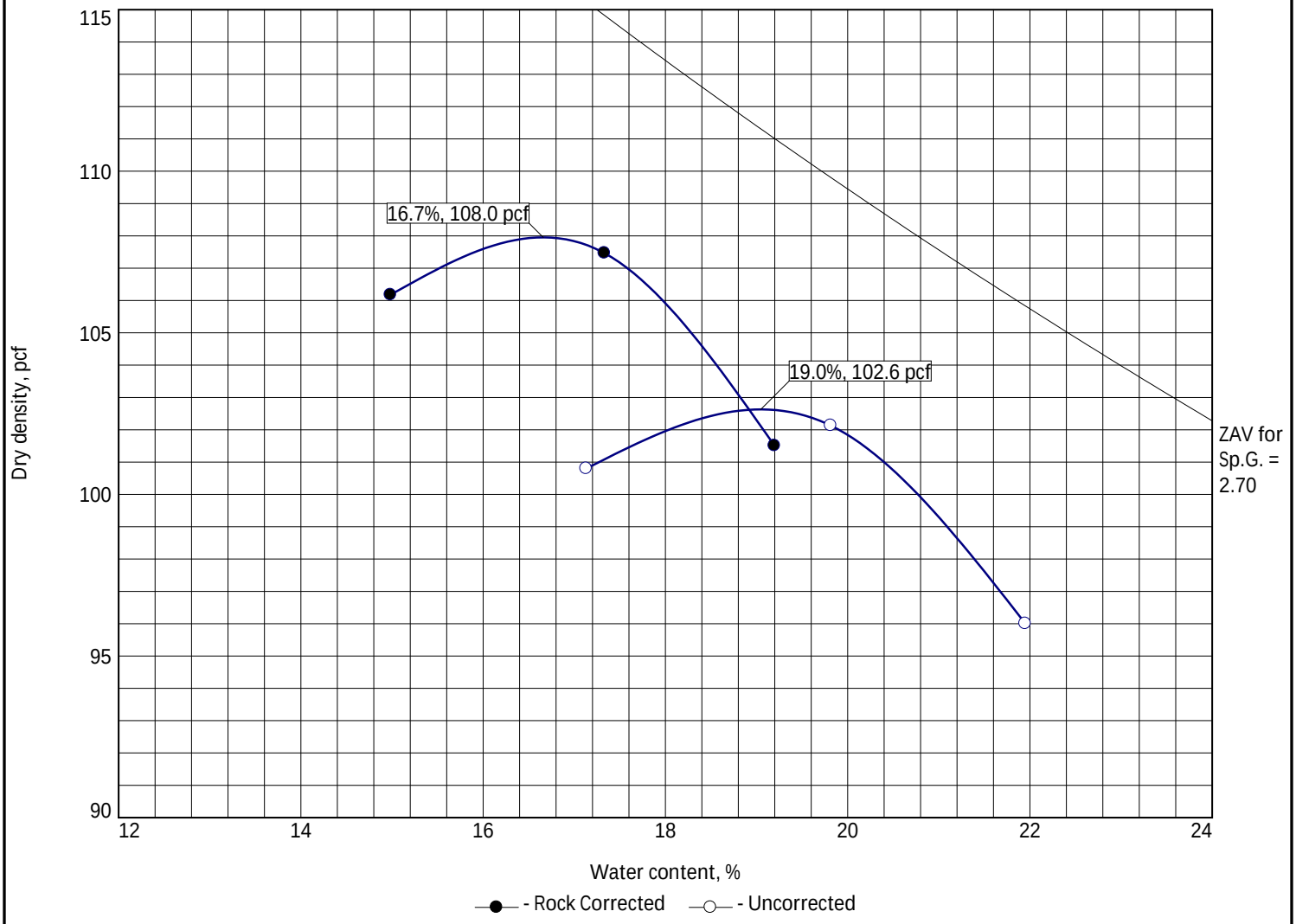
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(8) | | 2.7 | 32 | 13 | 12.6 | 71.6 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 108.0 pcf | 102.6 pcf | Dark Brown lean clay with sand |
| Optimum moisture = 16.7 % | 19.0 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: PV-079, TRT

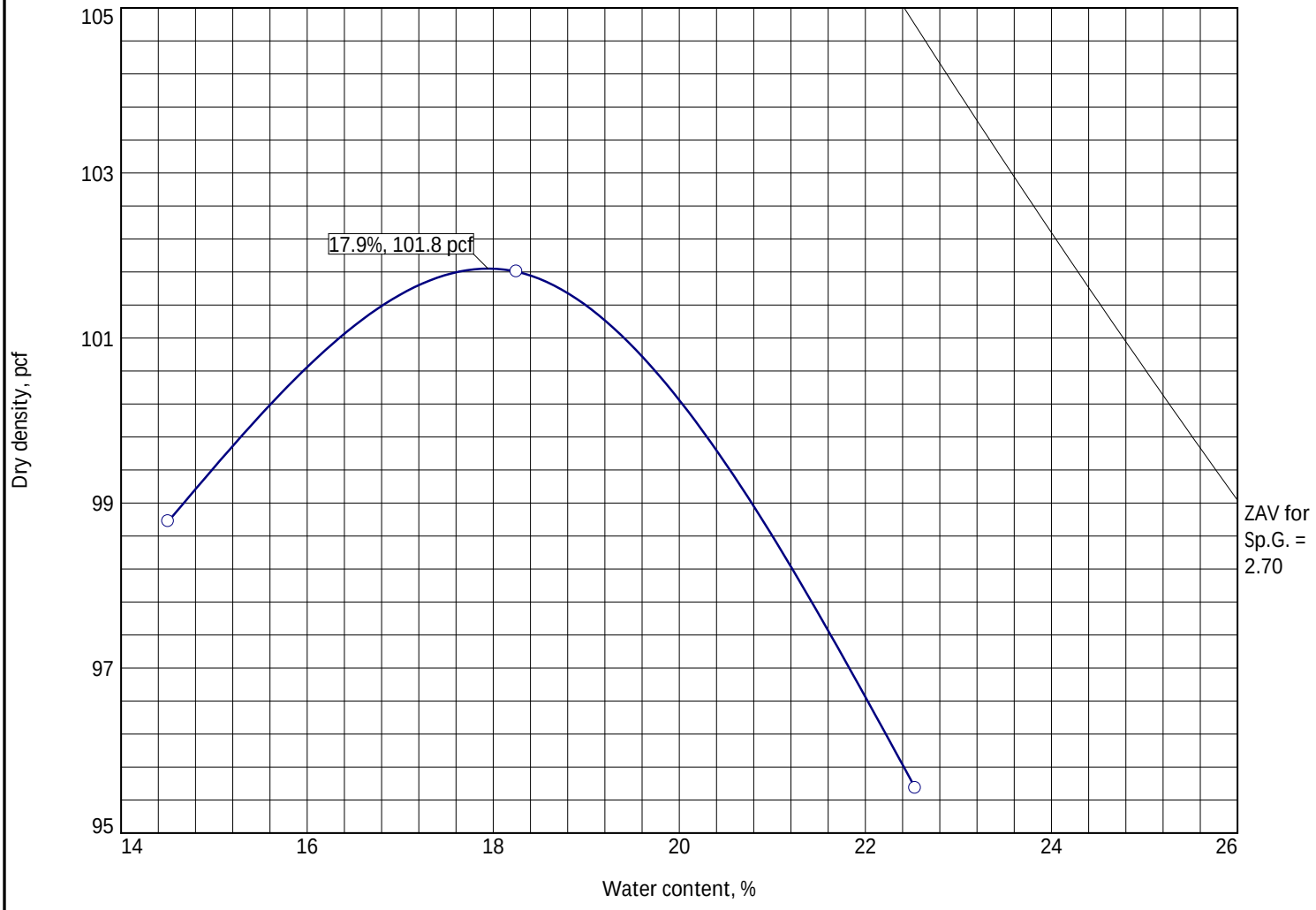
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(7) | | 2.7 | 30 | 9 | 0.0 | 85.6 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 101.8 pcf<br>Optimum moisture = 17.9 % | Brown lean clay |

Project No. IRN 25-T-215 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/11/2025

○ Sample Number: PV-081, TRT

ANS CONSULTANTS, INC.

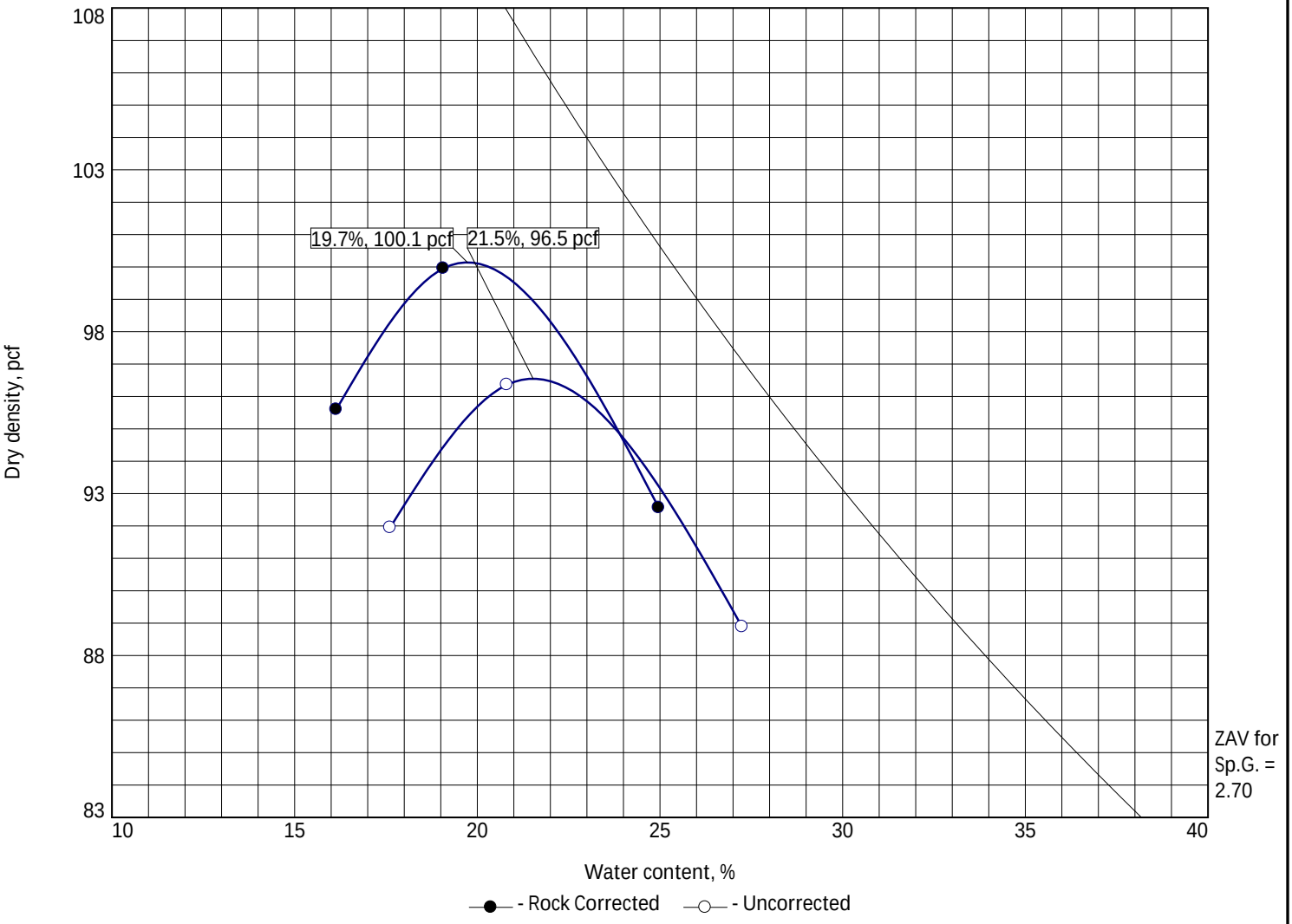
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CH | A-7-5(32) | | 2.7 | 68 | 38 | 8.4 | 77.3 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 100.1 pcf | 96.5 pcf | Gray fat clay with sand |
| Optimum moisture = 19.7 % | 21.5 % | |

Project No. IRN 25-T-215 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/11/2025
○ Sample Number: PV-084, TRT

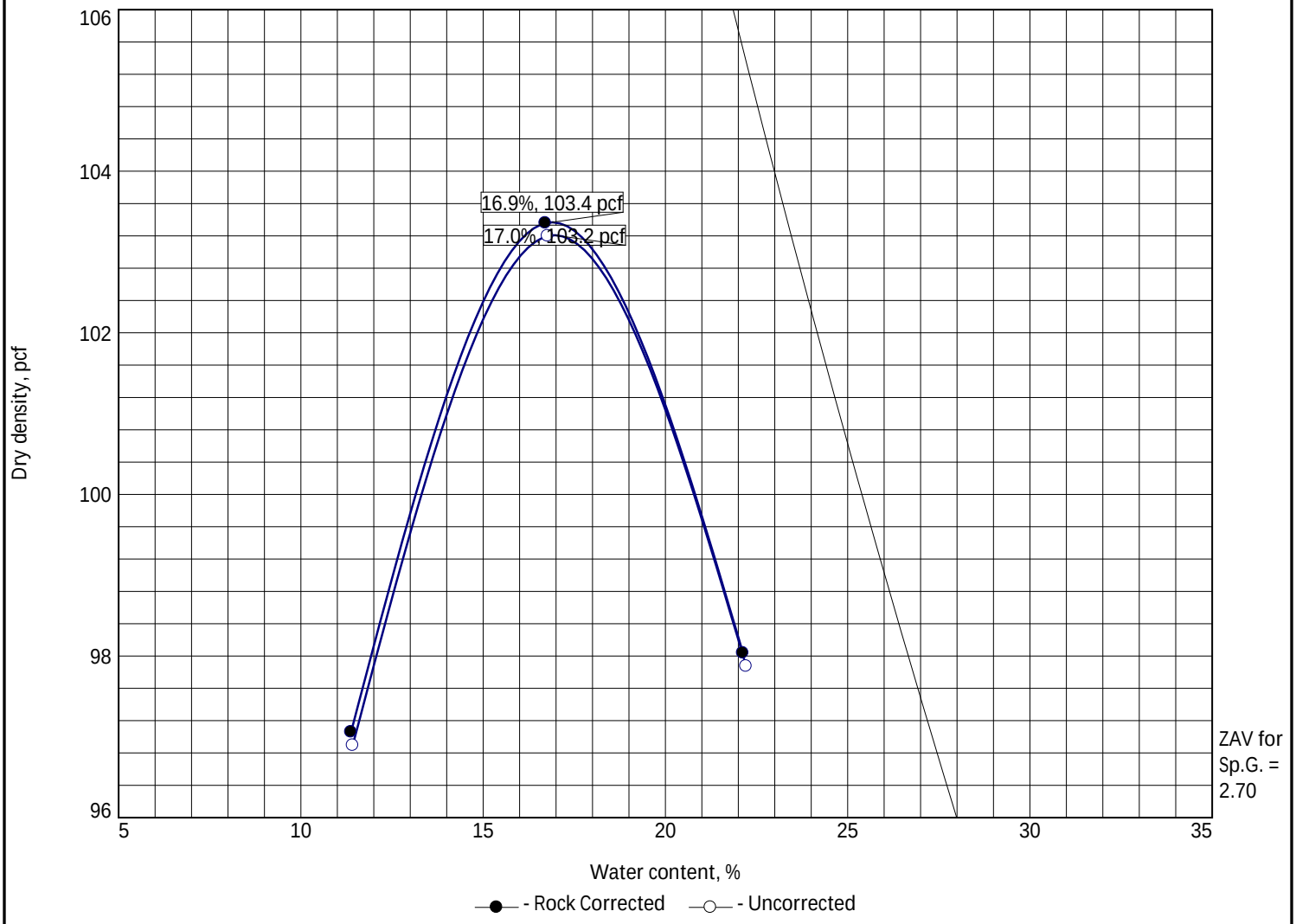
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 24 | 5 | 0.4 | 58.7 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 103.4 pcf | 103.2 pcf | Brown sandy silty clay |
| Optimum moisture = 16.9 % | 17.0 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-089, TRT

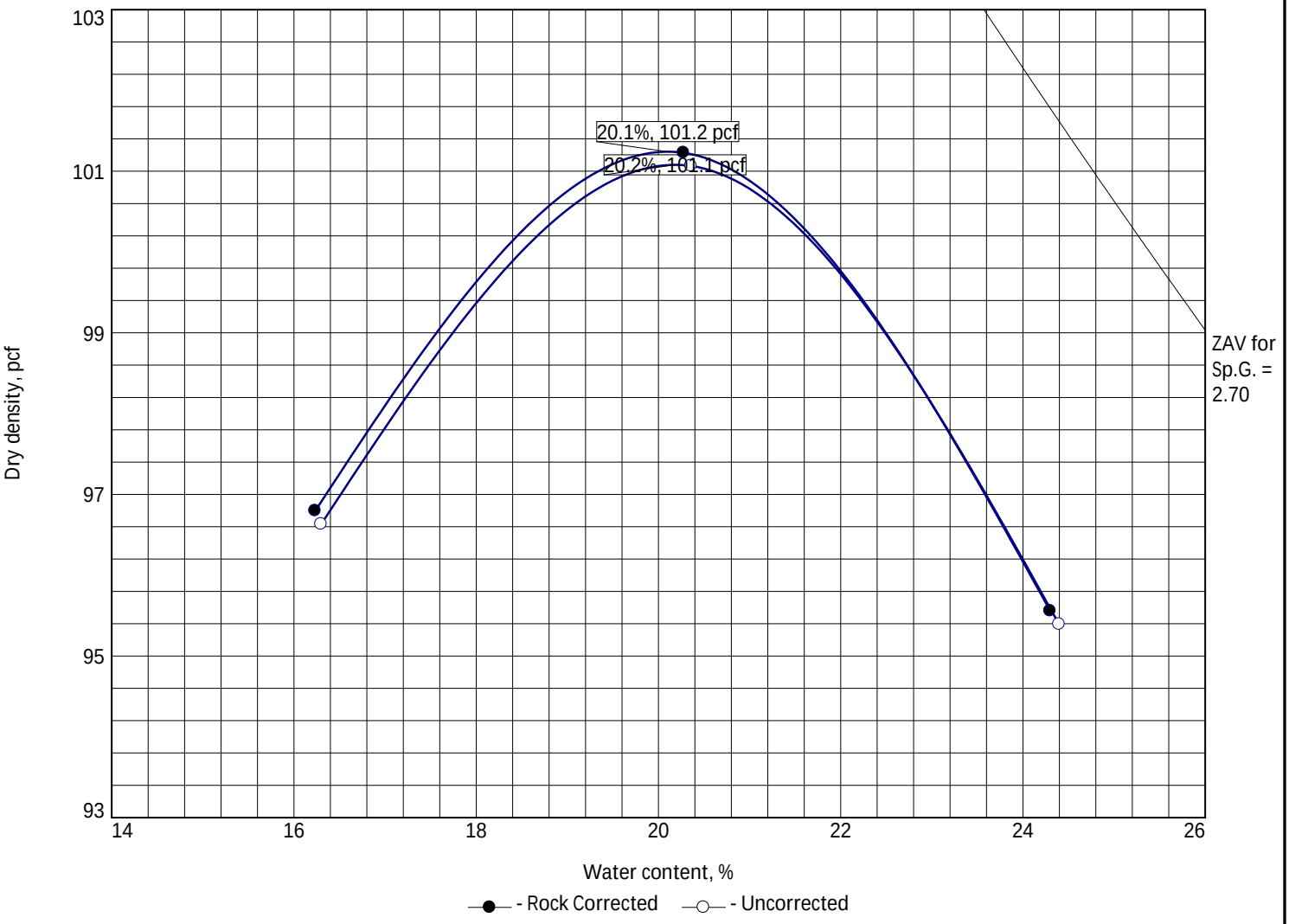
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(0) | | 2.7 | 19 | 5 | 0.4 | 52.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 101.2 pcf | 101.1 pcf | Brown sandy silty clay |
| Optimum moisture = 20.1 % | 20.2 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-090, TRT

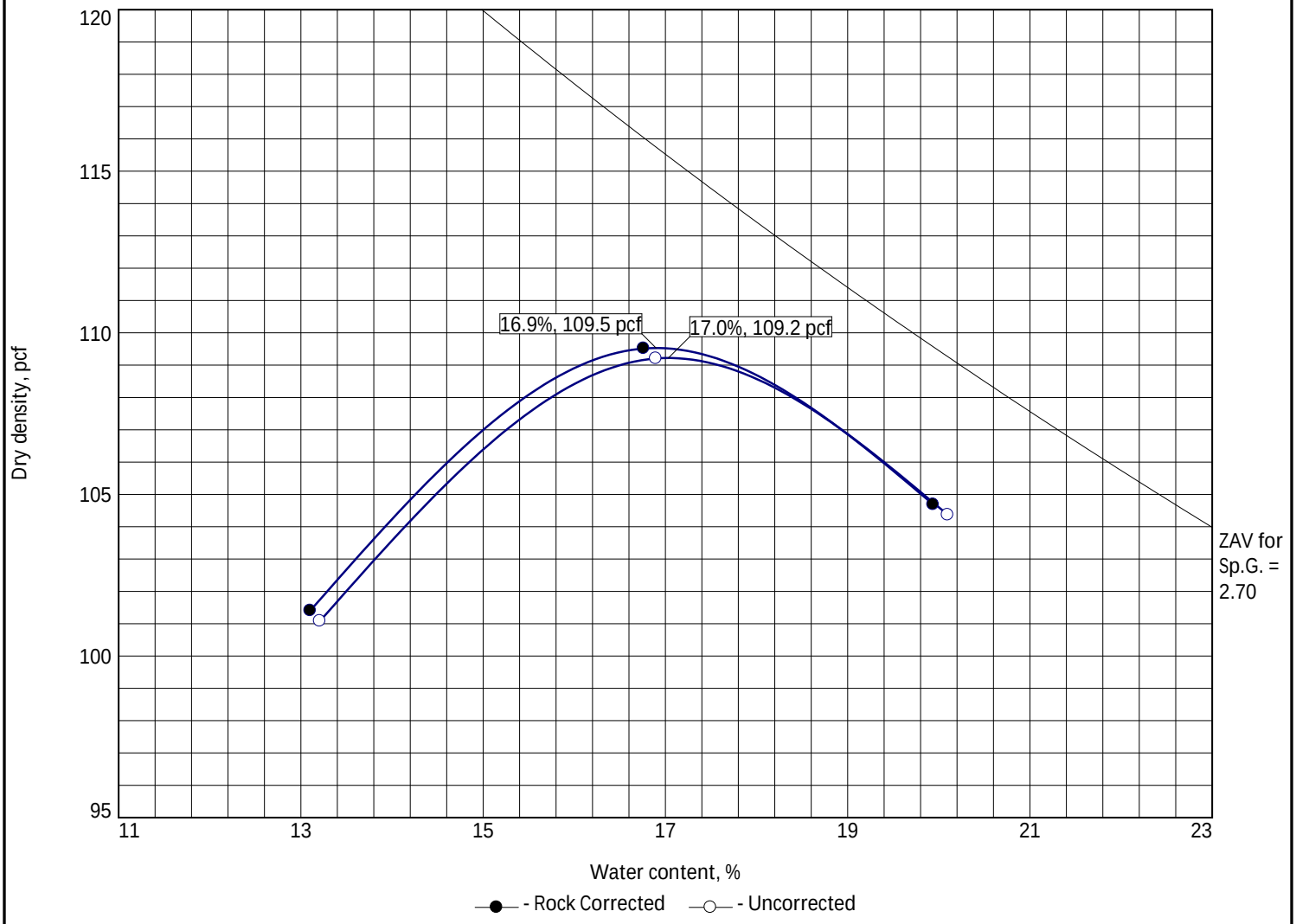
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 25 | 5 | 0.8 | 61.3 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 109.5 pcf | 109.2 pcf | Brown sandy silty clay |
| Optimum moisture = 16.9 % | 17.0 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-095, TRT

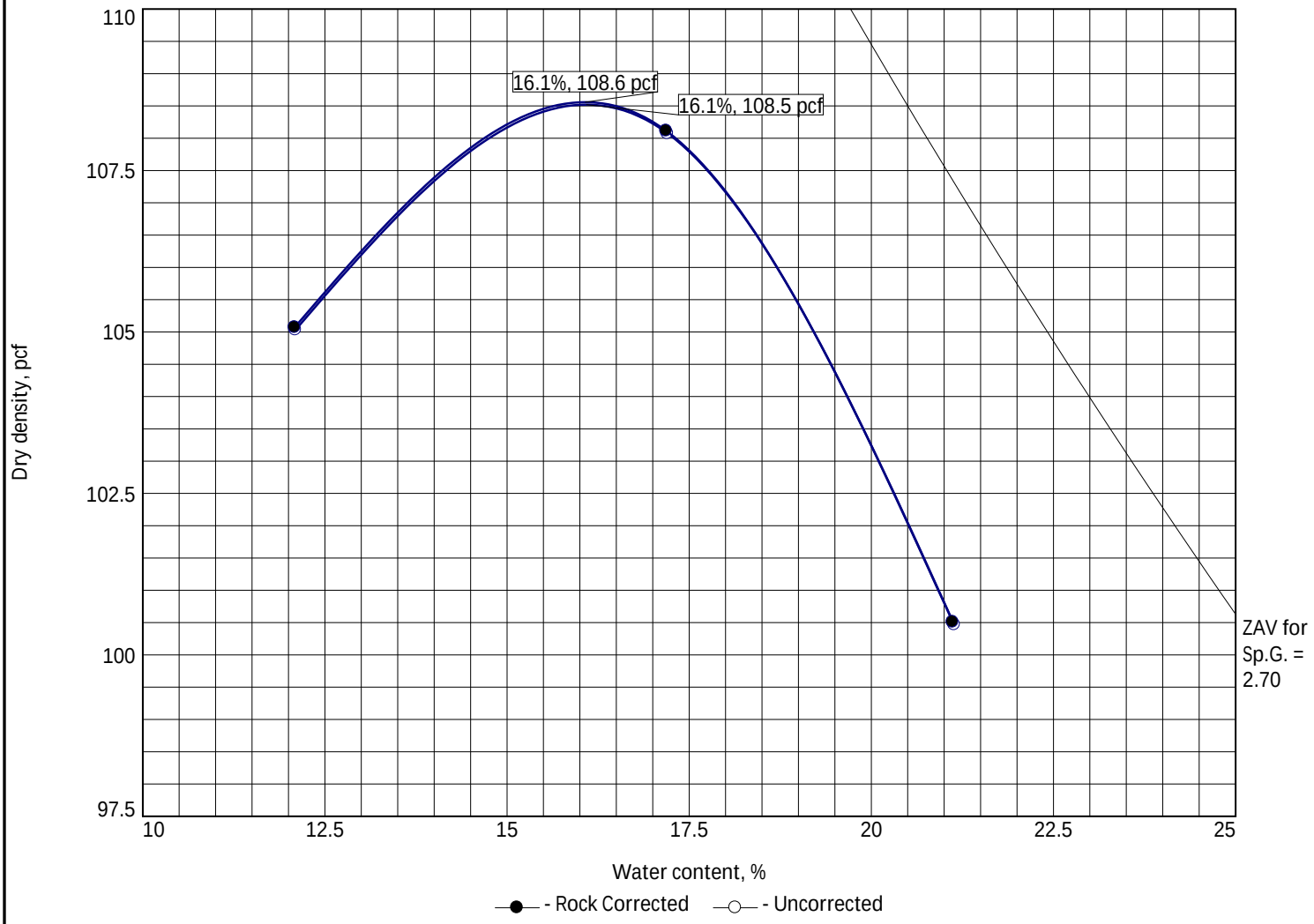
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(4) | | 2.7 | 27 | 7 | 0.1 | 75.6 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 108.6 pcf | 108.5 pcf | Brown silty clay with sand |
| Optimum moisture = 16.1 % | 16.1 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-097, TRT

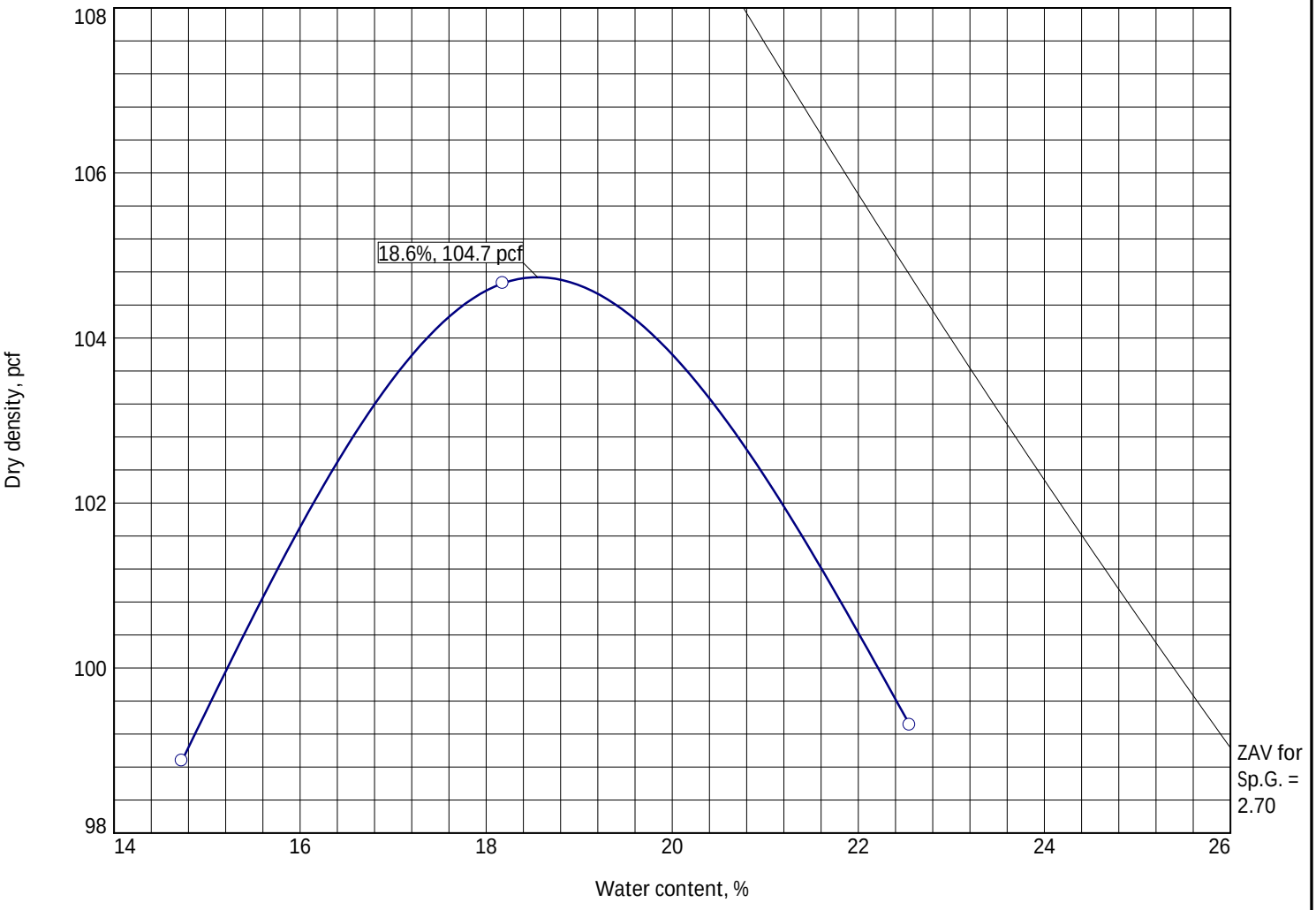
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(9) | | 2.7 | 32 | 11 | 0.0 | 84.6 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 104.7 pcf<br>Optimum moisture = 18.6 % | Brown lean clay with sand |

Project No. IRN 25-T-215 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/11/2025

○ Sample Number: PV-100, TRT

Remarks:
SG Assumed

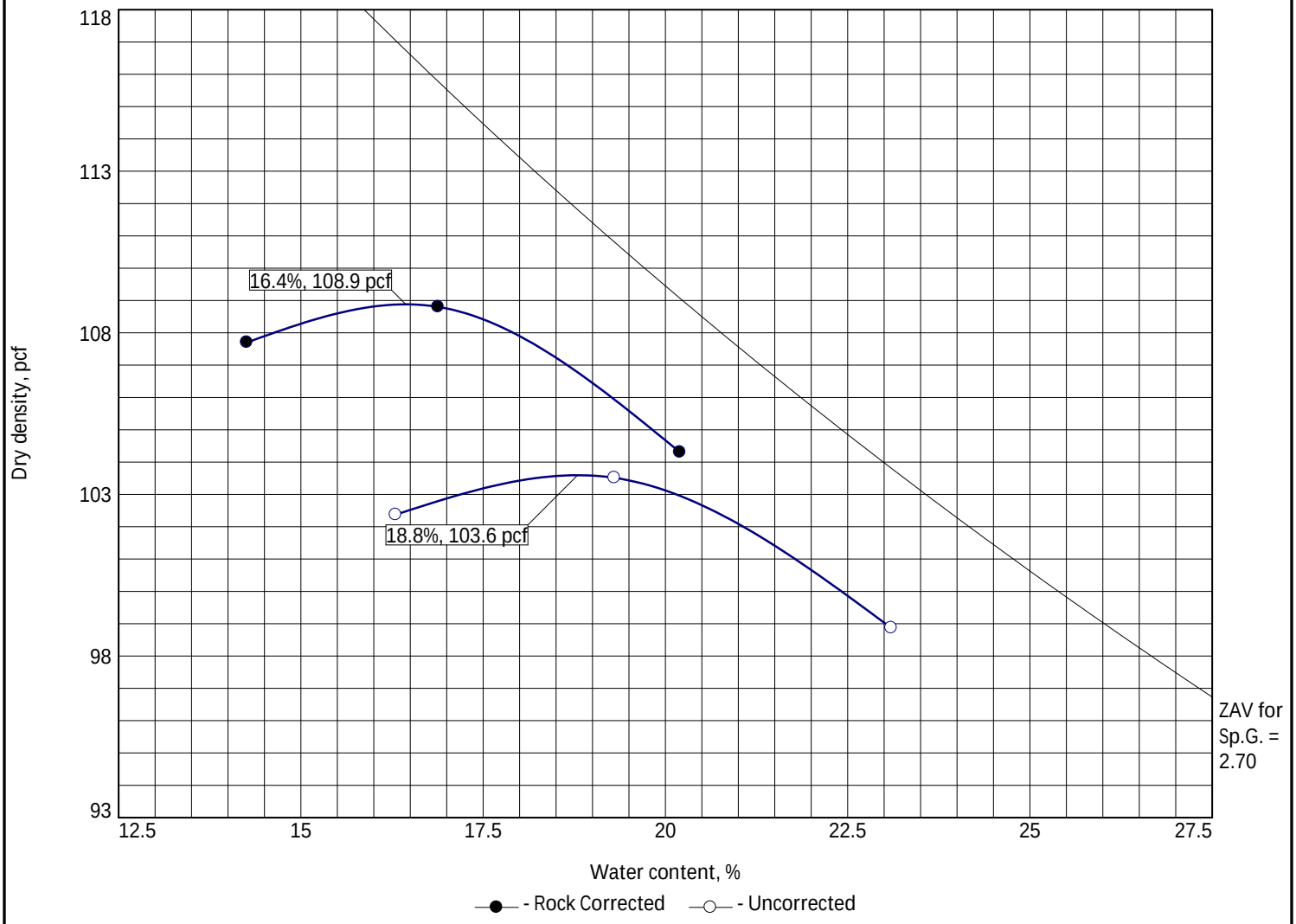
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: ES Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | SM | A-2-4(0) | | 2.7 | 27 | 4 | 12.6 | 29.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 108.9 pcf | 103.6 pcf | Brown silty sand with gravel |
| Optimum moisture = 16.4 % | 18.8 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-105, TRT

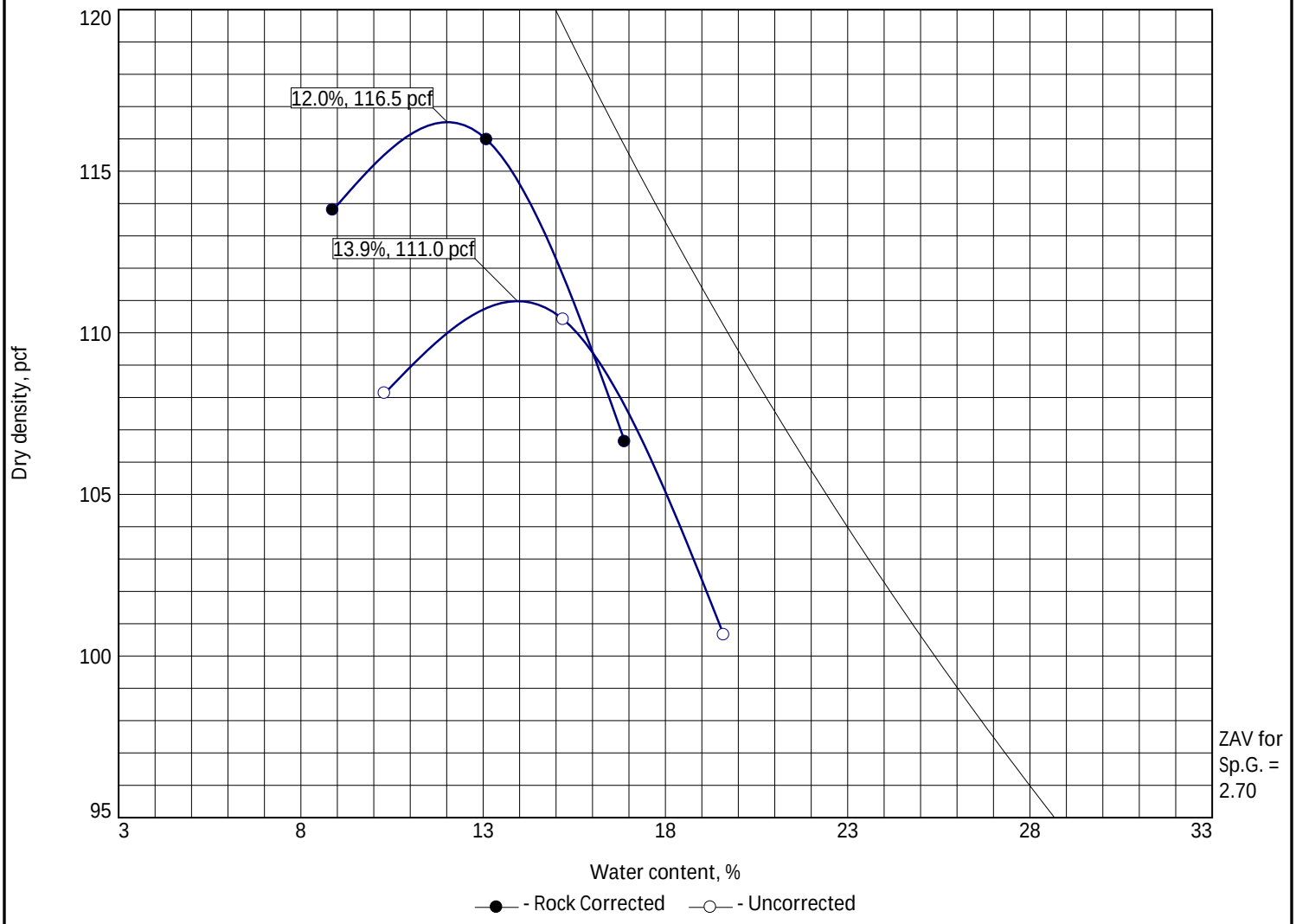
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-2-4(0) | | 2.7 | 25 | 4 | 13.9 | 30.7 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 116.5 pcf | 111.0 pcf | Brown silty, clayey sand with gravel |
| Optimum moisture = 12.0 % | 13.9 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-109, TRT

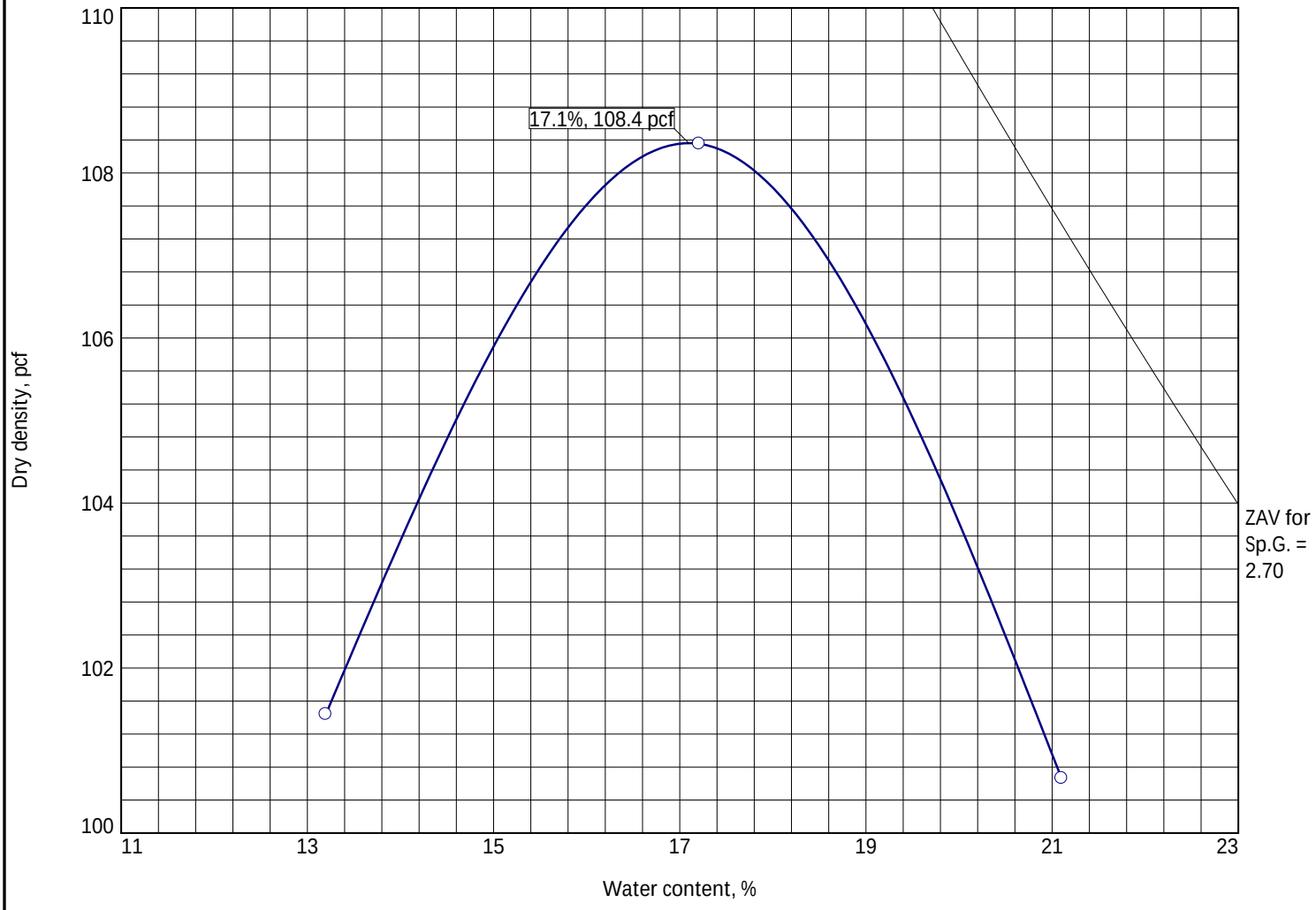
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(0) | | 2.7 | 23 | 5 | 0.0 | 53.0 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 108.4 pcf<br>Optimum moisture = 17.1 % | Brown sandy silty clay |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 10/22/2025

○ Sample Number: PV-111, TRT

ANS CONSULTANTS, INC.

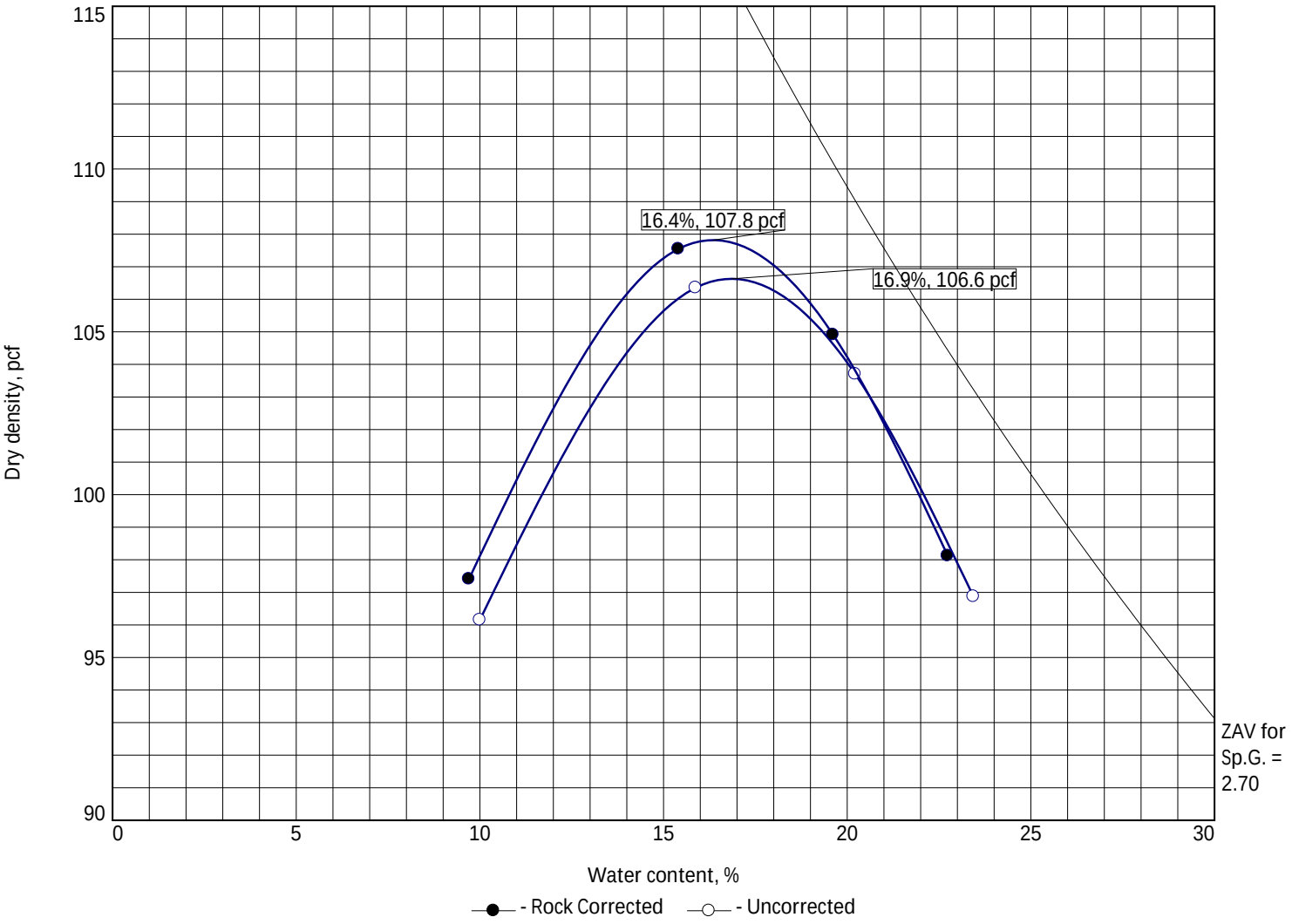
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SM | A-2-4(0) | | 2.7 | 31 | 6 | 3.0 | 29.9 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 107.8 pcf | 106.6 pcf | Brown silty sand |
| Optimum moisture = 16.4 % | 16.9 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-114, TRT

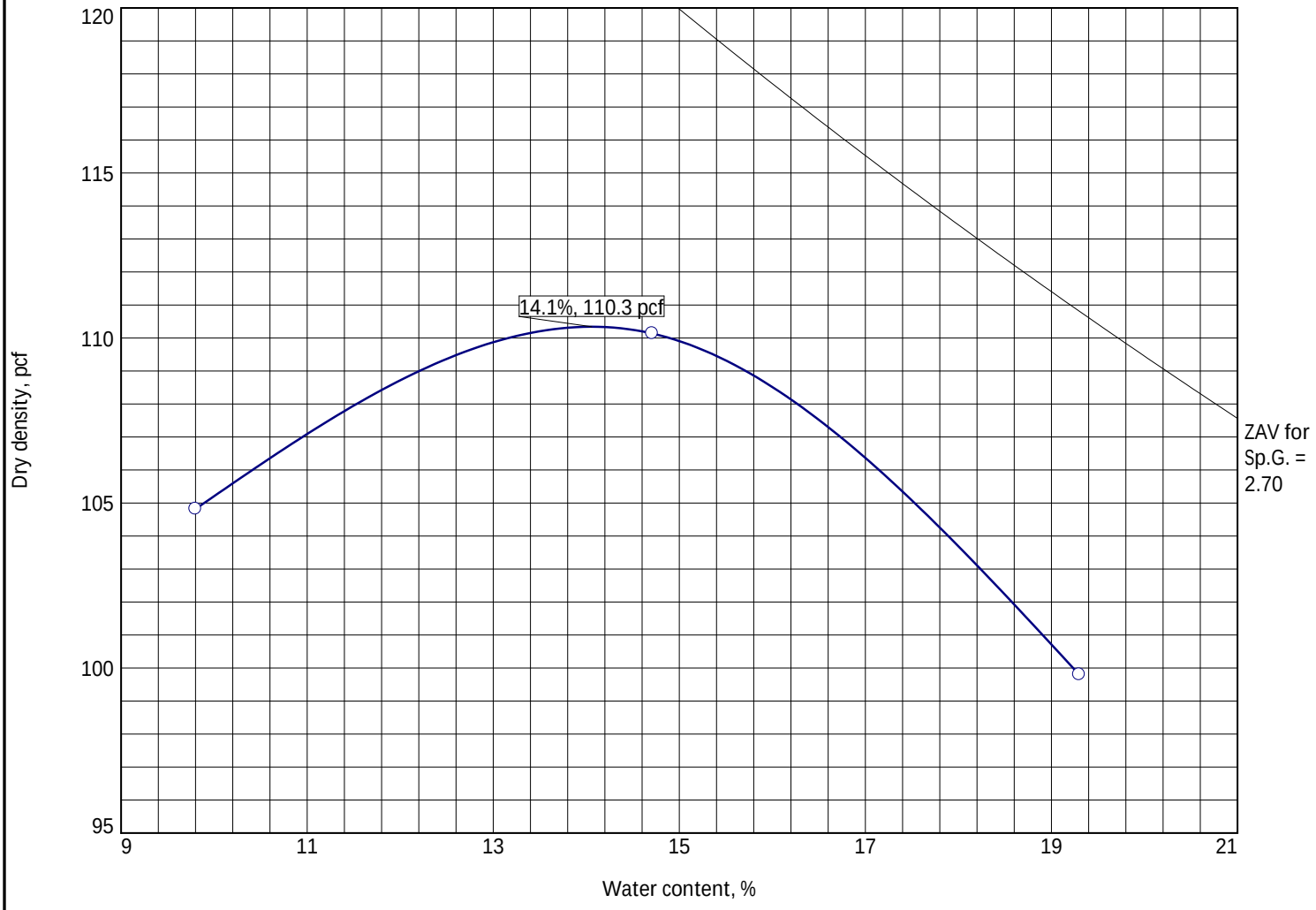
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | CL-ML | A-4(3) | | 2.7 | 27 | 7 | 0.0 | 70.9 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 110.3 pcf<br>Optimum moisture = 14.1 % | Brown silty clay with sand |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 10/22/2025

○ Sample Number: PV-119, TRT

Remarks:
SG Assumed

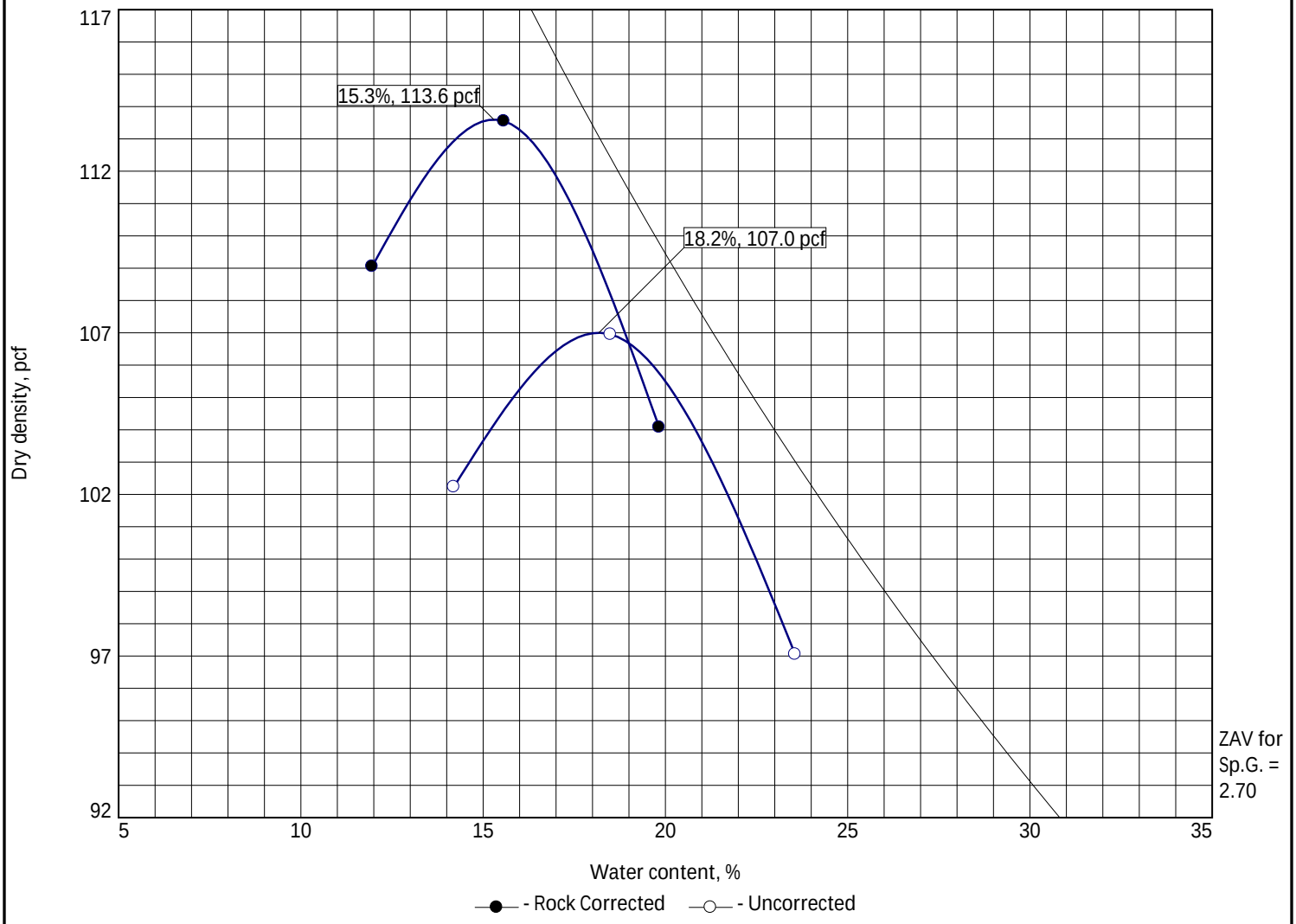
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC | A-2-6(0) | | 2.7 | 33 | 11 | 15.9 | 34.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 113.6 pcf | 107.0 pcf | Brown clayey sand with gravel |
| Optimum moisture = 15.3 % | 18.2 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-121, TRT

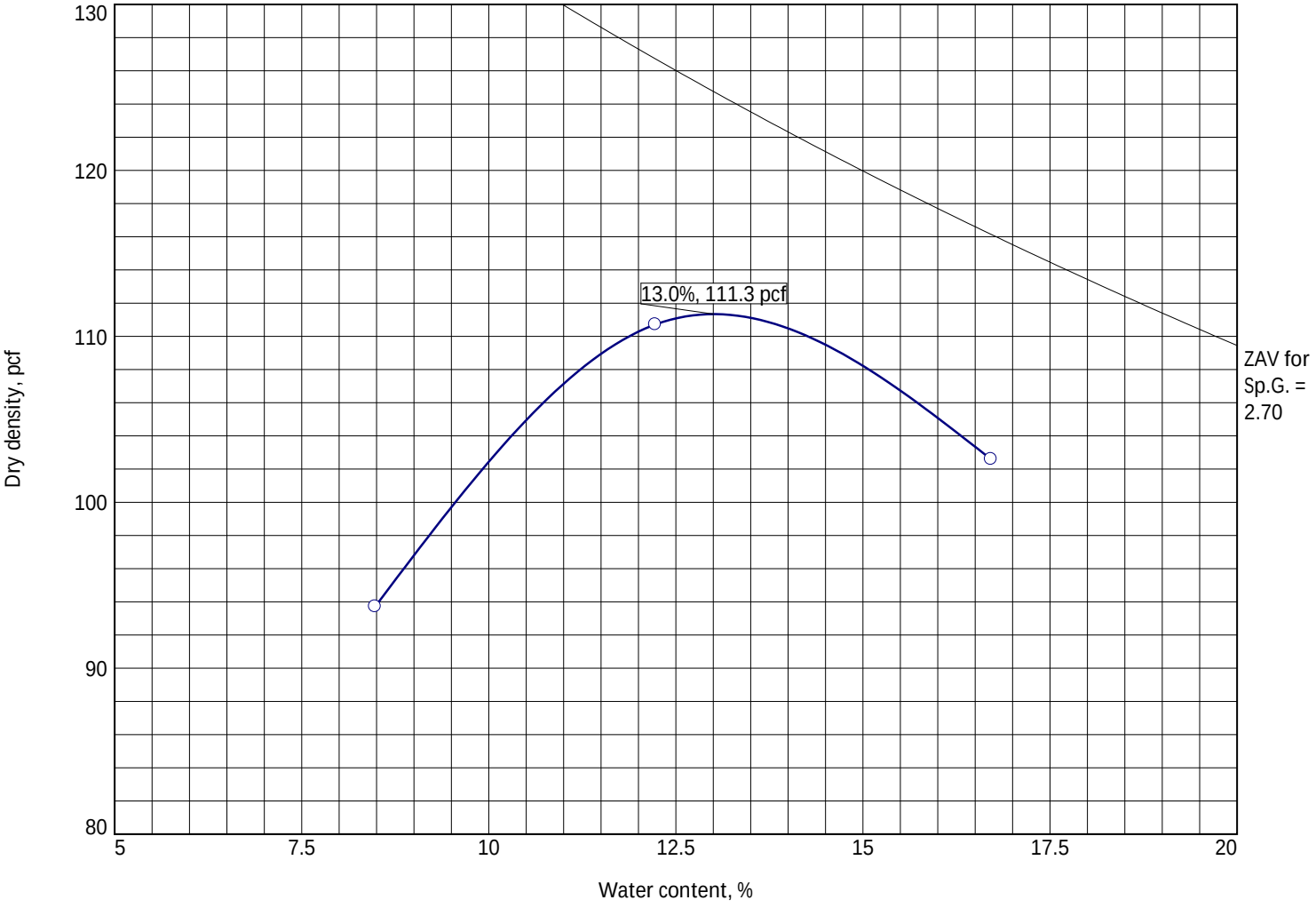
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | ML | A-4(0) | | 2.7 | NV | NP | 0.0 | 58.7 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 111.3 pcf<br>Optimum moisture = 13.0 % | Brown sandy silt |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 10/22/2025

○ Sample Number: PV-123, TRT

ANS CONSULTANTS, INC.

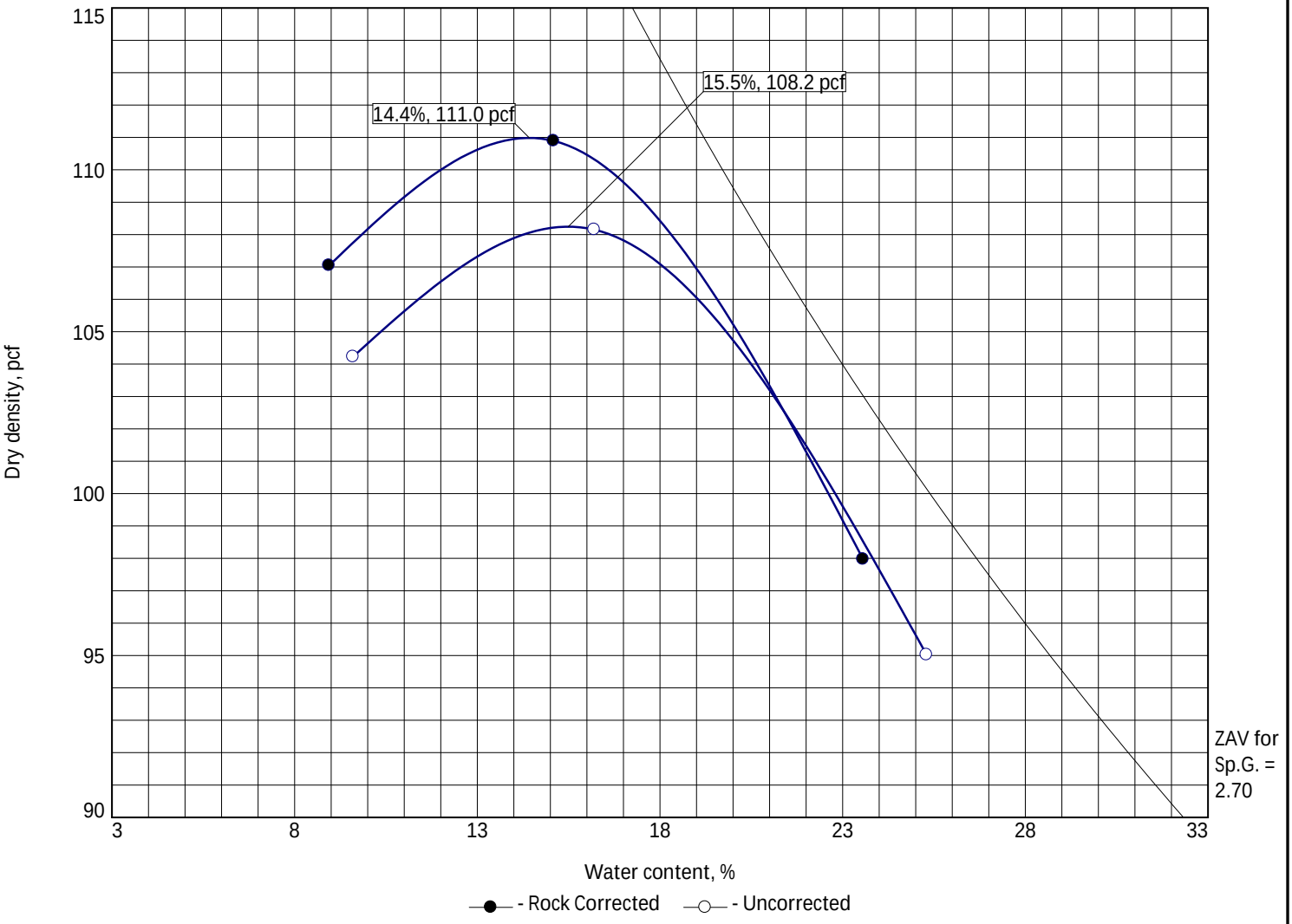
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | ML | A-4(3) | | 2.7 | 34 | 9 | 6.9 | 54.7 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 111.0 pcf | 108.2 pcf | Brown sandy silt |
| Optimum moisture = 14.4 % | 15.5 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-126, TRT

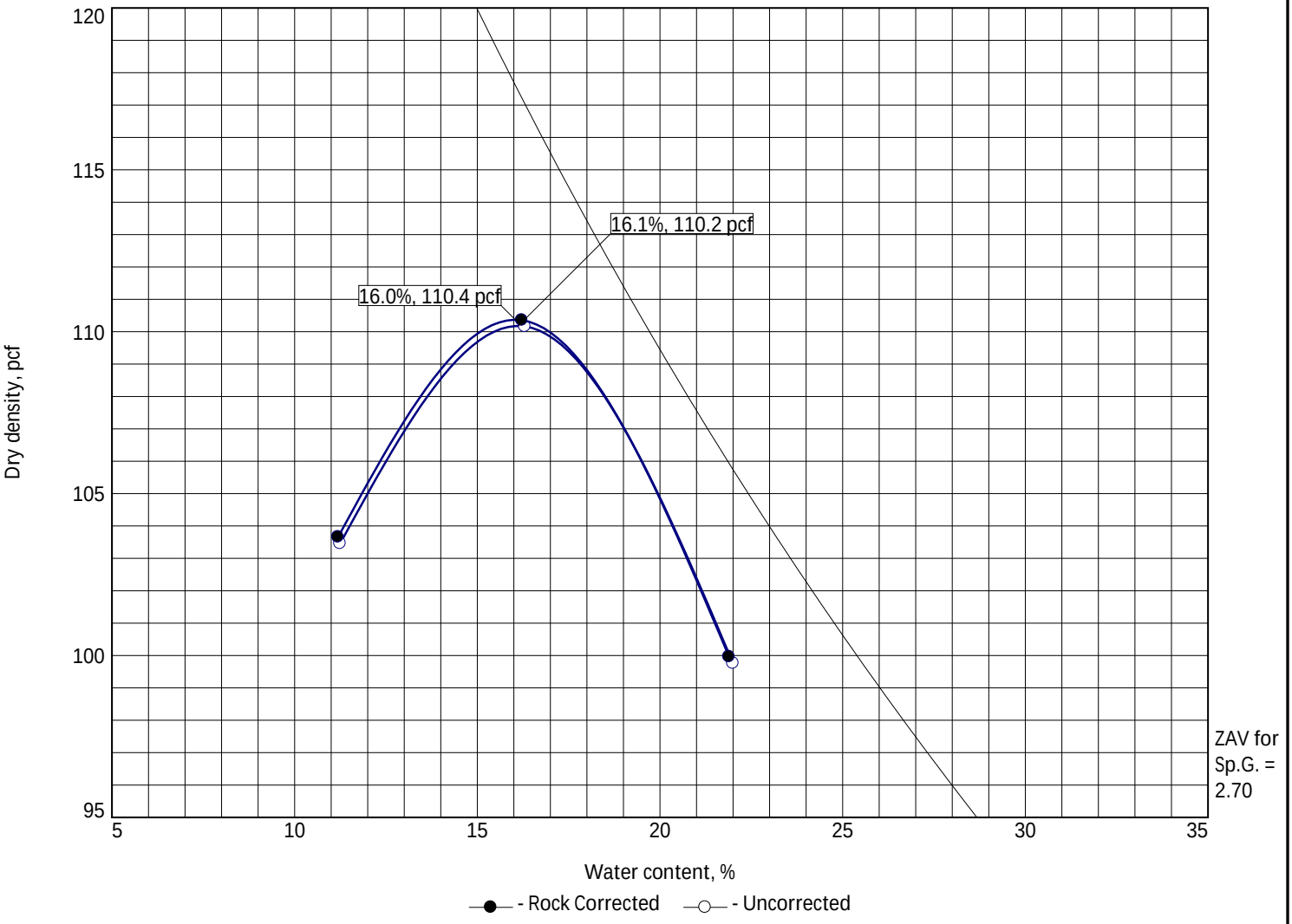
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(0) | | 2.7 | 20 | 5 | 0.5 | 58.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.4 pcf | 110.2 pcf | Brown sandy silty clay |
| Optimum moisture = 16.0 % | 16.1 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-127, TRT

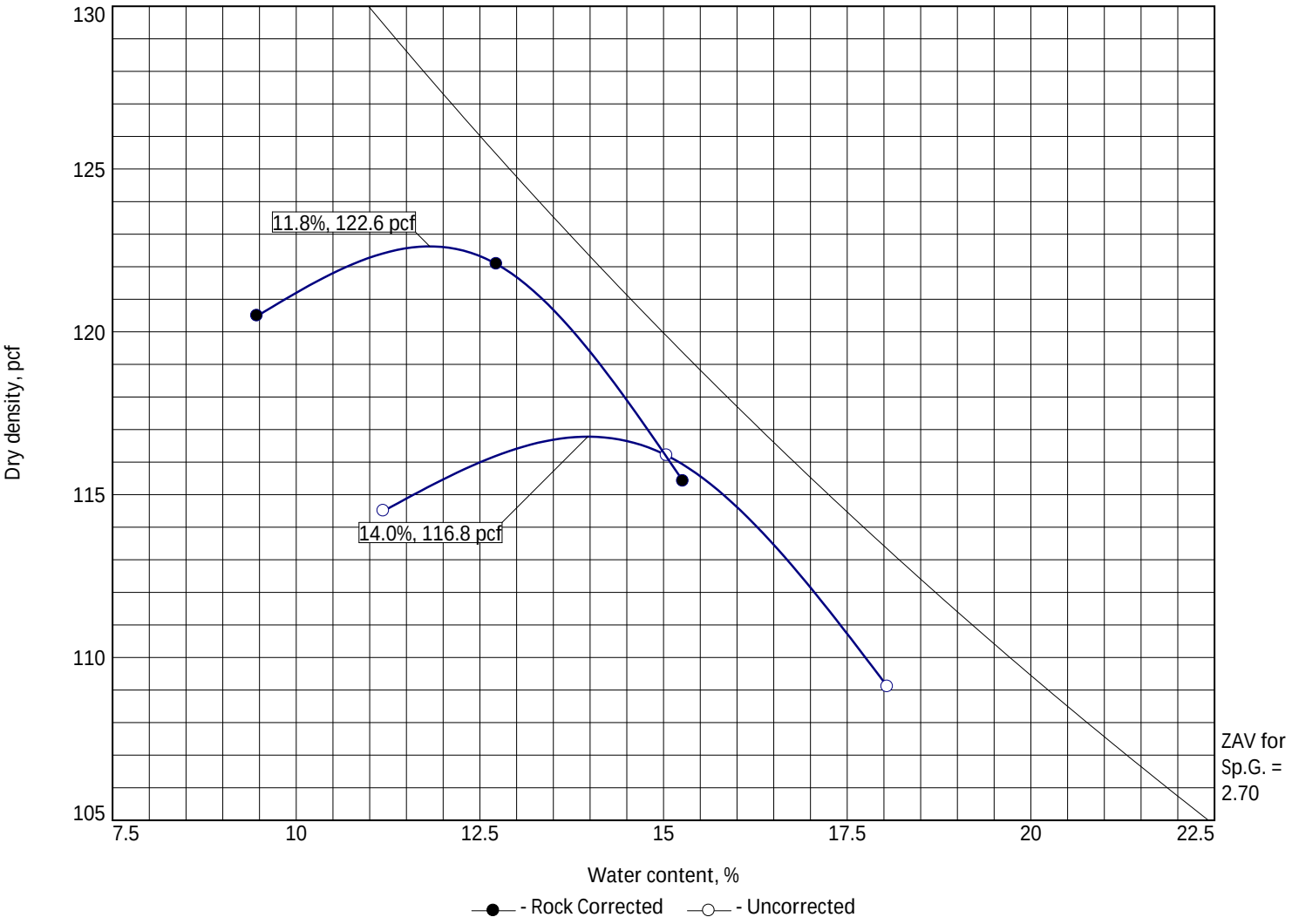
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 27 | 7 | 15.5 | 36.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 122.6 pcf | 116.8 pcf | Brown silty, clayey sand with gravel |
| Optimum moisture = 11.8 % | 14.0 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-132, TRT

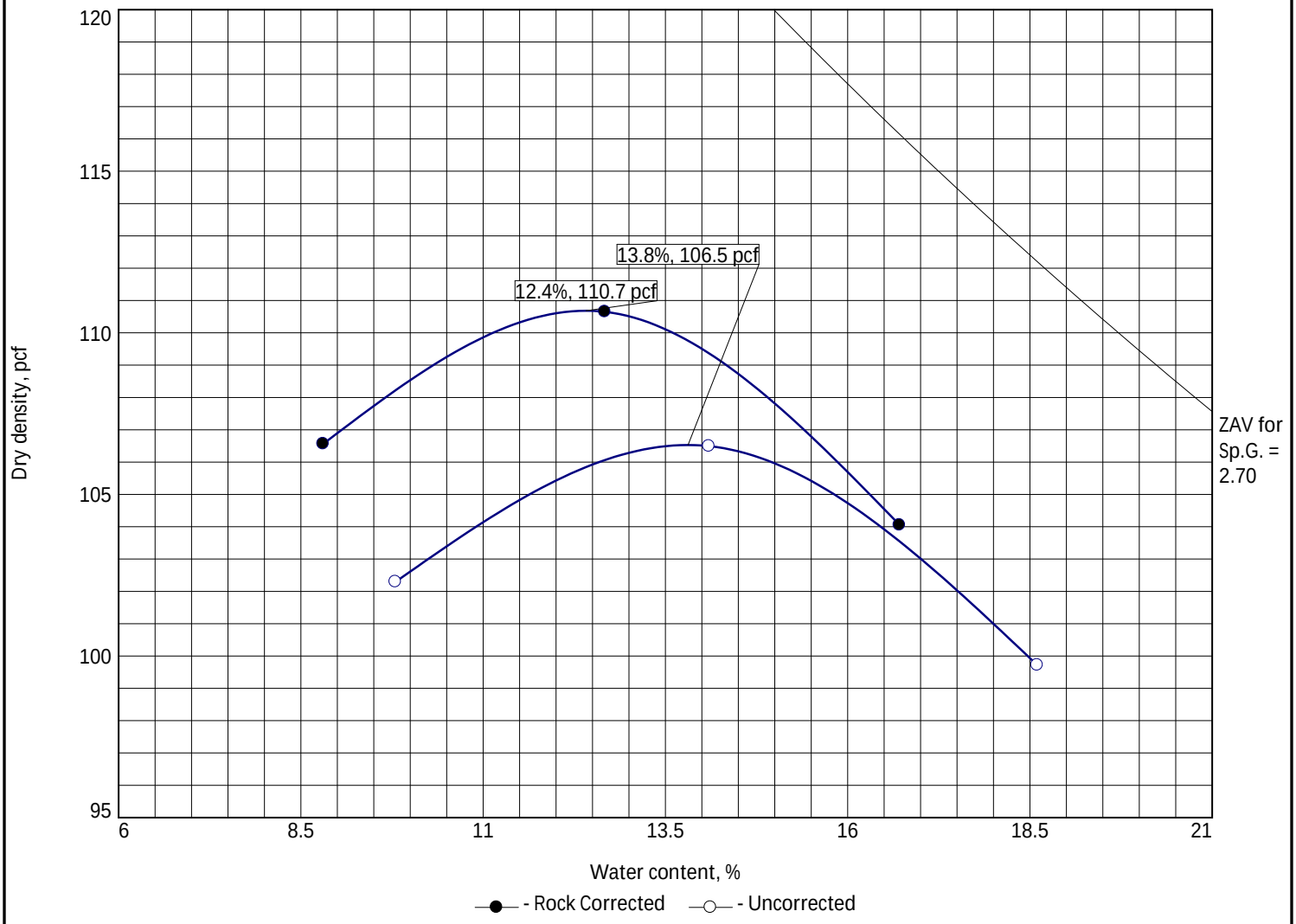
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SM | A-4(0) | | 2.7 | 29 | 5 | 10.2 | 43.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.7 pcf | 106.5 pcf | Brown silty sand with gravel |
| Optimum moisture = 12.4 % | 13.8 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-137, TRT

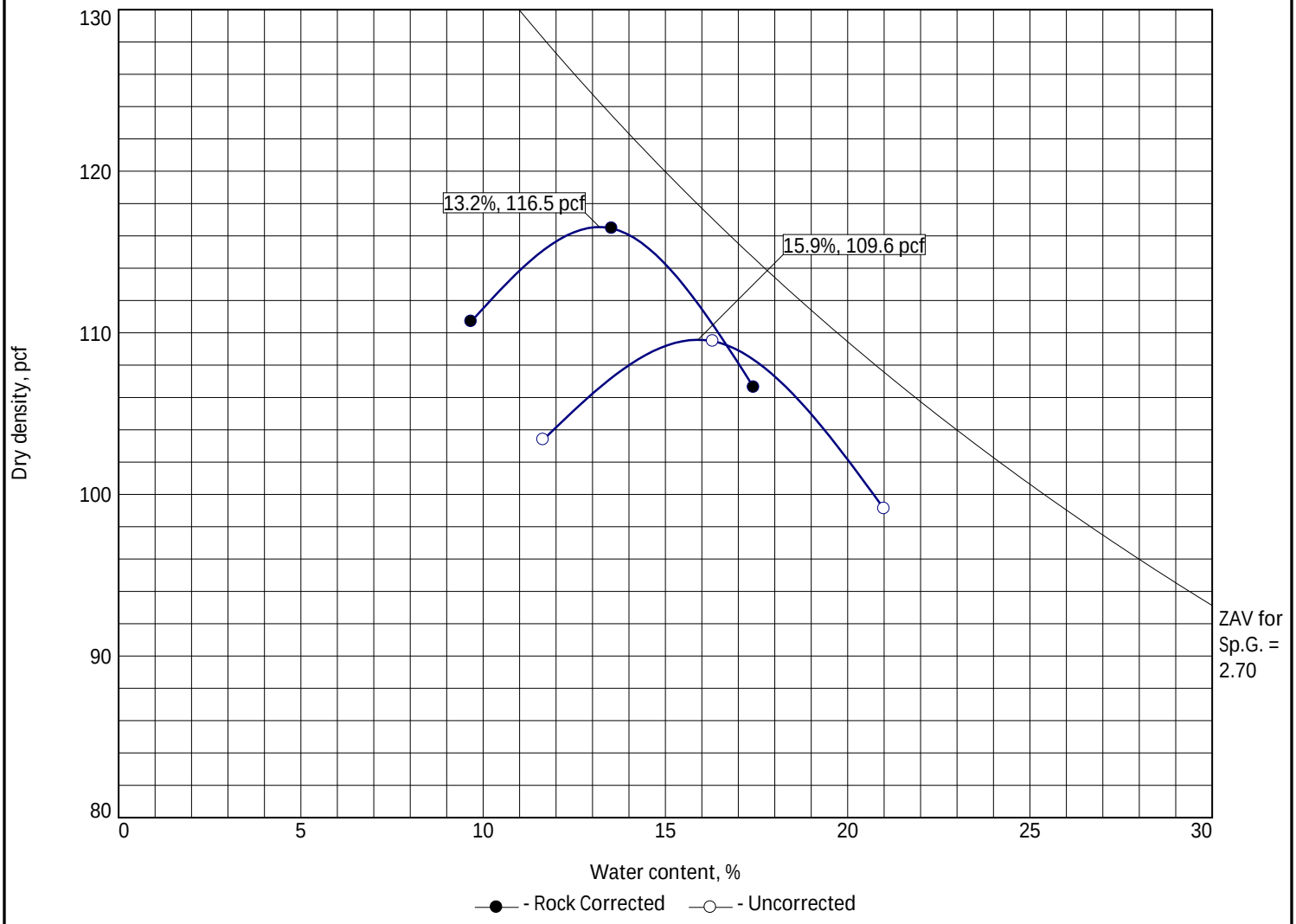
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | ML | A-4(2) | | 2.7 | 29 | 6 | 17.1 | 60.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 116.5 pcf | 109.6 pcf | Brown sandy silt with gravel |
| Optimum moisture = 13.2 % | 15.9 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-142, TRT

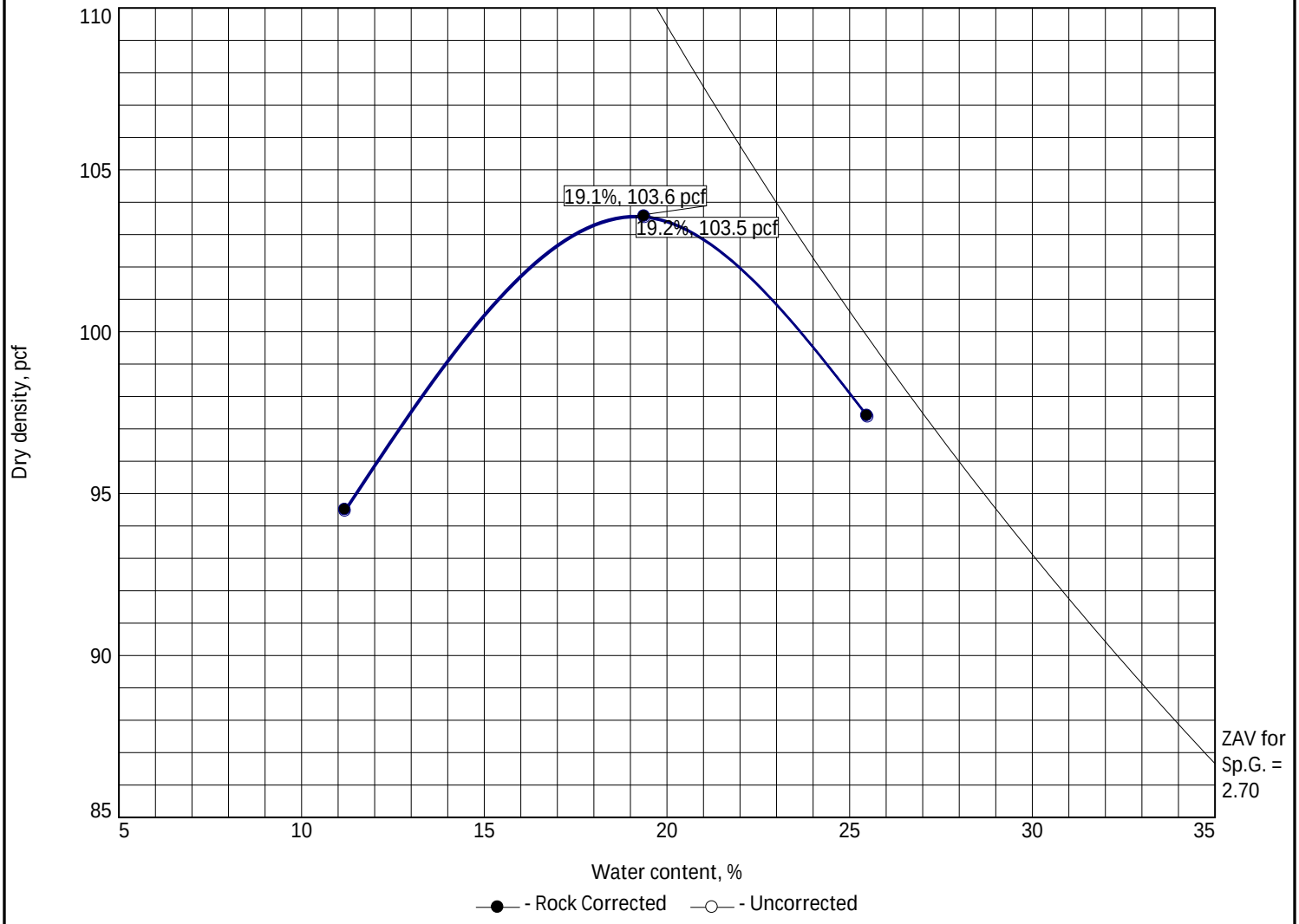
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 24 | 5 | 0.1 | 65.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 103.6 pcf | 103.5 pcf | Brown sandy silty clay |
| Optimum moisture = 19.1 % | 19.2 % | |

Project No. IRN 25-N-597 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 10/22/2025
○ Sample Number: PV-144, TRT

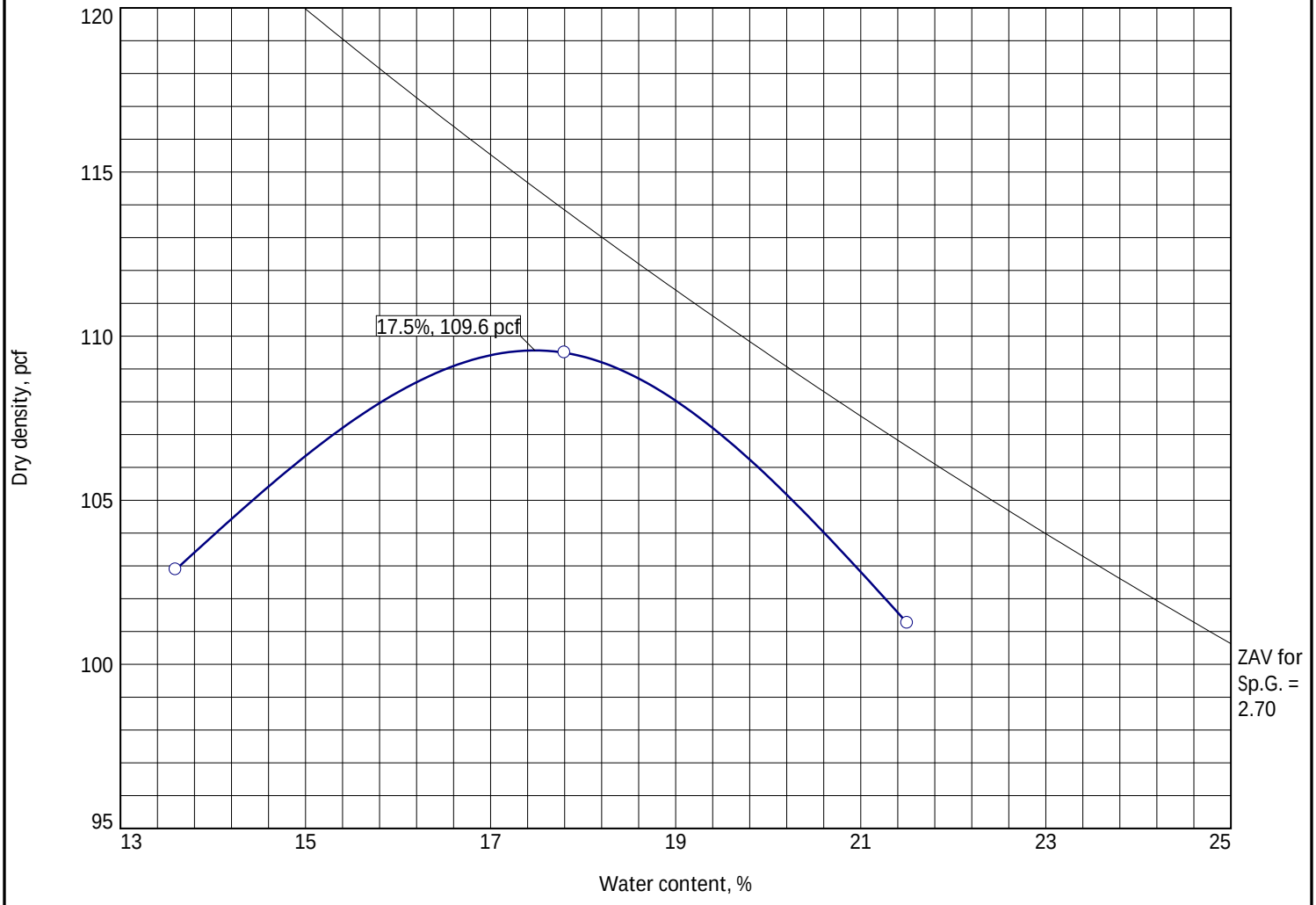
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: ST Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(1) | | 2.7 | 20 | 6 | 0.0 | 57.9 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 109.6 pcf<br>Optimum moisture = 17.5 % | Brown sandy silty clay |

Project No. IRN 25-N-597 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 10/22/2025

○ Sample Number: PV-145, TRT

ANS CONSULTANTS, INC.

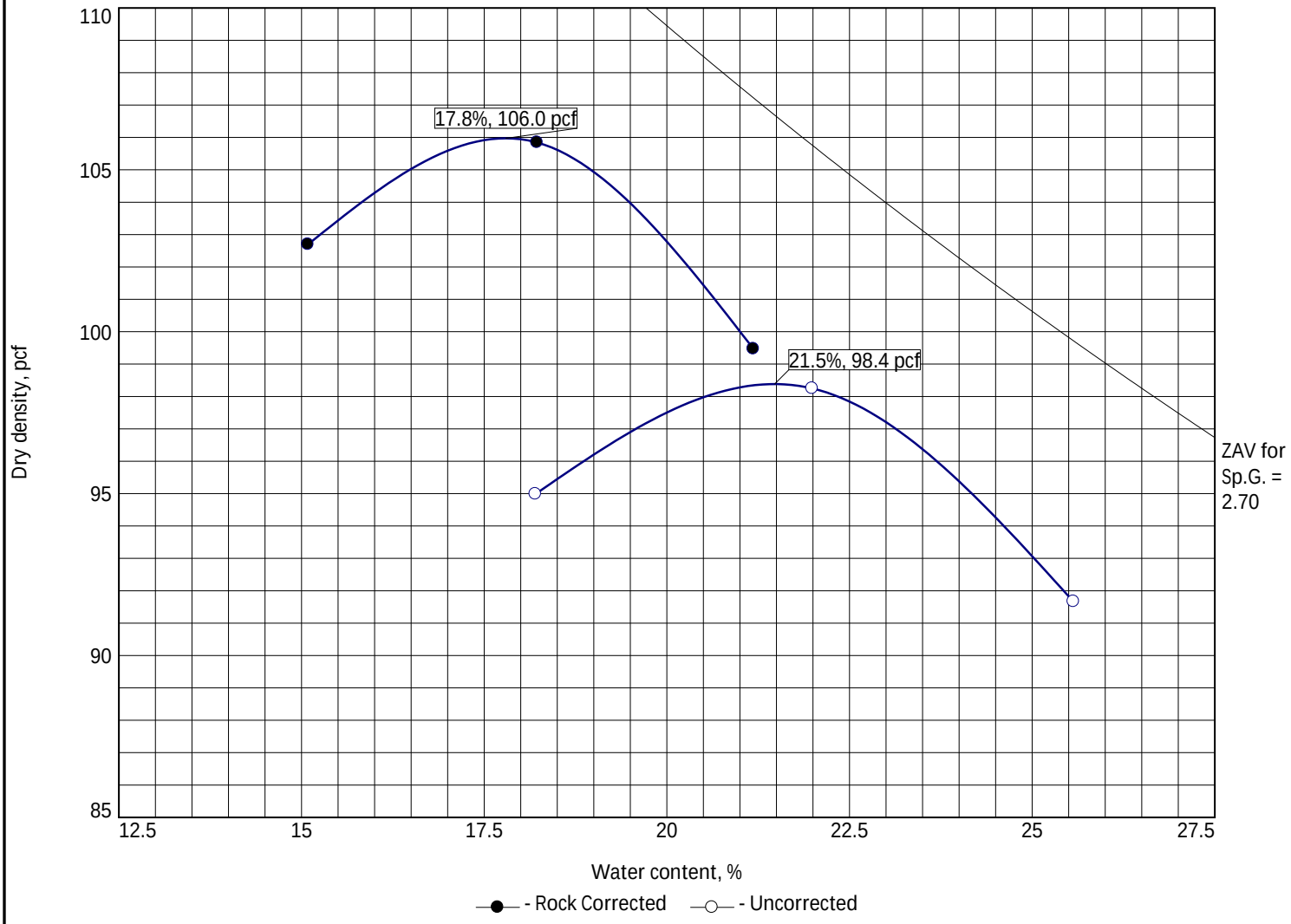
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | CL | A-6(4) | | 2.7 | 31 | 12 | 17.2 | 57.5 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 106.0 pcf | 98.4 pcf | Brown gravelly lean clay with sand |
| Optimum moisture = 17.8 % | 21.5 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-151, CBR/TRT

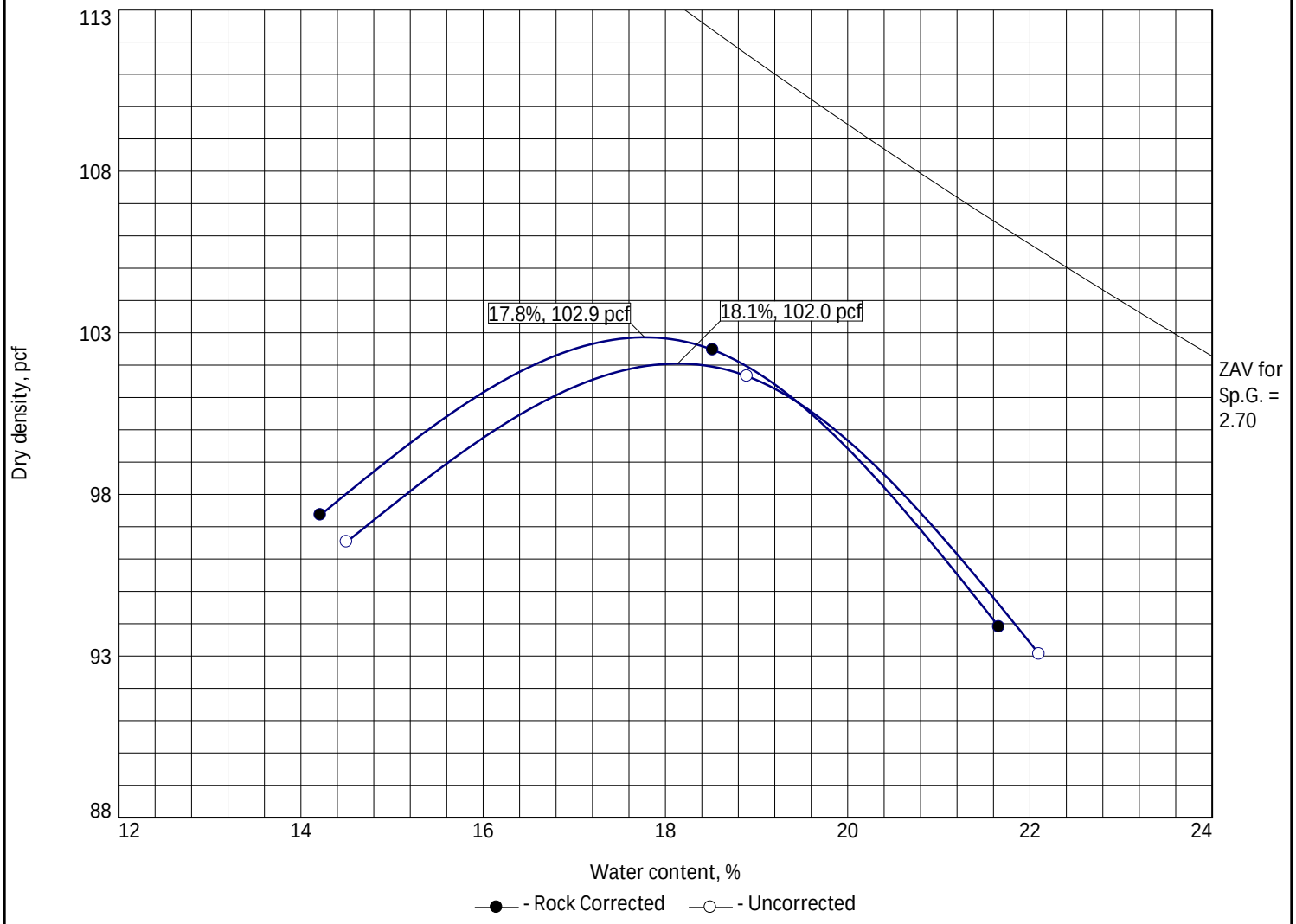
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(6) | | 2.7 | 31 | 12 | 2.0 | 68.8 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 102.9 pcf | 102.0 pcf | Brown sandy lean clay |
| Optimum moisture = 17.8 % | 18.1 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-154, TRT

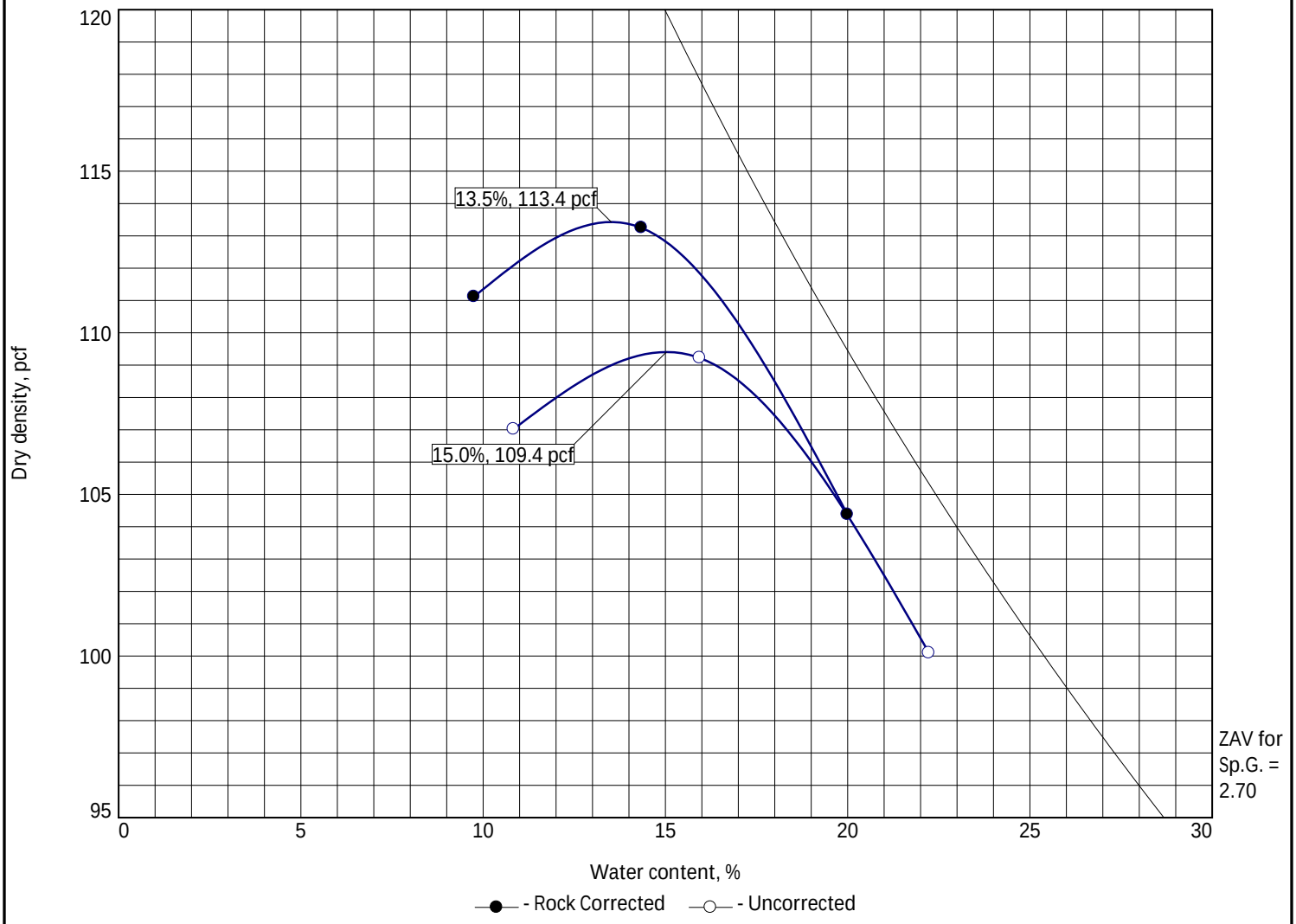
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(0) | | 2.7 | 25 | 5 | 10.1 | 52.5 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 113.4 pcf | 109.4 pcf | Brown sandy silty clay |
| Optimum moisture = 13.5 % | 15.0 % | |

Project No. IRN 25-N-653 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/14/2025
○ Sample Number: PV-158, TRT

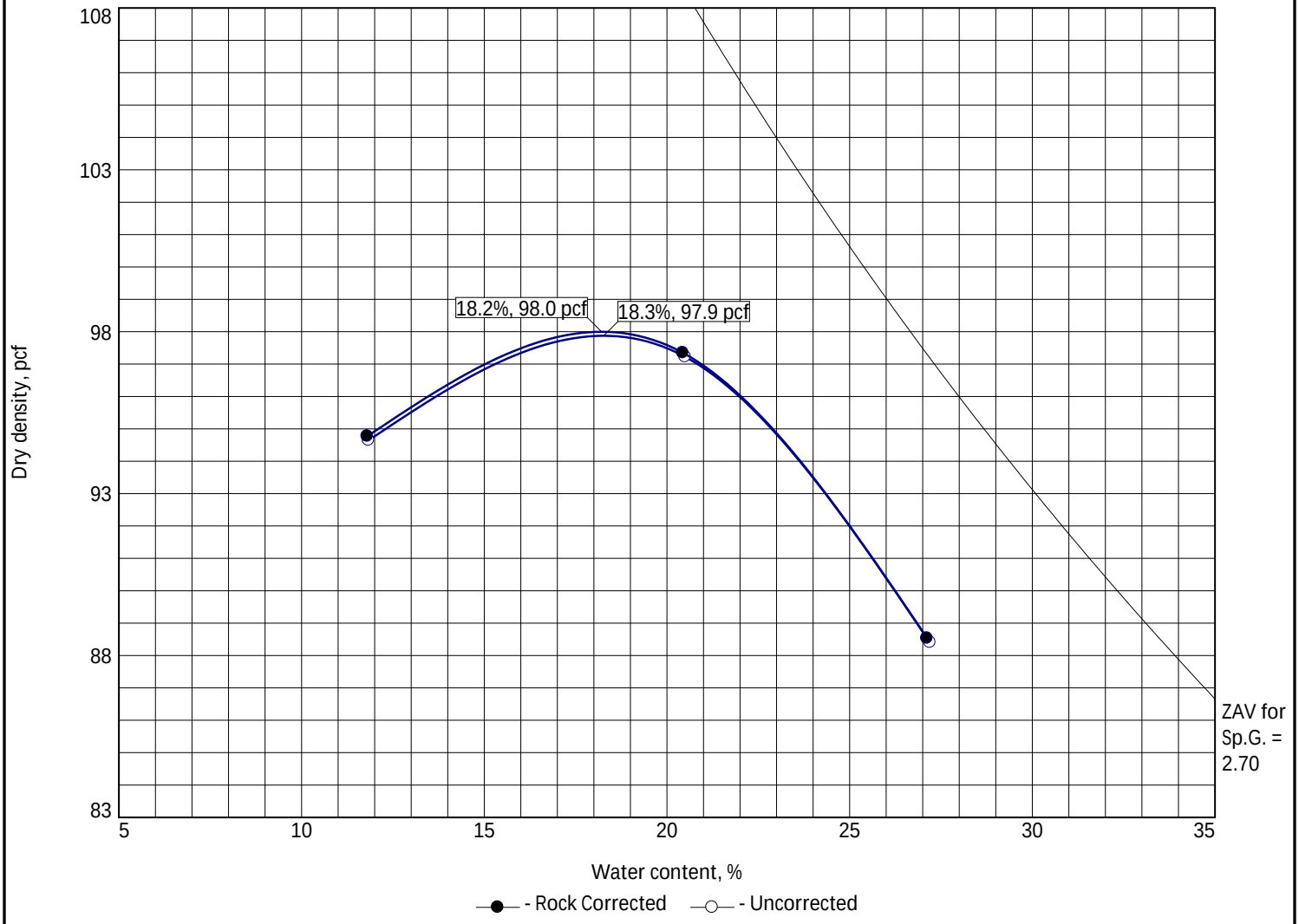
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC | A-4(1) | | 2.7 | 25 | 8 | 0.3 | 48.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 98.0 pcf | 97.9 pcf | Brown clayey sand |
| Optimum moisture = 18.2 % | 18.3 % | |

Project No. IRN 25-N-653 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/14/2025
○ Sample Number: PV-160, TRT

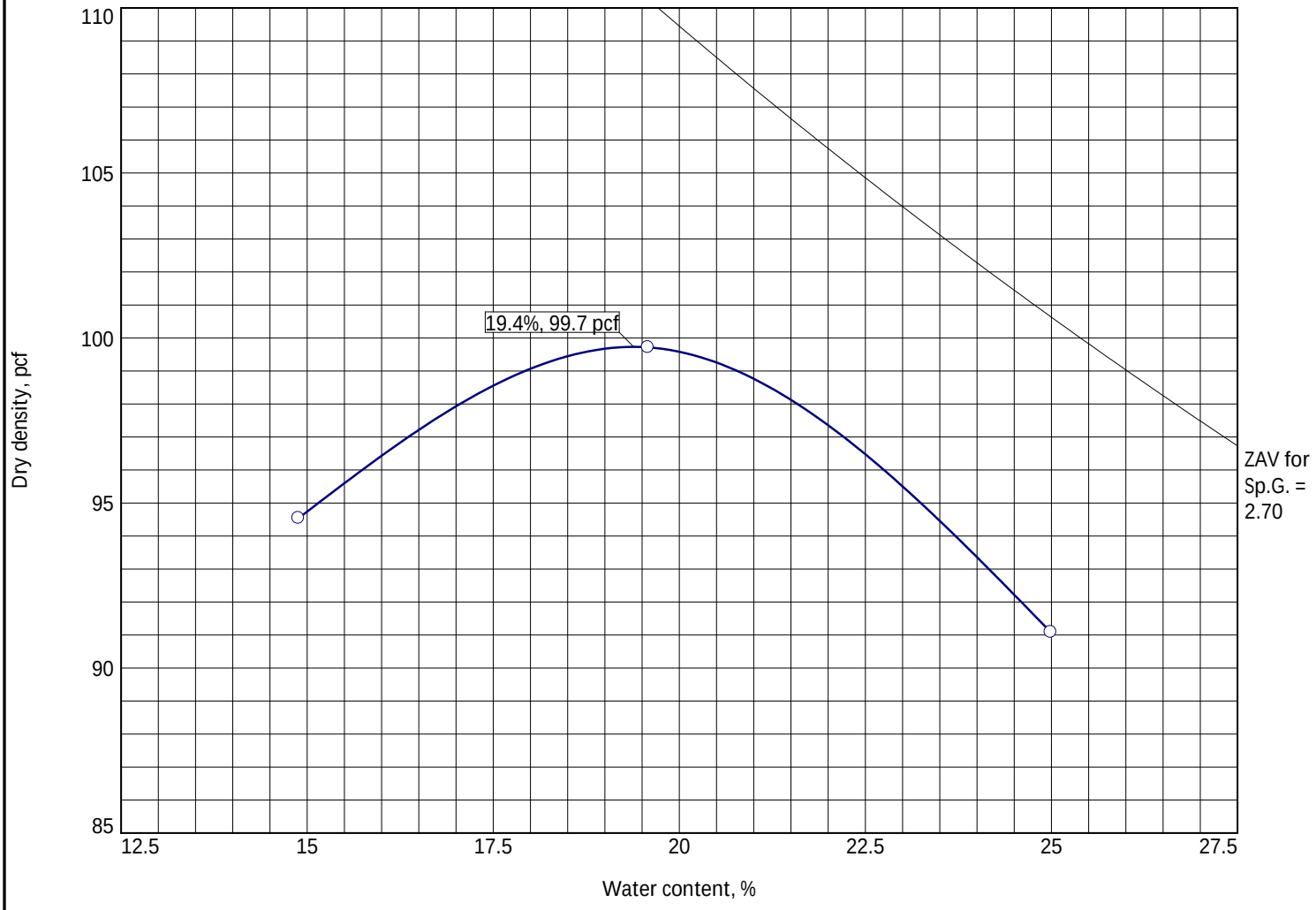
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(10) | | 2.7 | 32 | 13 | 0.0 | 82.2 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 99.7 pcf<br>Optimum moisture = 19.4 % | Brown lean clay with sand |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/6/2025

○ Sample Number: PV-164, CBR/TRT

ANS CONSULTANTS, INC.

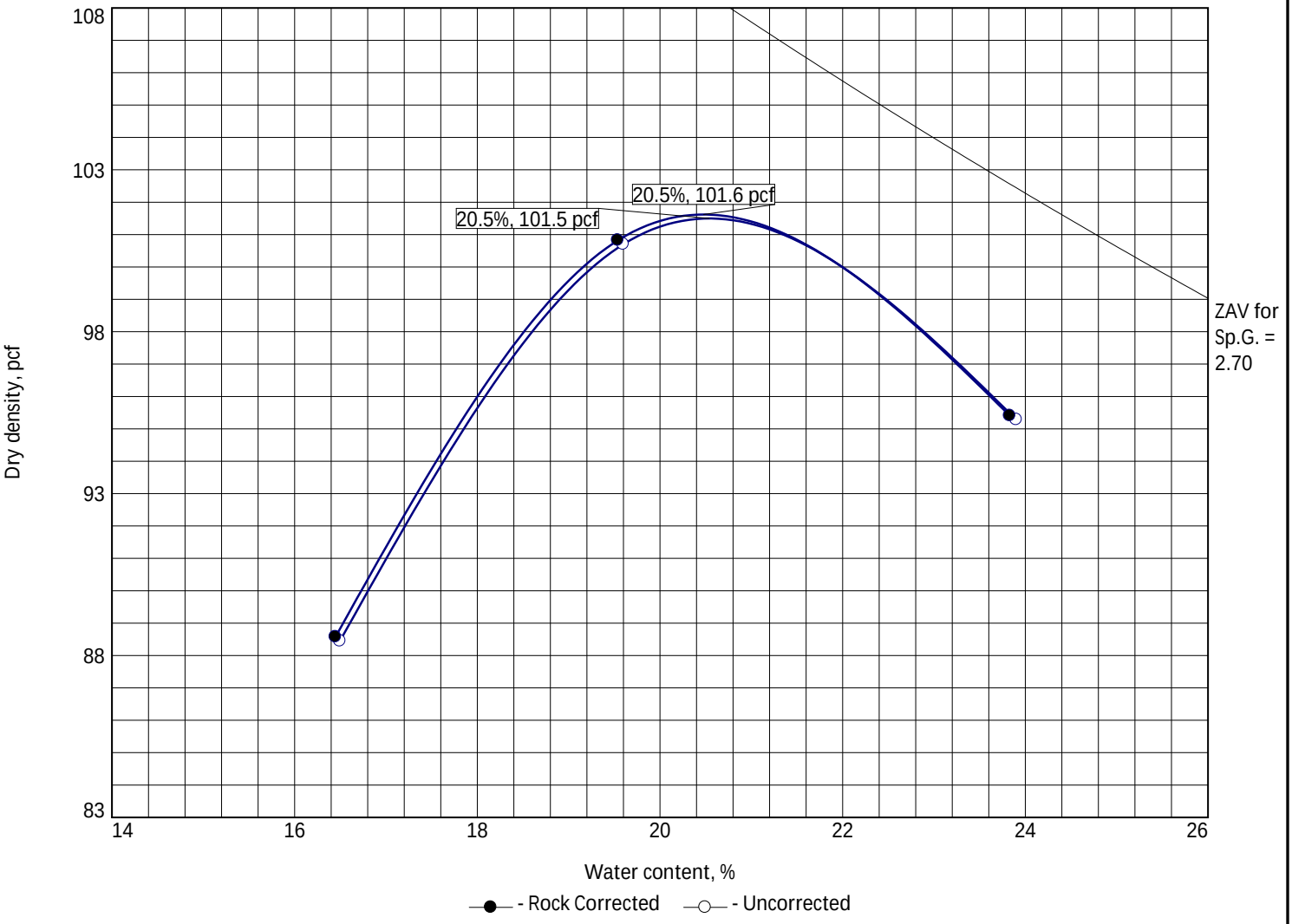
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CB Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(4) | | 2.7 | 28 | 8 | 0.3 | 75.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 101.6 pcf | 101.5 pcf | Brown lean clay with sand |
| Optimum moisture = 20.5 % | 20.5 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-169, TRT

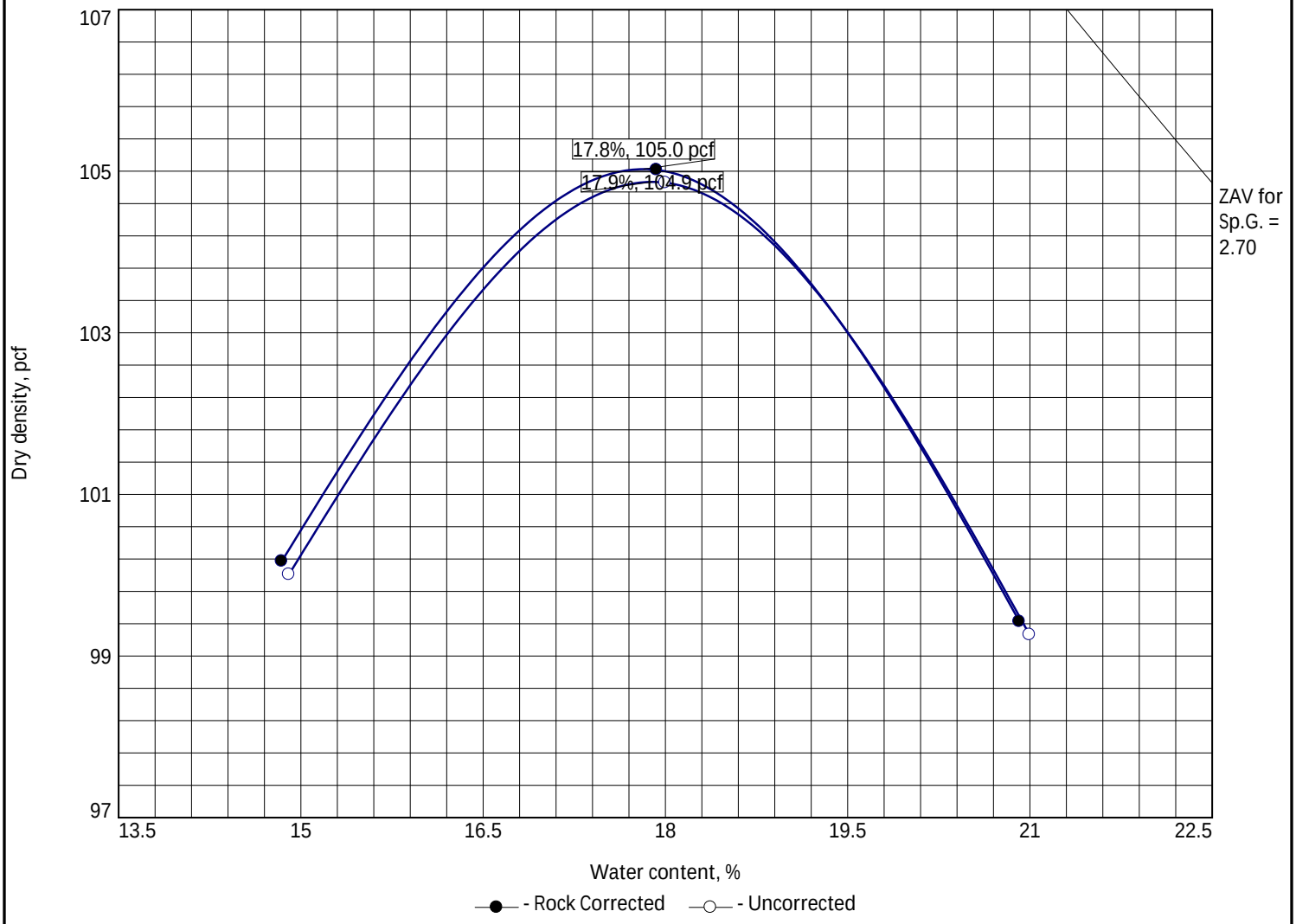
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(2) | | 2.7 | 25 | 5 | 0.4 | 74.9 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 105.0 pcf | 104.9 pcf | Pale Brown silty clay with sand |
| Optimum moisture = 17.8 % | 17.9 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-172, TRT

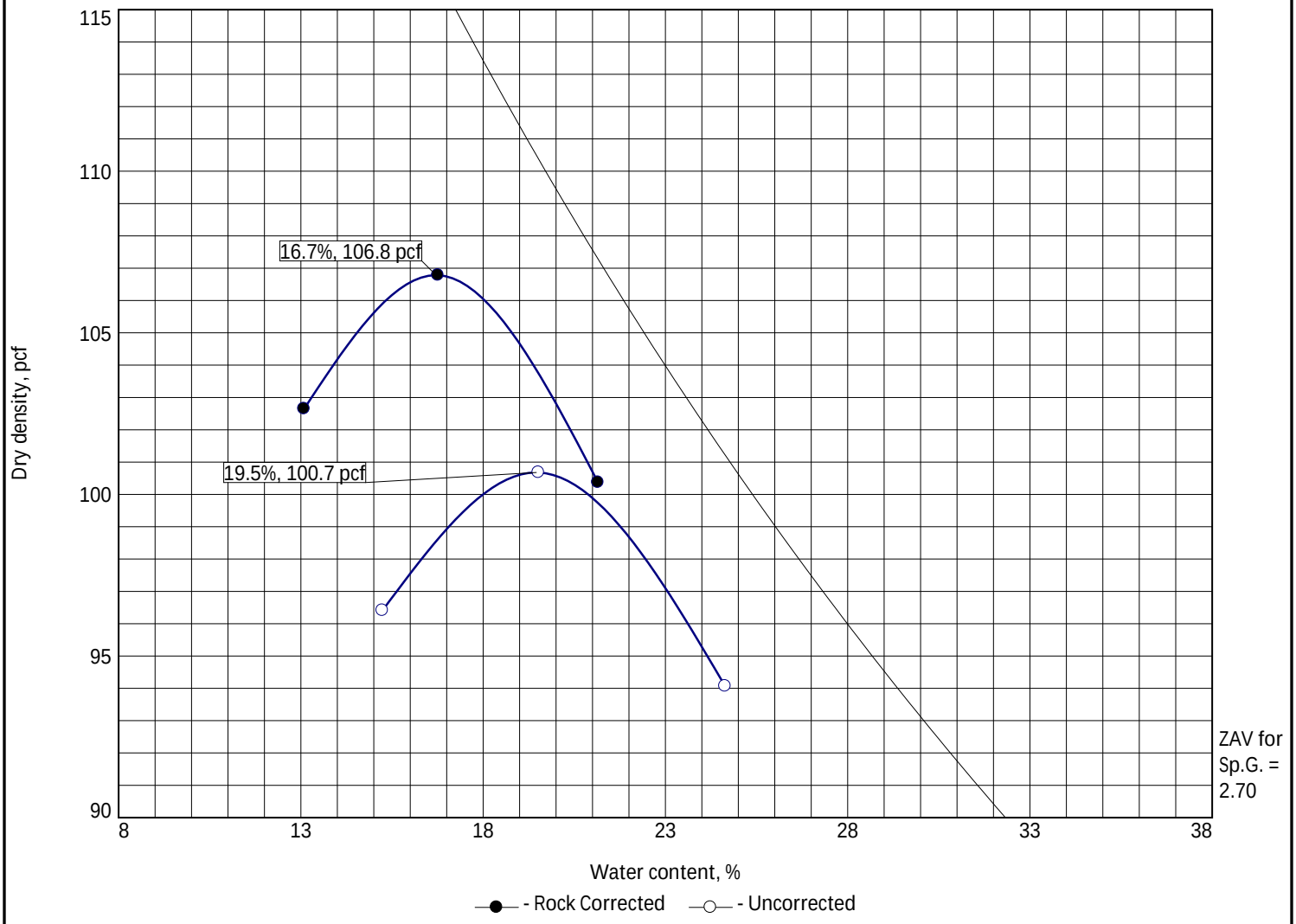
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CB Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method C Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/4 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 27 | 6 | 14.2 | 46.2 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 106.8 pcf | 100.7 pcf | Pale Brown silty, clayey sand with gravel |
| Optimum moisture = 16.7 % | 19.5 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-178, CBR/TRT

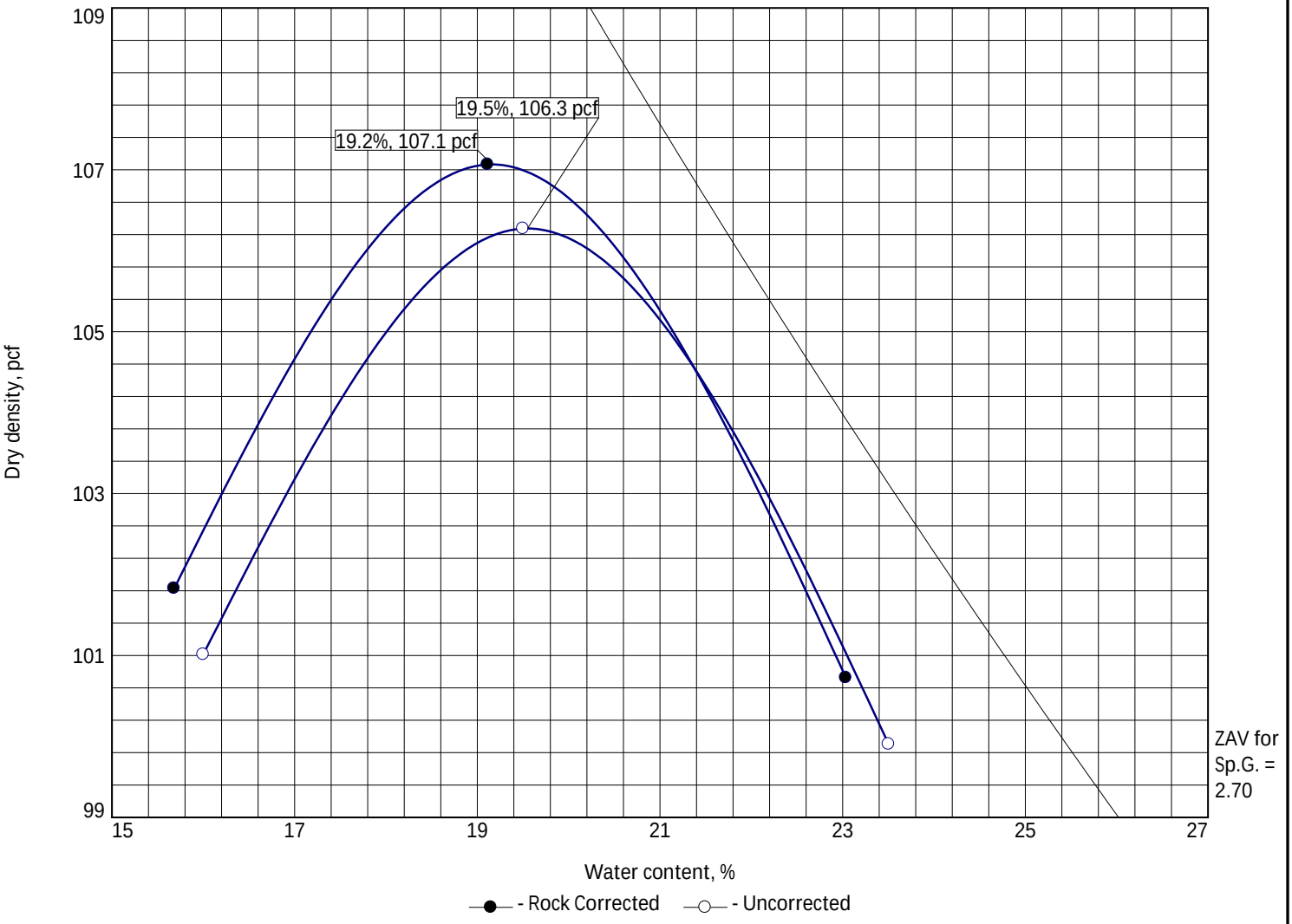
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(5) | | 2.7 | 30 | 10 | 2.0 | 69.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 107.1 pcf | 106.3 pcf | Brown sandy lean clay |
| Optimum moisture = 19.2 % | 19.5 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-179, TRT

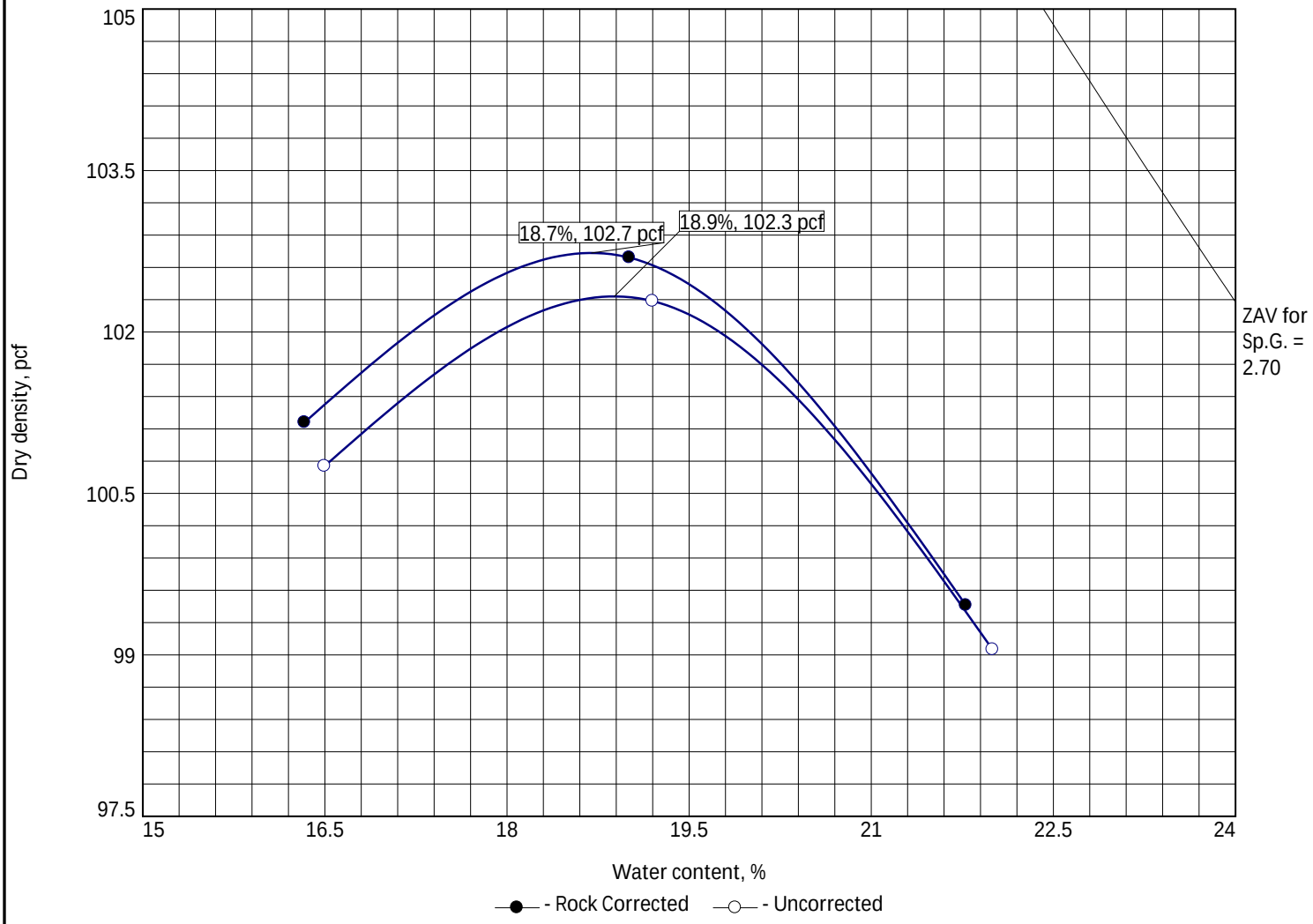
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(6) | | 2.7 | 29 | 9 | 1.0 | 79.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 102.7 pcf | 102.3 pcf | Brown lean clay with sand |
| Optimum moisture = 18.7 % | 18.9 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-181, TRT

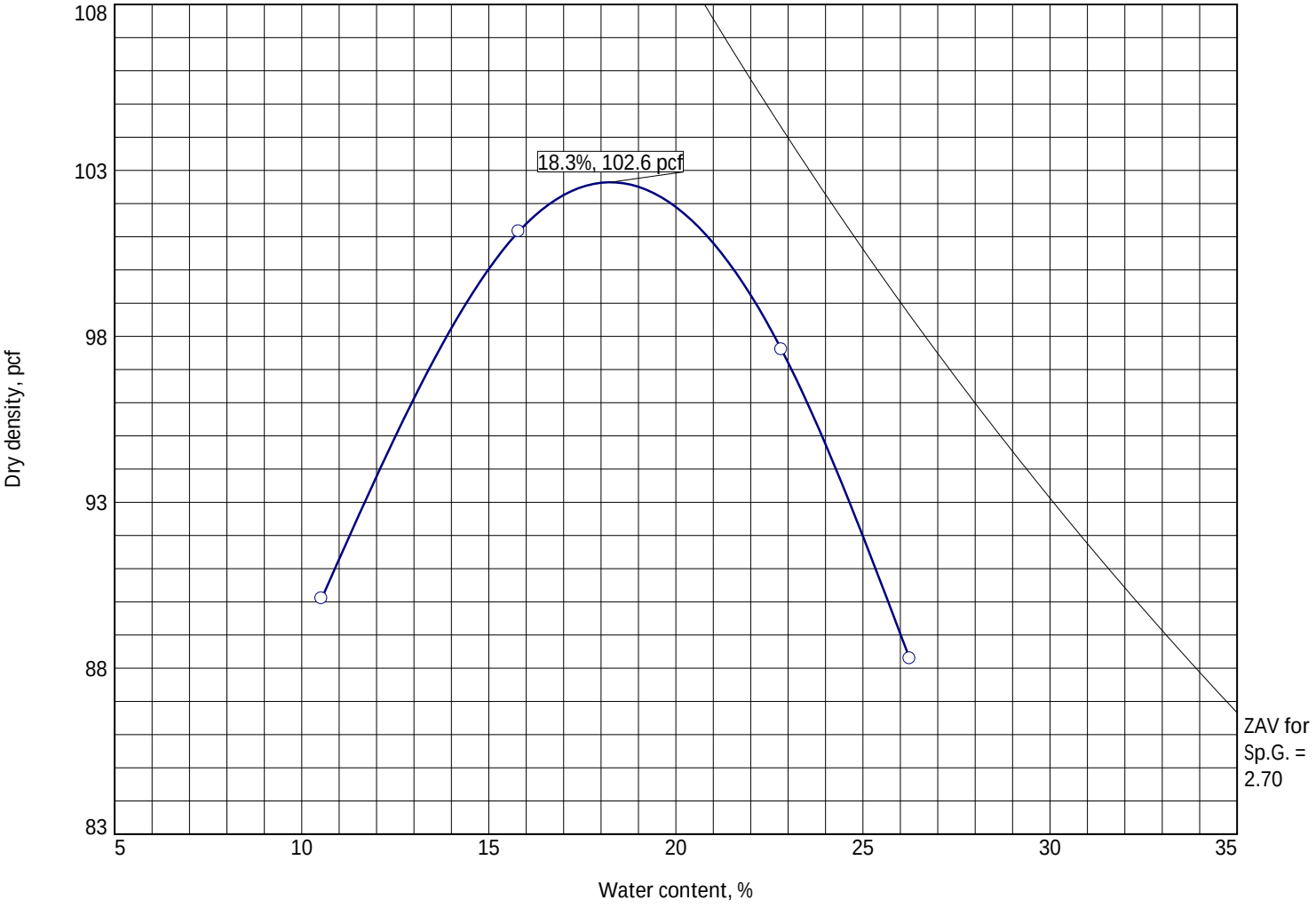
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(10) | | 2.7 | 31 | 12 | 0.0 | 88.1 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 102.6 pcf<br>Optimum moisture = 18.3 % | Brown lean clay |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/6/2025

○ Sample Number: PV-183, CBR/TRT

ANS CONSULTANTS, INC.

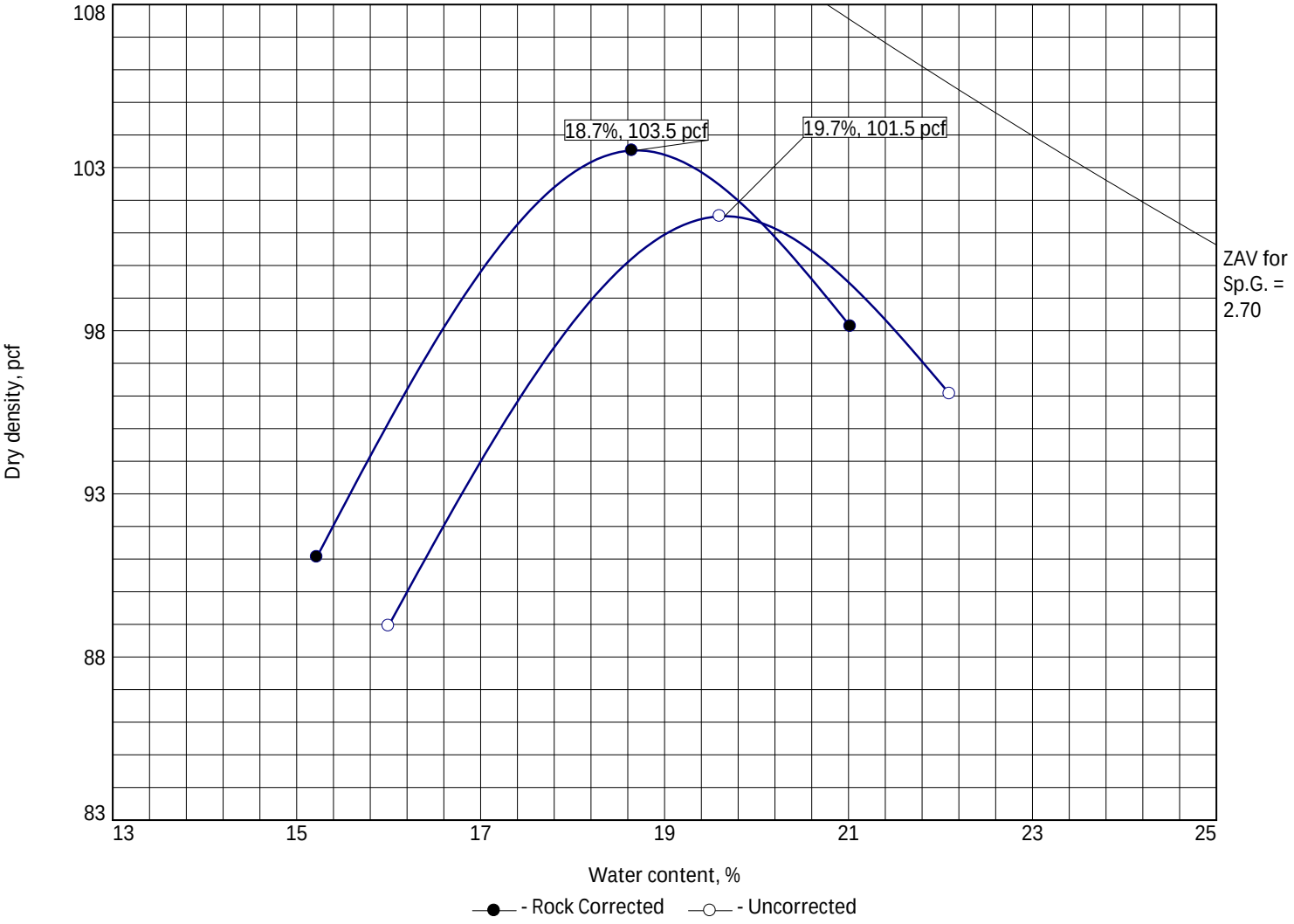
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CB Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL-ML | A-4(2) | | 2.7 | 27 | 6 | 4.9 | 60.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 103.5 pcf | 101.5 pcf | Pale Brown sandy silty clay |
| Optimum moisture = 18.7 % | 19.7 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 8/6/2025
○ Sample Number: PV-188, TRT

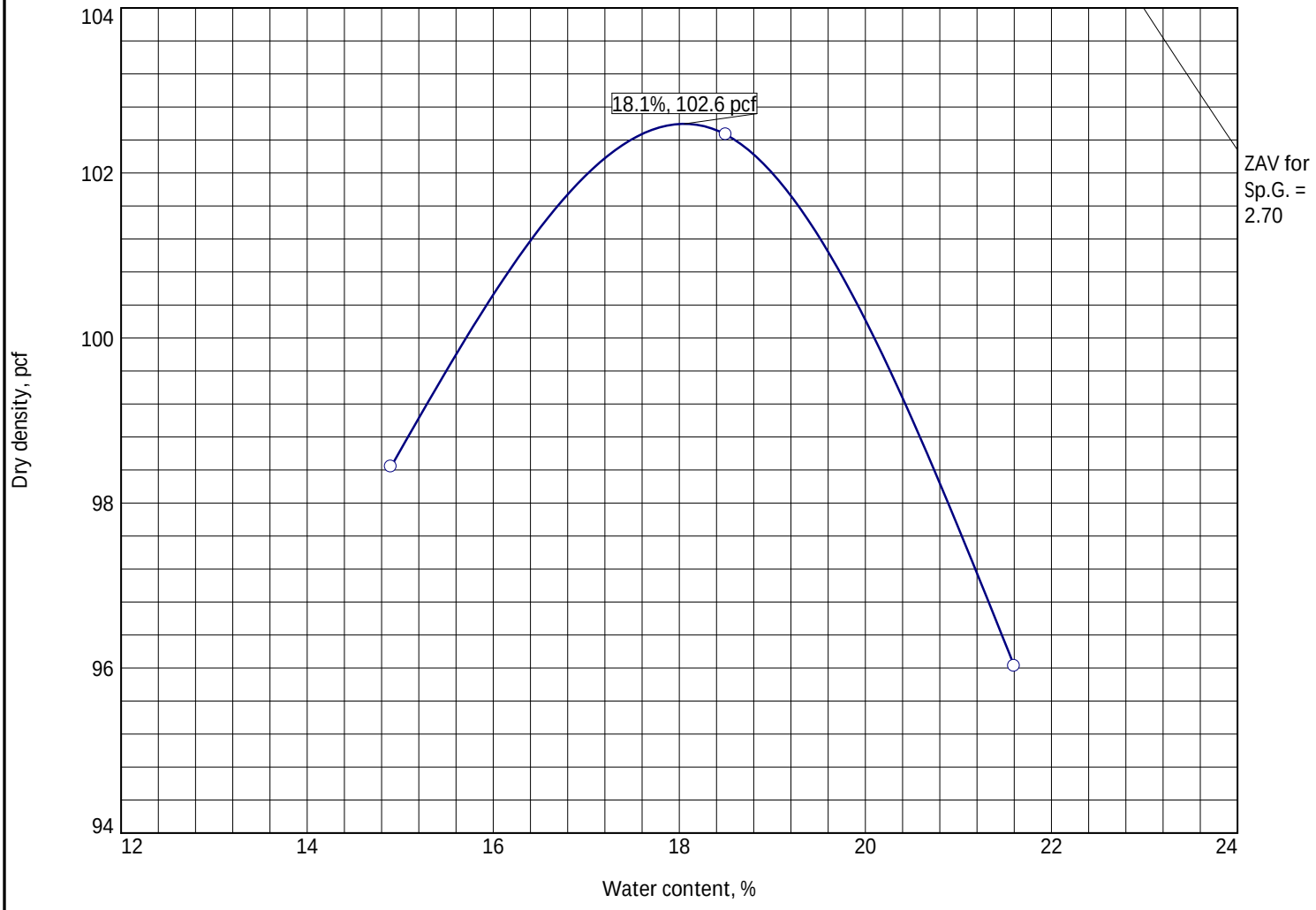
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(10) | | 2.7 | 33 | 14 | 0.0 | 77.6 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 102.6 pcf<br>Optimum moisture = 18.1 % | Brown lean clay with sand |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/6/2025

○ Sample Number: PV-189, TRT

ANS CONSULTANTS, INC.

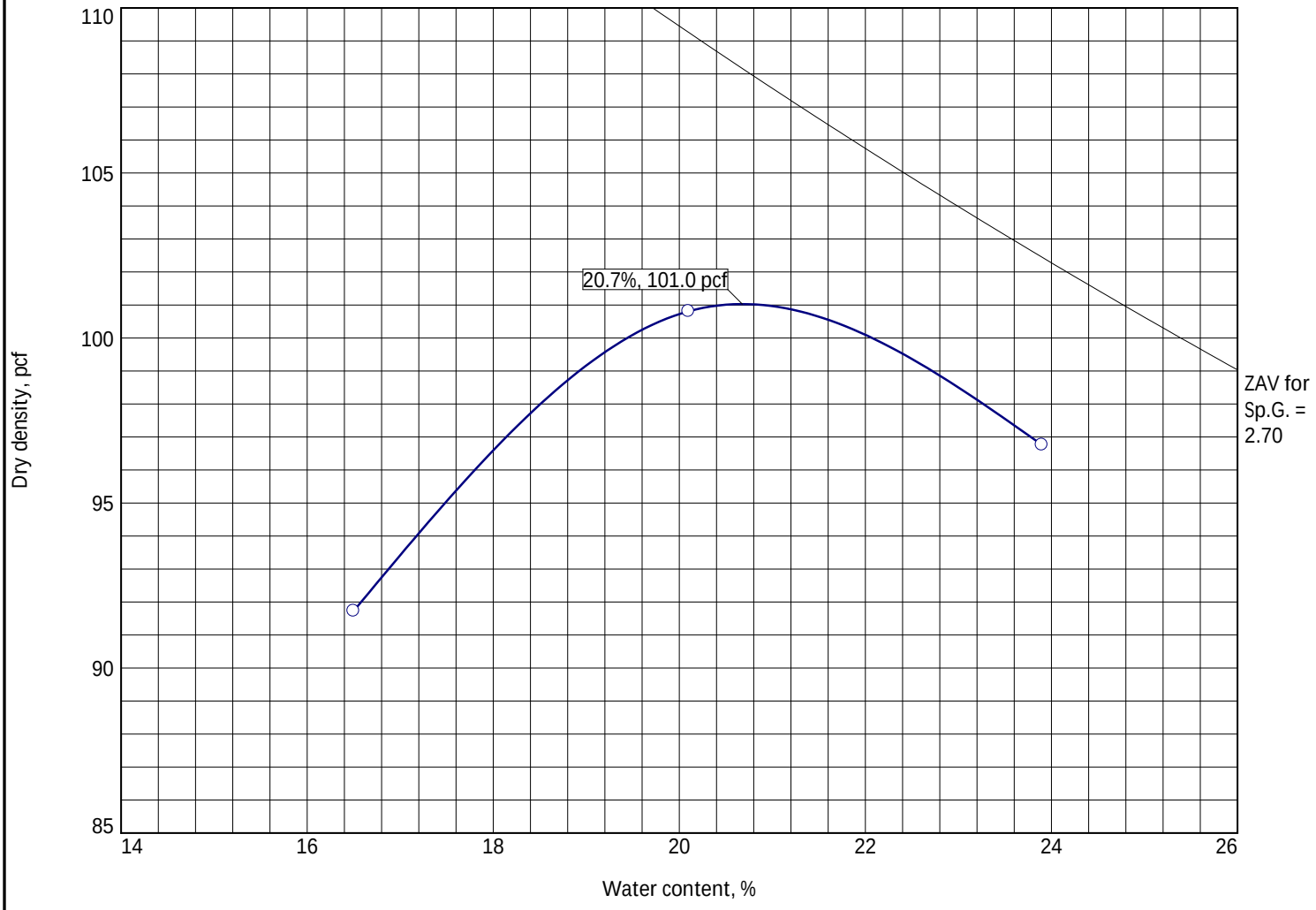
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CB Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-4(4) | | 2.7 | 26 | 8 | 0.0 | 78.9 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 101.0 pcf<br>Optimum moisture = 20.7 % | Brown lean clay with sand |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/6/2025

○ Sample Number: PV-193, TRT

Remarks:
SG Assumed

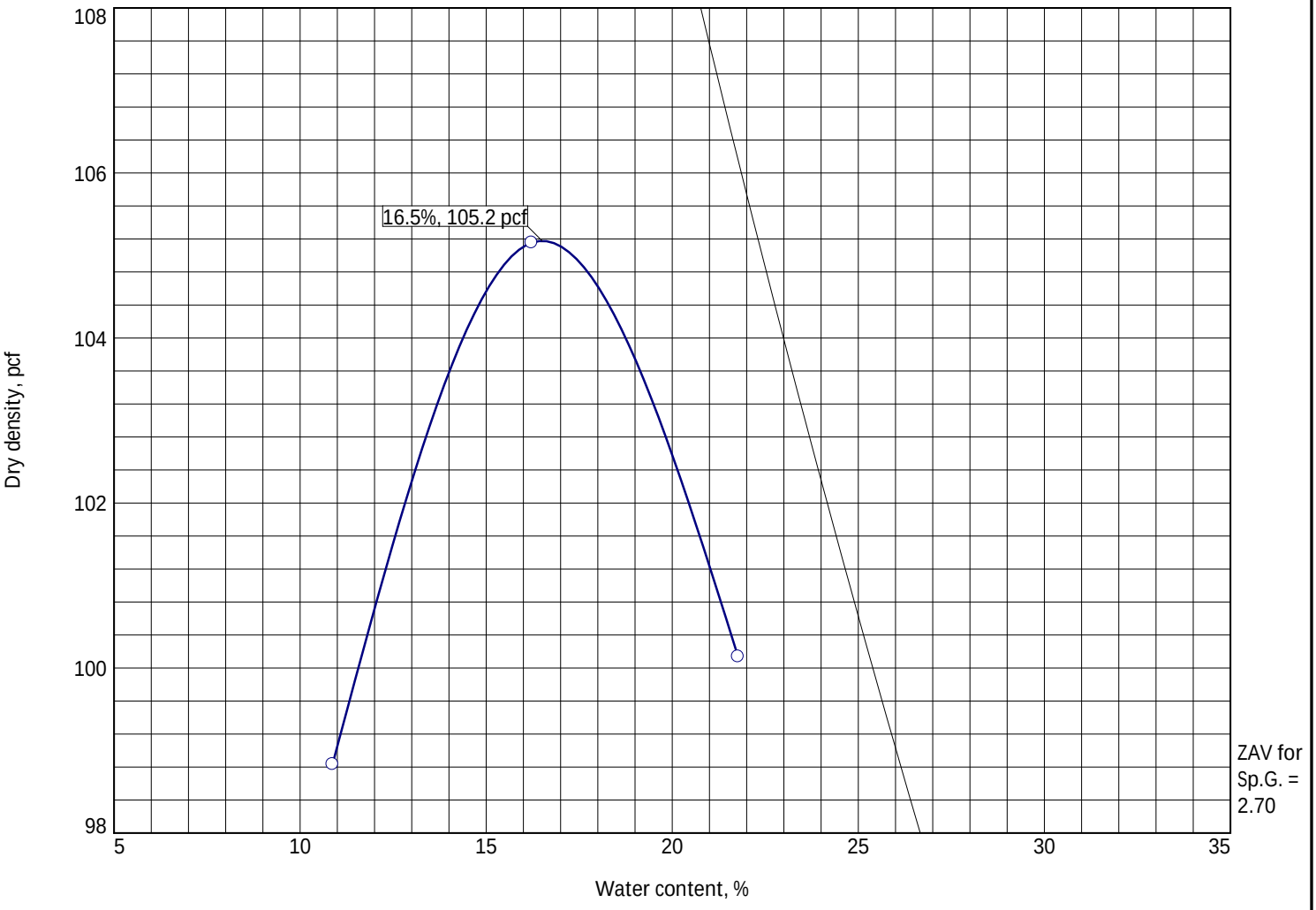
ANS CONSULTANTS, INC.

South Plainfield, New Jersey

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(7) | | 2.7 | 31 | 12 | 0.0 | 69.7 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 105.2 pcf<br>Optimum moisture = 16.5 % | Brown sandy lean clay |

Project No. IRN 25-N-598 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/6/2025

○ Sample Number: PV-195, CBR/TRT

ANS CONSULTANTS, INC.

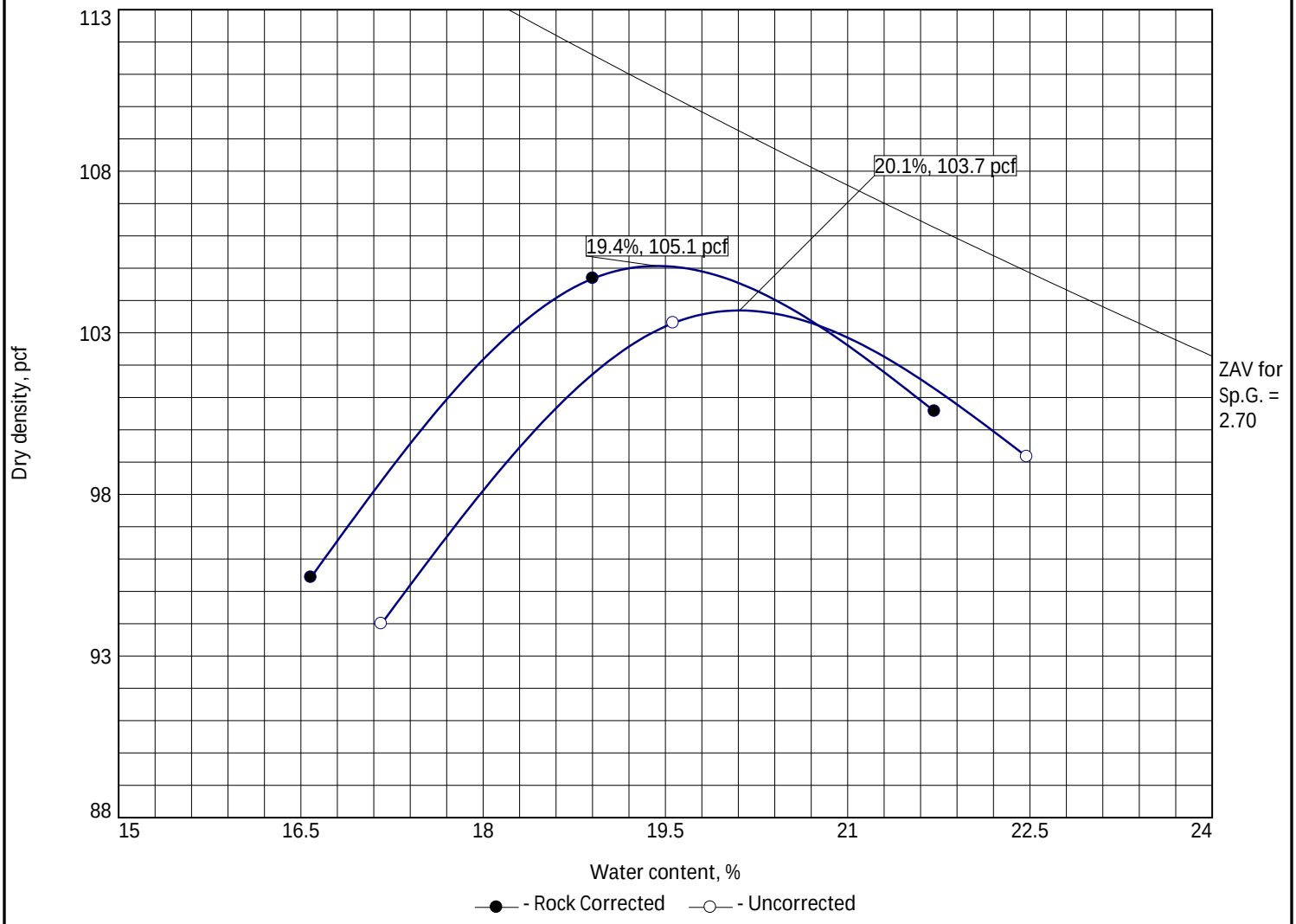
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CB Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(5) | | 2.7 | 30 | 11 | 3.4 | 68.5 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 105.1 pcf | 103.7 pcf | Brown sandy lean clay |
| Optimum moisture = 19.4 % | 20.1 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-198, TRT

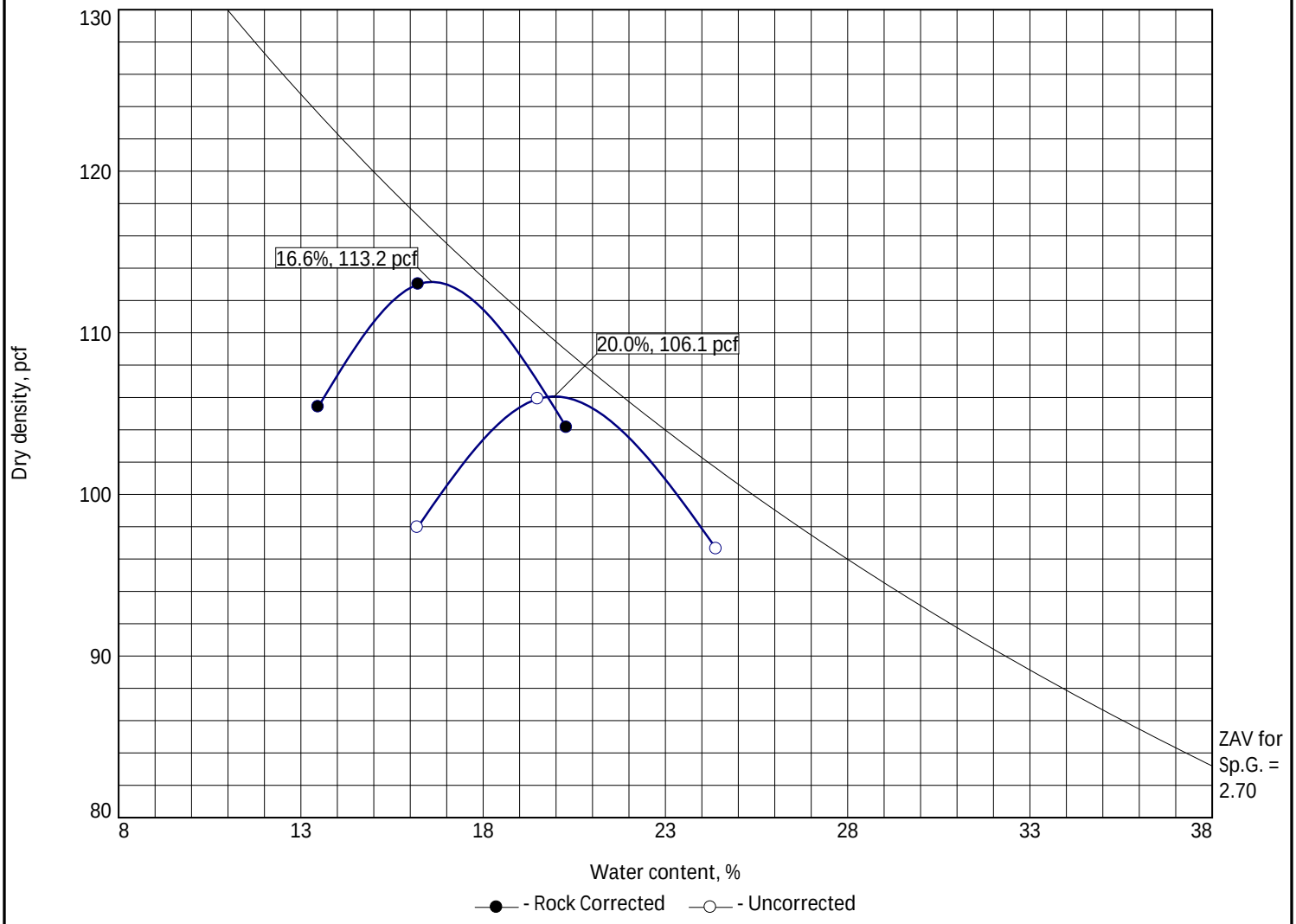
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC | A-4(1) | | 2.7 | 27 | 8 | 16.9 | 49.5 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 113.2 pcf | 106.1 pcf | Brown clayey sand with gravel |
| Optimum moisture = 16.6 % | 20.0 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-204, TRT

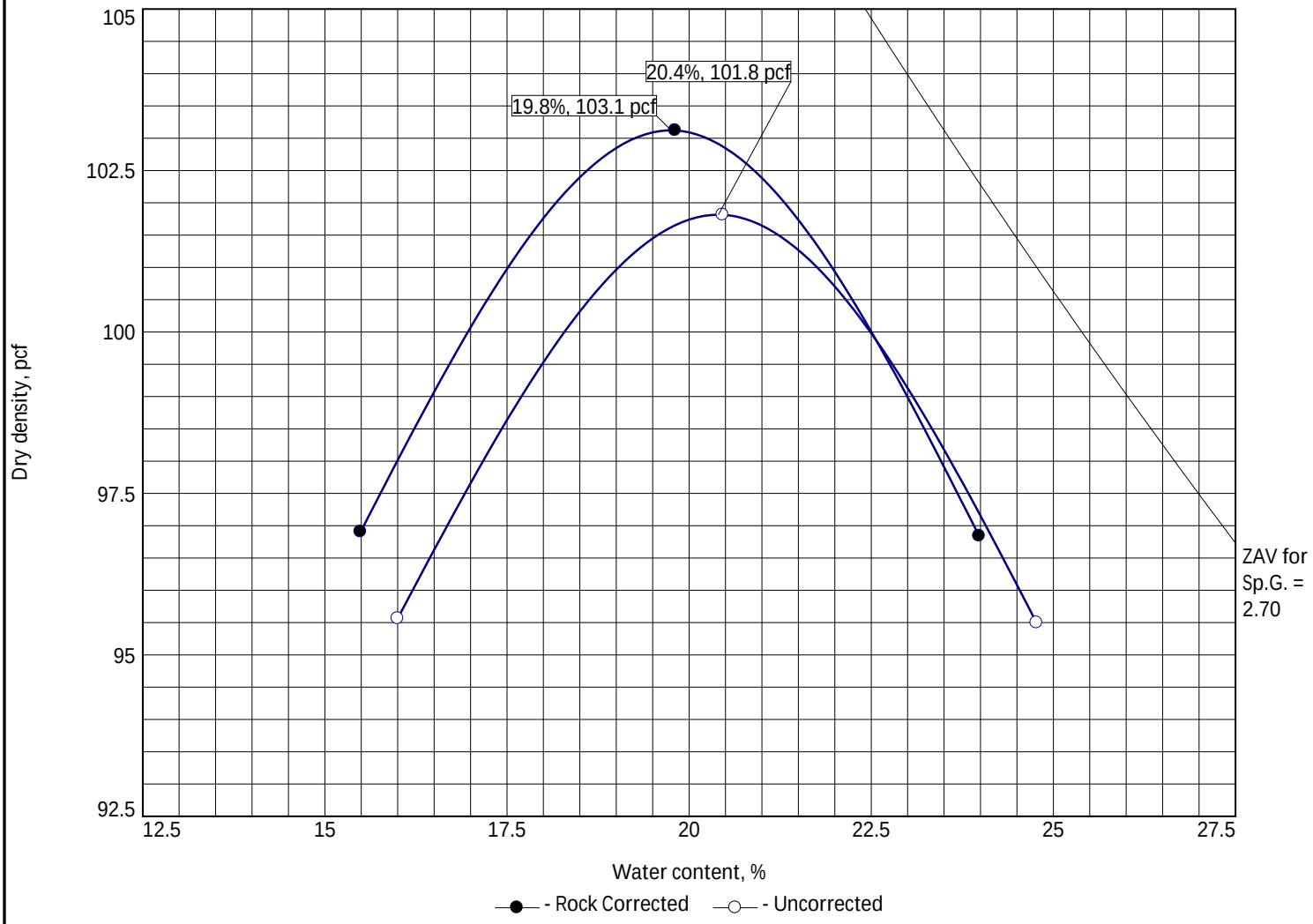
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: FM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | CL | A-6(10) | | 2.7 | 34 | 15 | 3.2 | 77.0 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 103.1 pcf | 101.8 pcf | Dark Brown lean clay with sand |
| Optimum moisture = 19.8 % | 20.4 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-207, CBR/TRT

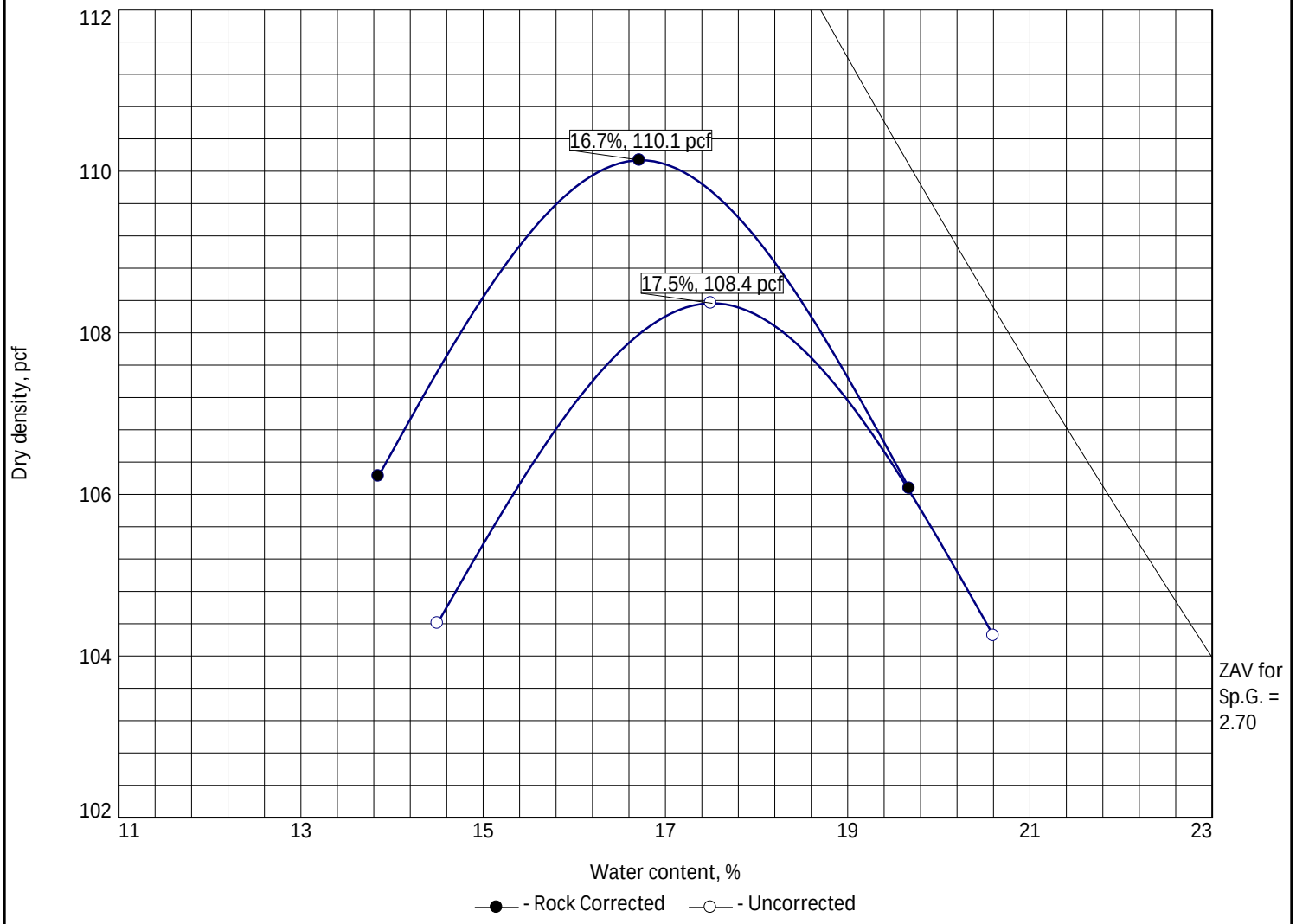
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 2'-5' | SC-SM | A-4(0) | | 2.7 | 22 | 6 | 4.5 | 46.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.1 pcf | 108.4 pcf | Brown silty, clayey sand |
| Optimum moisture = 16.7 % | 17.5 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-210, TRT

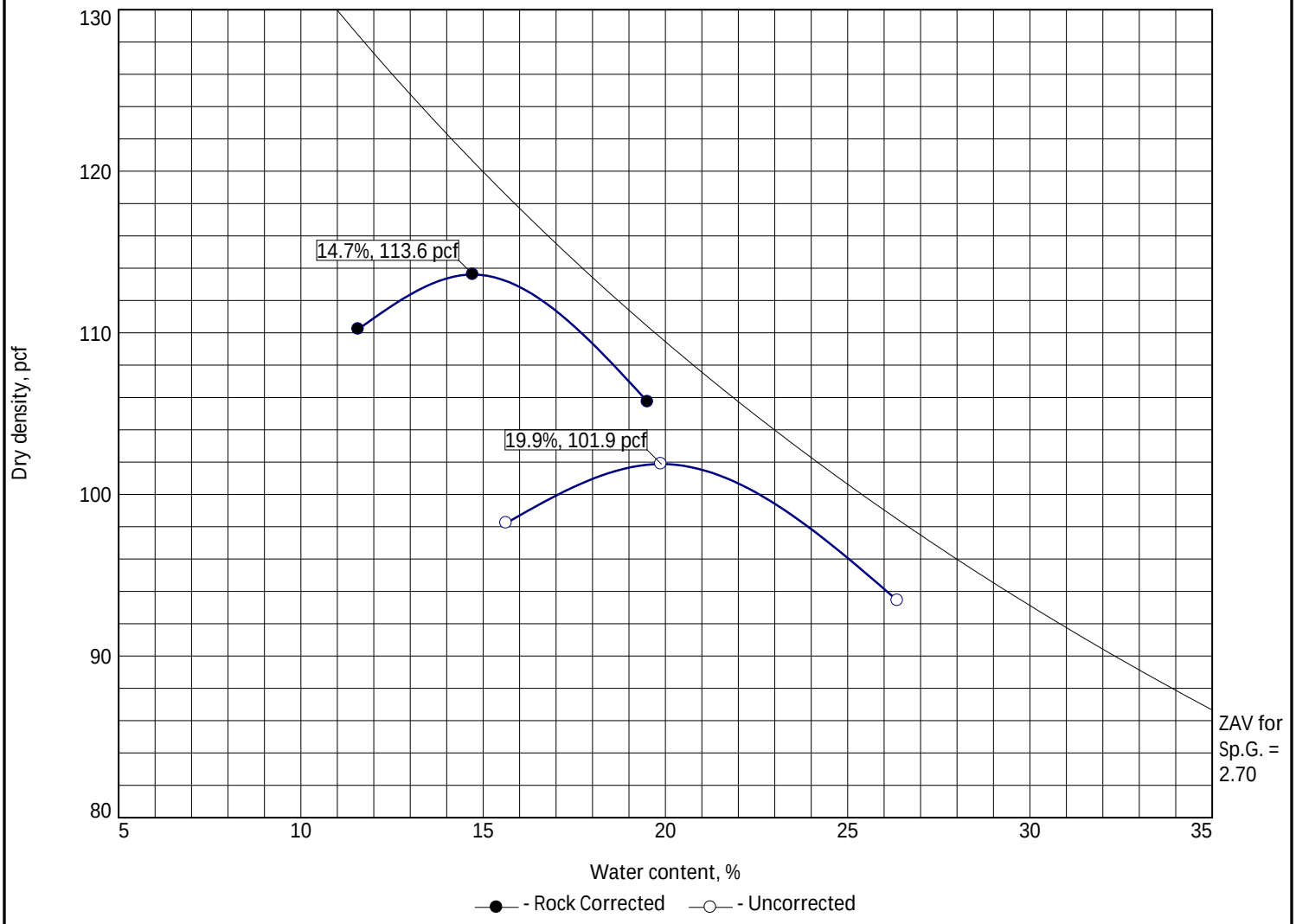
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MG Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method C Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/4 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | CL | A-6(5) | | 2.7 | 32 | 13 | 26.1 | 56.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 113.6 pcf | 101.9 pcf | Dark Brown gravelly lean clay |
| Optimum moisture = 14.7 % | 19.9 % | |

Project No. IRN 25-N-598 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-212, TRT

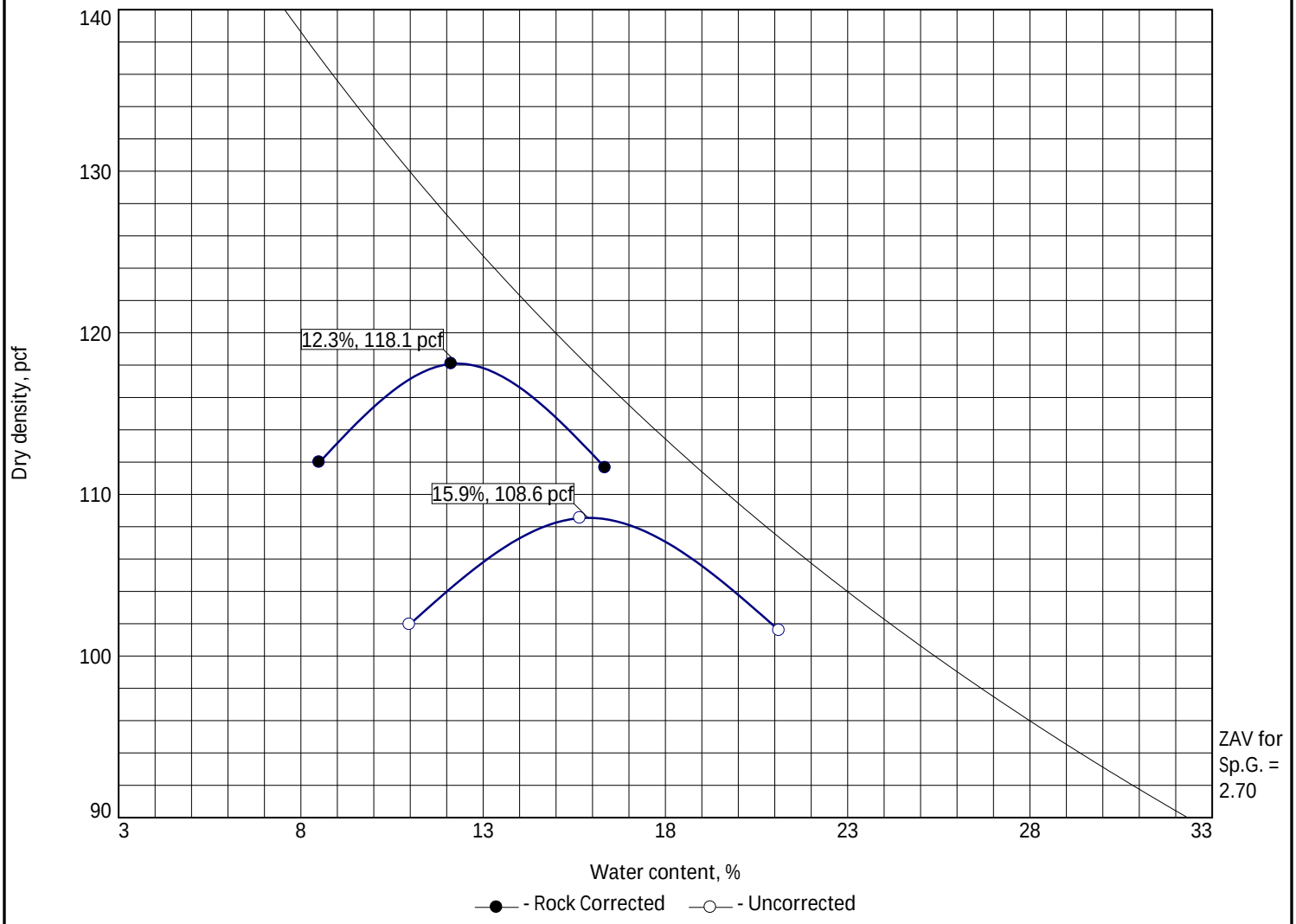
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: CC Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | SC | A-2-6(0) | | 2.7 | 31 | 11 | 22.7 | 28.7 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 118.1 pcf | 108.6 pcf | Brown clayey sand with gravel |
| Optimum moisture = 12.3 % | 15.9 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-214, TRT

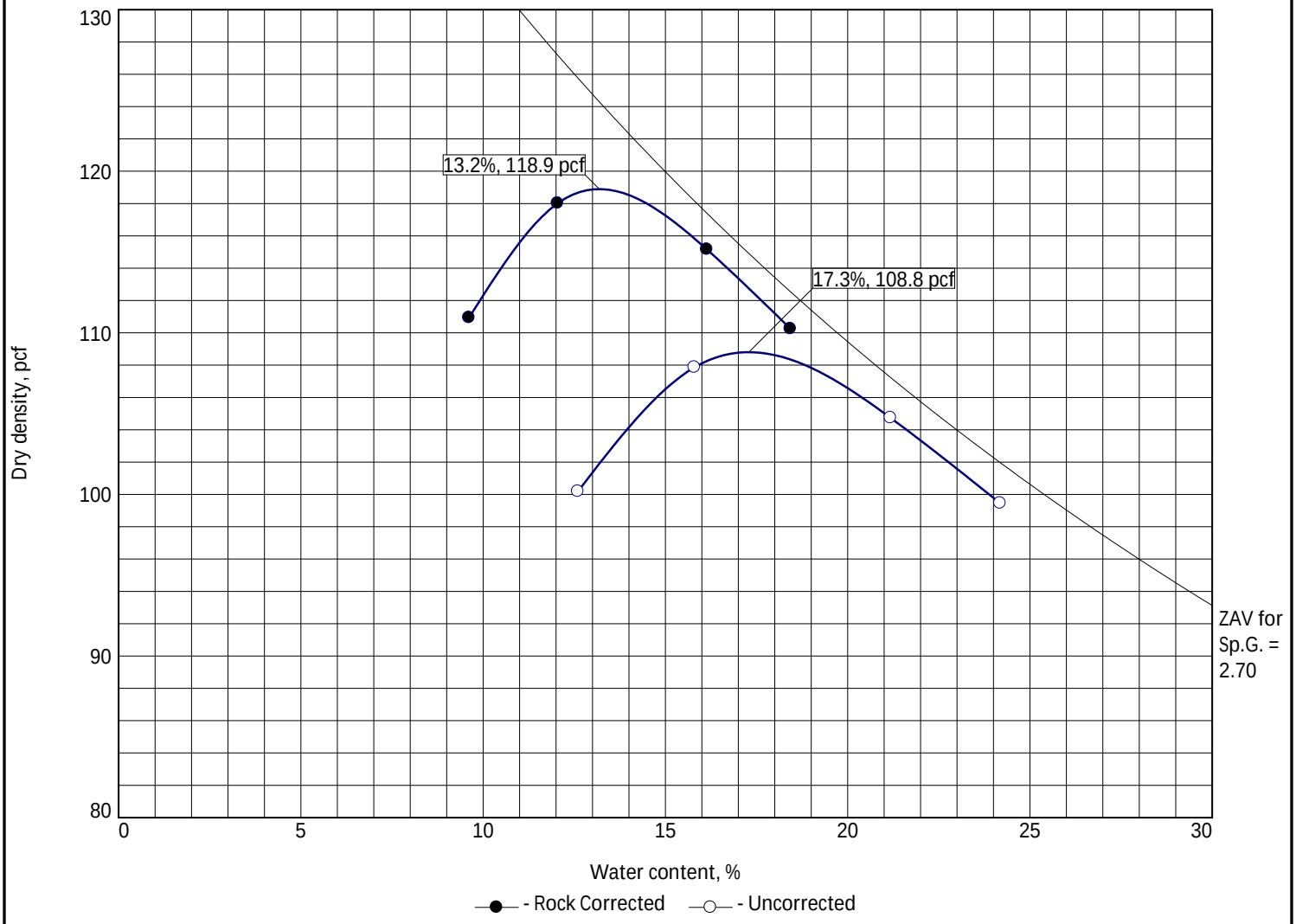
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-3' | SC | A-2-6(1) | | 2.7 | 40 | 16 | 23.9 | 30.1 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 118.9 pcf | 108.8 pcf | Brown clayey sand with gravel |
| Optimum moisture = 13.2 % | 17.3 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-217, TRT

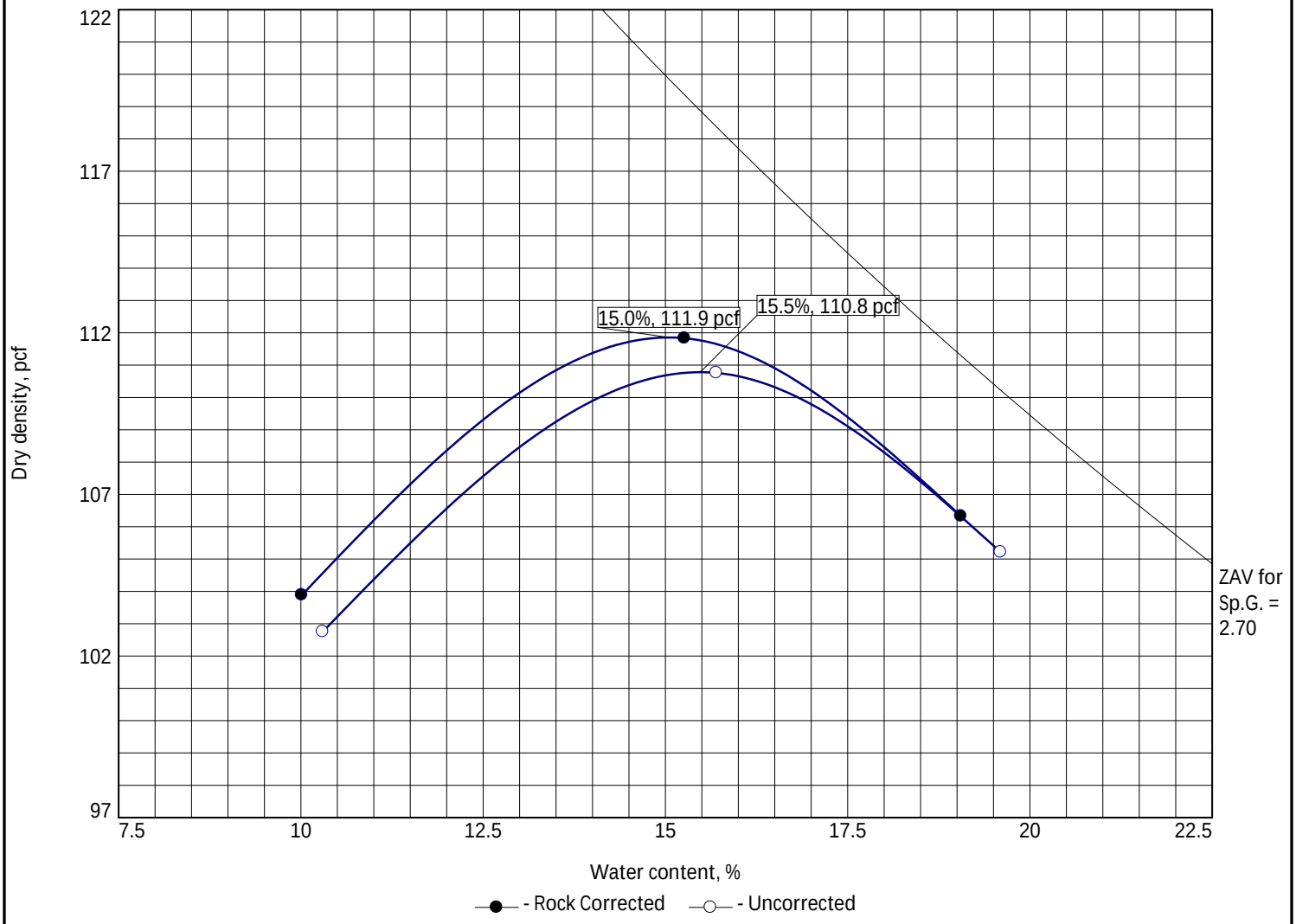
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: RS Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | CL | A-6(10) | | 2.7 | 33 | 13 | 2.8 | 80.8 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 111.9 pcf | 110.8 pcf | Brown lean clay with sand |
| Optimum moisture = 15.0 % | 15.5 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-223, TRT

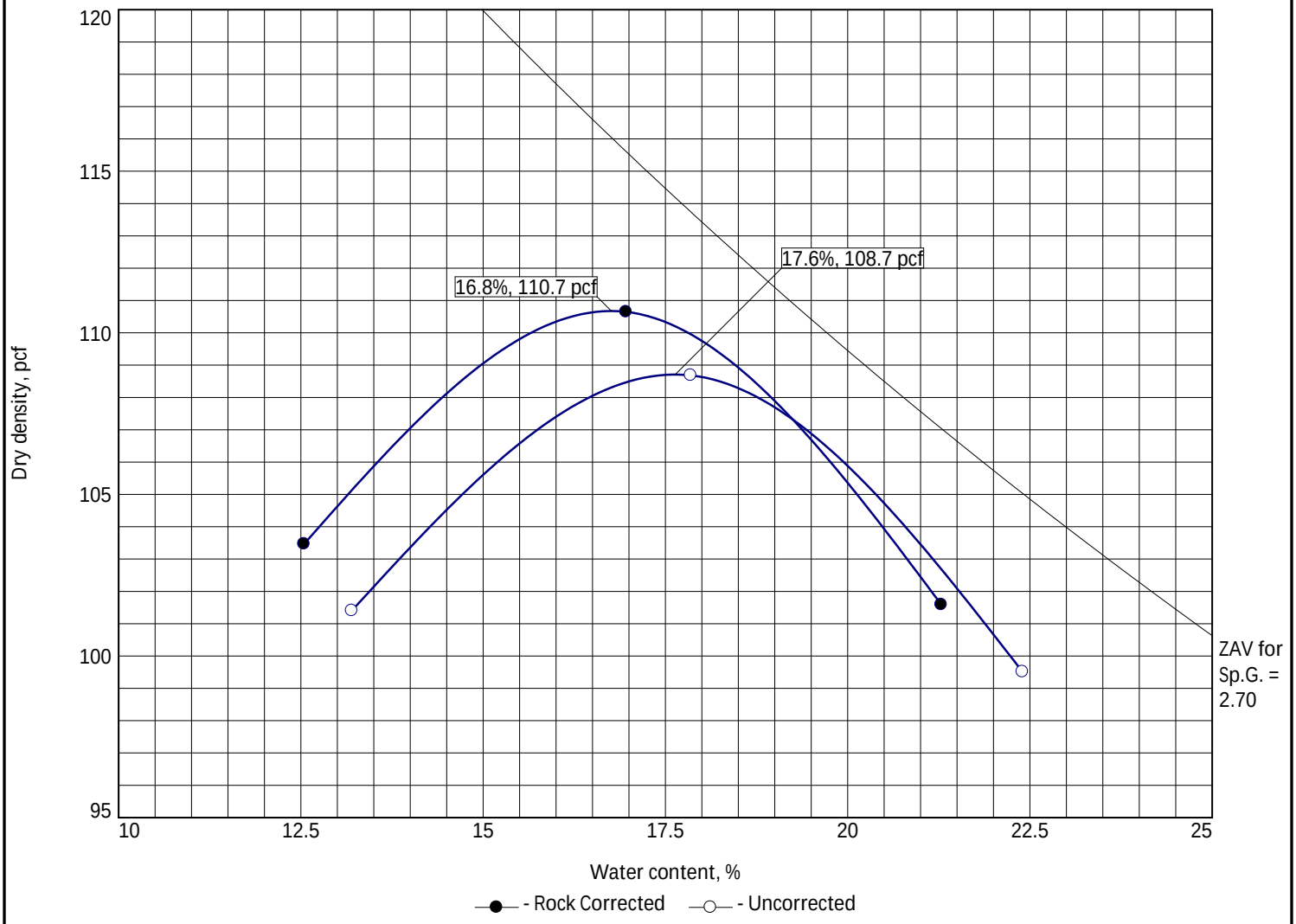
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | CL | A-4(7) | | 2.7 | 32 | 10 | 5.0 | 79.4 |

| ROCK CORRECTED TEST RESULTS | UNCORRECTED | MATERIAL DESCRIPTION |
|---|---|---|
| Maximum dry density = 110.7 pcf | 108.7 pcf | Brown lean clay with sand |
| Optimum moisture = 16.8 % | 17.6 % | |

Project No. IRN 25-N-599 Client: Tetra Tech
Project: Speedway, Sherman County, OR
Date: 11/6/2025
○ Sample Number: PV-226, TRT

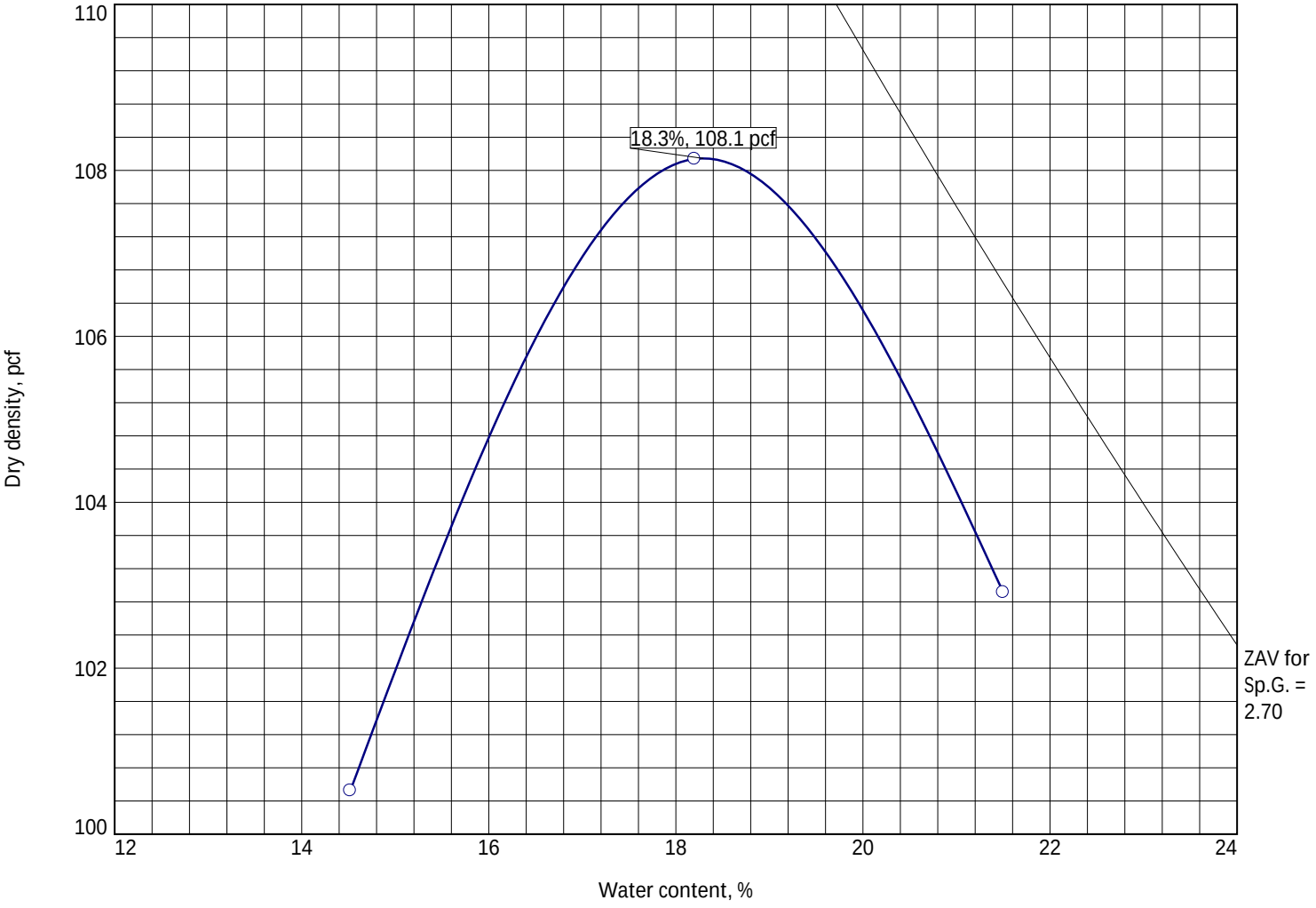
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

Remarks:
SG Assumed

Figure

Tested By: MM Checked By: ANS

# COMPACTION TEST REPORT




Test specification: ASTM D 698-12 Method B Standard

| Elev/ Depth | Classification | | Nat. Moist. | Sp.G. | LL | PI | % > 3/8 in. | % < No.200 |
|---|---|---|---|---|---|---|---|---|
| | USCS | AASHTO | | | | | | |
| 1'-2' | CL | A-4(6) | | 2.7 | 30 | 9 | 0.0 | 81.0 |

| TEST RESULTS | MATERIAL DESCRIPTION |
|---|---|
| Maximum dry density = 108.1 pcf<br>Optimum moisture = 18.3 % | Brown lean clay with sand |

Project No. IRN 25-N-599 Client: Tetra Tech

Project: Speedway, Sherman County, OR

Date: 11/6/2025

○ Sample Number: PV-230, TRT

ANS CONSULTANTS, INC.

South Plainfield, New Jersey

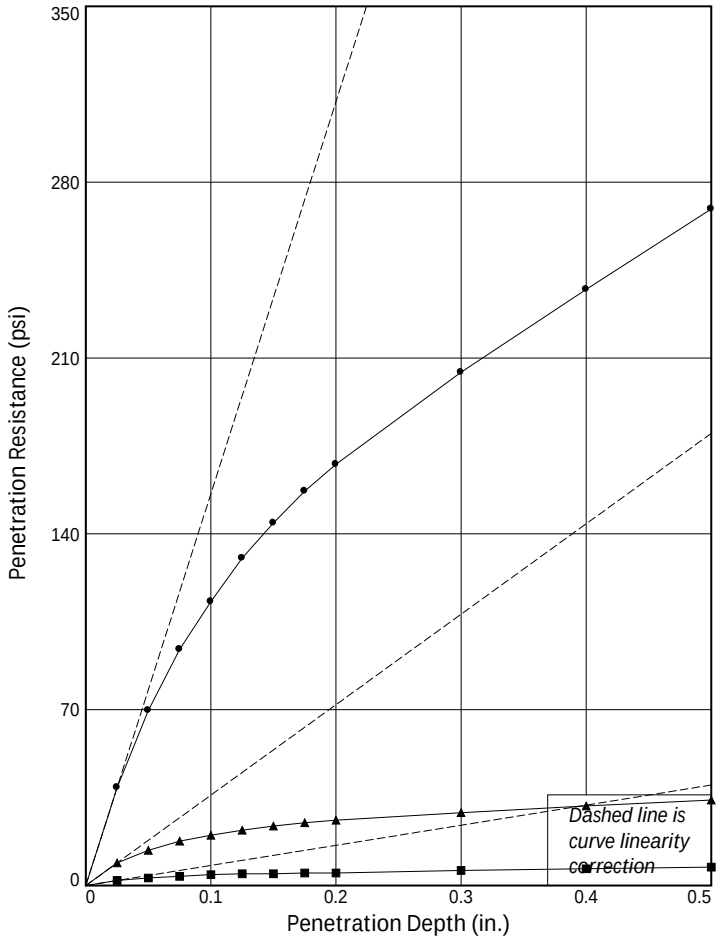
Remarks:
SG Assumed

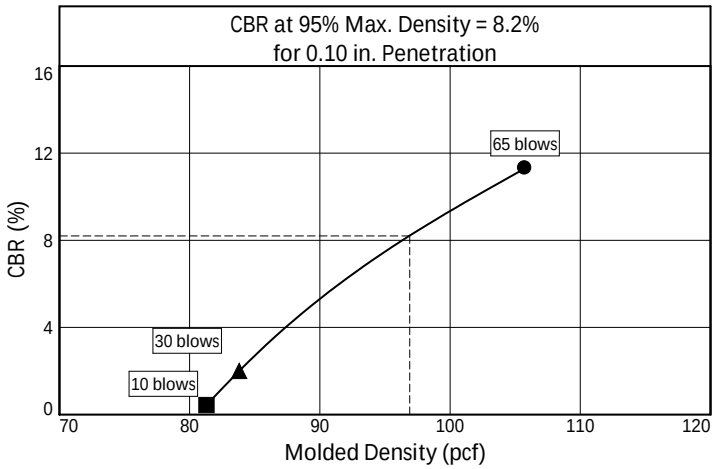
Figure

Tested By: MM Checked By: ANS

# CALIFORNIA BEARING RATIO

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 105.8 | 103.7 | 19.5 | 105.5 | 103.5 | 26.7 | 11.3 | 11.2 | 0.000 | 10 | 0.2 |
| 2 ▲ | 83.8 | 82.2 | 19.5 | 83.7 | 82.1 | 28.3 | 2.0 | 1.7 | 0.000 | 10 | 0.1 |
| 3 ■ | 81.3 | 79.7 | 19.5 | 81.2 | 79.6 | 31.6 | 0.4 | 0.3 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown silty, clayey sand | SC-SM | 102.0 | 19.5 | 24 | 5 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: WTG-01, CBR Depth: 2'-5'

Date: 10/21/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

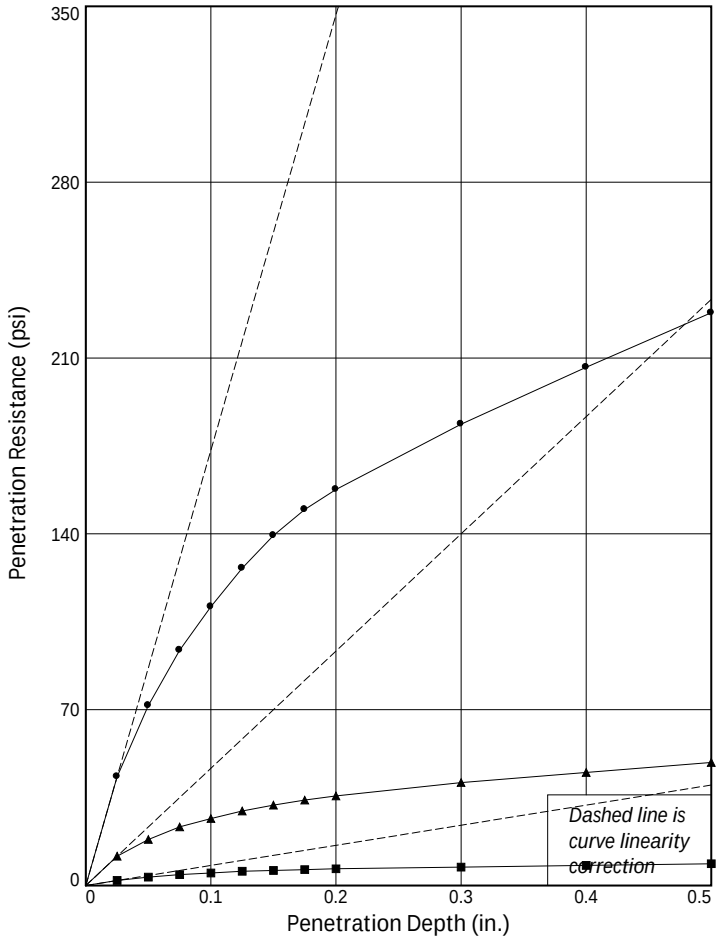
Test Remarks:

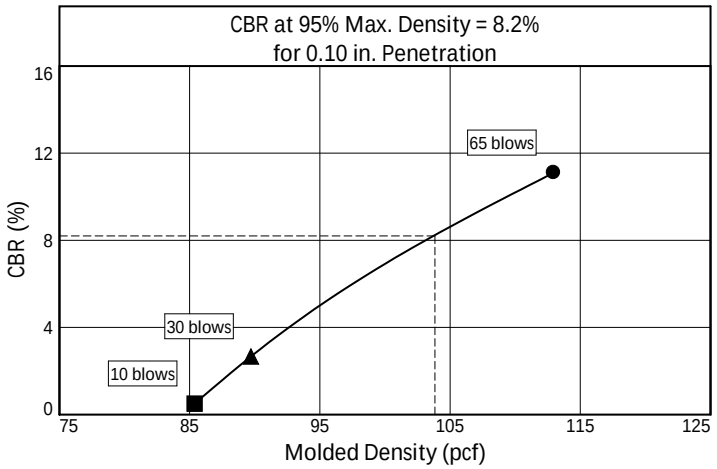
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: HP Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 113.0 | 103.4 | 16.7 | 112.7 | 103.1 | 27.4 | 11.1 | 10.5 | 0.000 | 10 | 0.2 |
| 2 ▲ | 89.7 | 82.1 | 16.7 | 89.6 | 82 | 29.1 | 2.7 | 2.4 | 0.000 | 10 | 0.1 |
| 3 ■ | 85.4 | 78.1 | 16.7 | 85.3 | 78 | 31.3 | 0.5 | 0.4 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Grayish Brown silty, clayey sand | SC-SM | 109.3 | 16.7 | 22 | 5 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: WTG-02, CBR Depth: 2'-5'

Date: 10/21/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

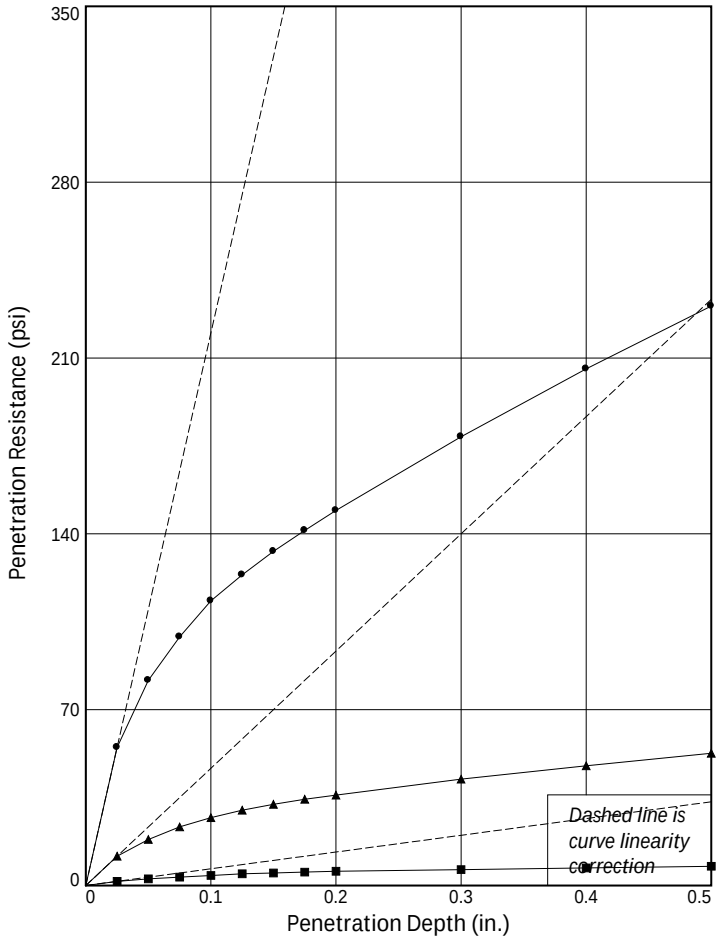
Test Remarks:

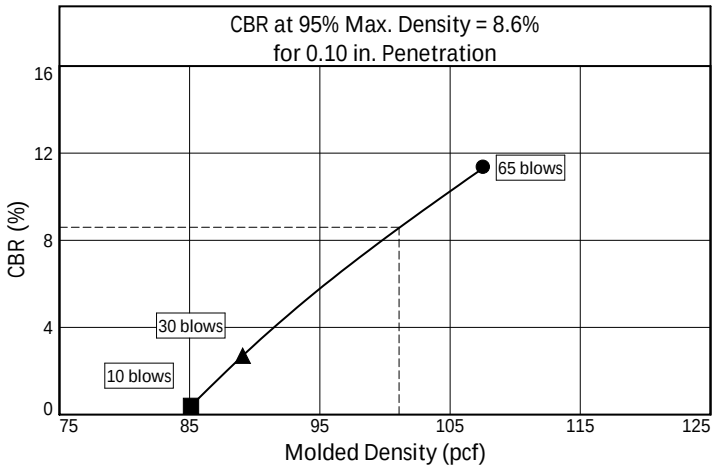
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: Hp Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 107.6 | 101.1 | 17.4 | 107.3 | 100.8 | 23.8 | 11.3 | 10.0 | 0.000 | 10 | 0.3 |
| 2 ▲ | 89.1 | 83.7 | 17.4 | 88.9 | 83.6 | 25.8 | 2.7 | 2.4 | 0.000 | 10 | 0.2 |
| 3 ■ | 85.1 | 80 | 17.4 | 84.9 | 79.8 | 27.9 | 0.4 | 0.4 | 0.000 | 10 | 0.2 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown silty, clayey sand | SC-SM | 106.4 | 17.4 | 27 | 6 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: WTG-03, CBR Depth: 2'-5'

Date: 10/21/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

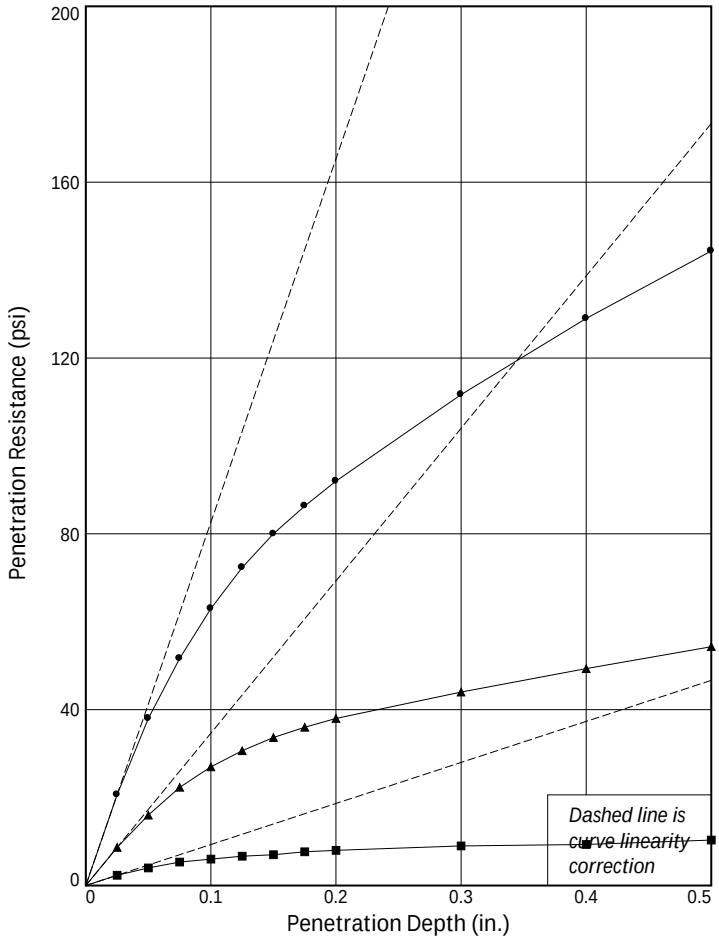
Test Remarks:

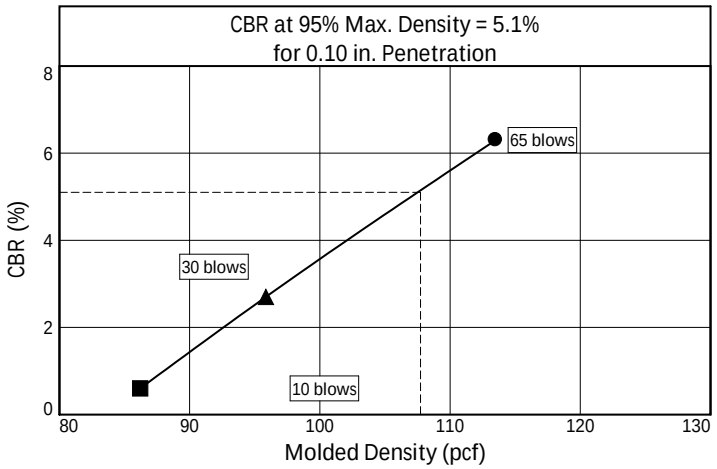
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: ST Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 113.5 | 100.1 | 12.0 | 112.5 | 99.2 | 22.3 | 6.3 | 6.1 | 0.000 | 10 | 0.9 |
| 2 ▲ | 95.9 | 84.6 | 12.0 | 95.2 | 84 | 23.2 | 2.7 | 2.5 | 0.000 | 10 | 0.7 |
| 3 ■ | 86.2 | 76 | 12.0 | 86.1 | 75.9 | 25.4 | 0.6 | 0.5 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy lean clay with gravel | CL | 113.4 | 12.0 | 28 | 9 |

Project No: IRN 25-N-599

Project: Speedway, Sherman County, OR

Sample Number: WTG-04, TRT Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

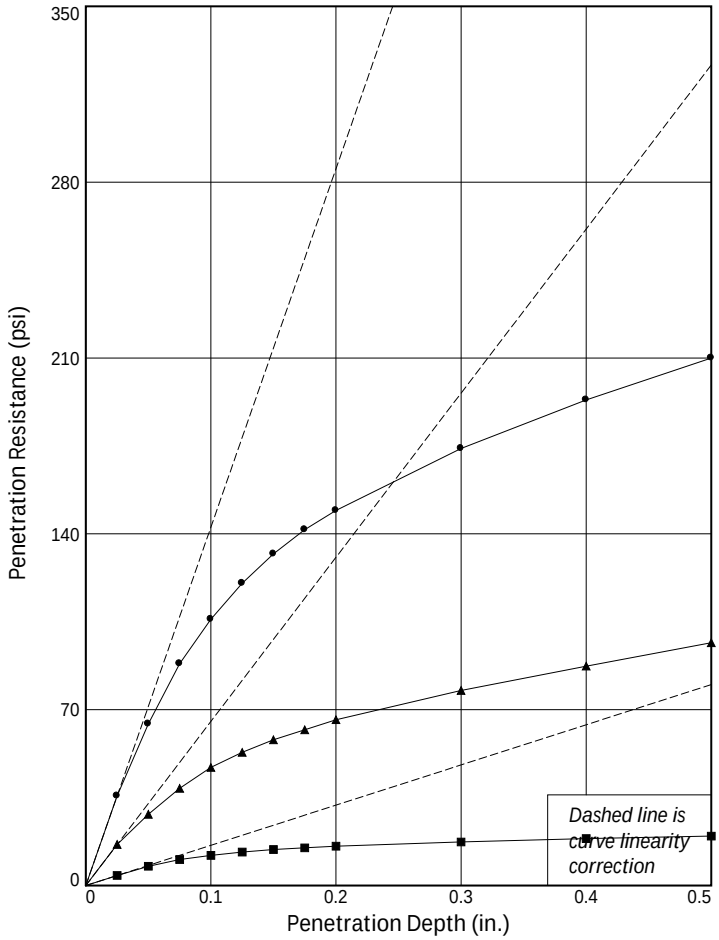
Test Remarks:

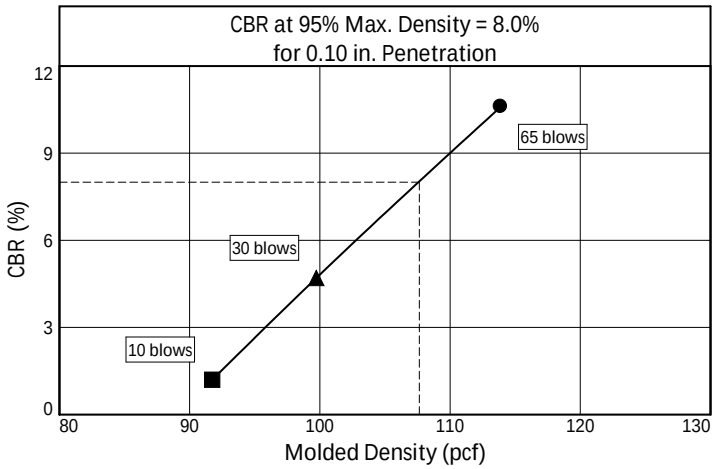
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 113.9 | 100.5 | 11.2 | 113.9 | 100.5 | 18.2 | 10.6 | 10.0 | 0.000 | 10 | 0 |
| 2 ▲ | 99.7 | 88 | 11.2 | 99.7 | 88 | 20.8 | 4.7 | 4.4 | 0.000 | 10 | 0 |
| 3 ■ | 91.7 | 80.9 | 11.2 | 91.7 | 81 | 23.6 | 1.2 | 1.0 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown clayey sand with gravel | SC | 113.3 | 11.2 | 32 | 11 |

Project No: IRN 25-N-599

Project: Speedway, Sherman County, OR

Sample Number: WTG-05, TRT Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

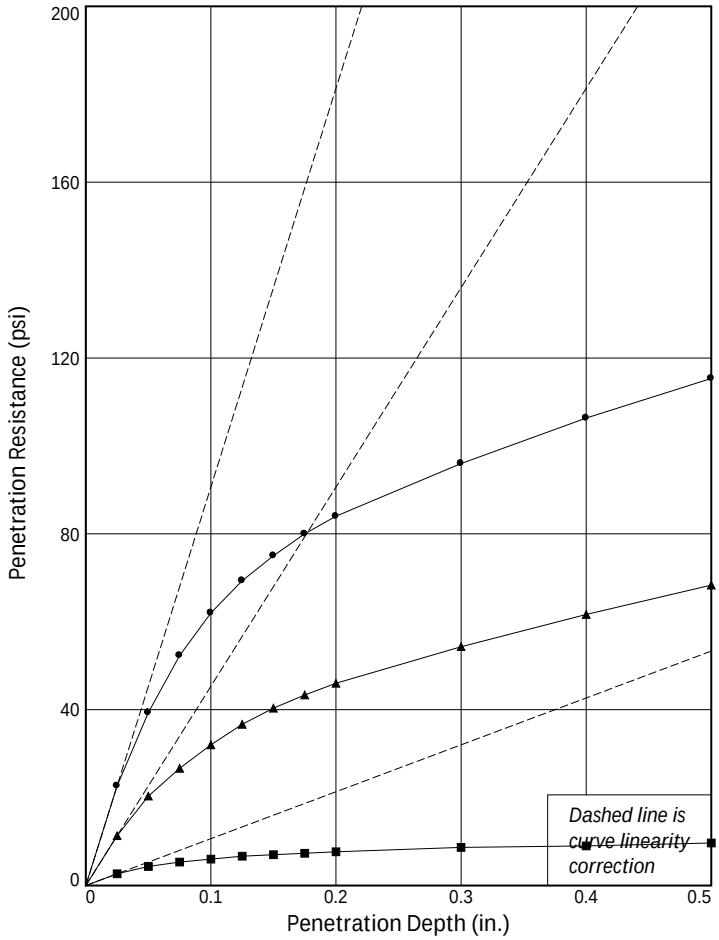
Test Remarks:

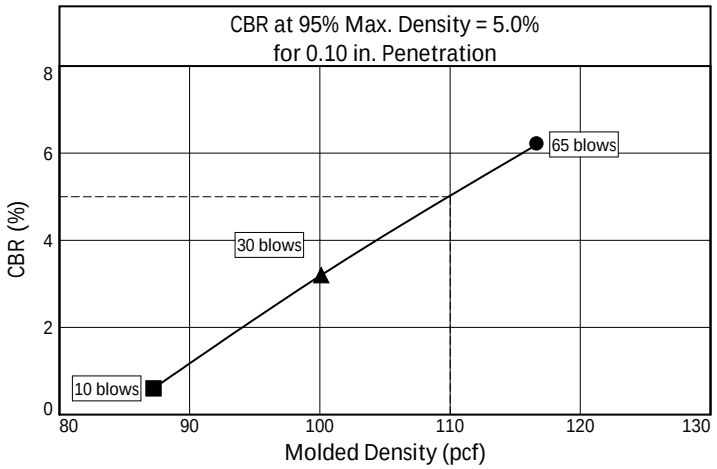
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 116.7 | 100.8 | 13.5 | 116.3 | 100.4 | 18.1 | 6.2 | 5.6 | 0.000 | 10 | 0.3 |
| 2 ▲ | 100.1 | 86.4 | 13.5 | 100.0 | 86.4 | 20.1 | 3.2 | 3.1 | 0.000 | 10 | 0.1 |
| 3 ■ | 87.2 | 75.3 | 13.5 | 87.2 | 75.3 | 22.1 | 0.6 | 0.5 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy lean clay | CL | 115.8 | 13.5 | 33 | 10 |

Project No: IRN 25-N-599

Project: Speedway, Sherman County, OR

Sample Number: WTG-06, TRT Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

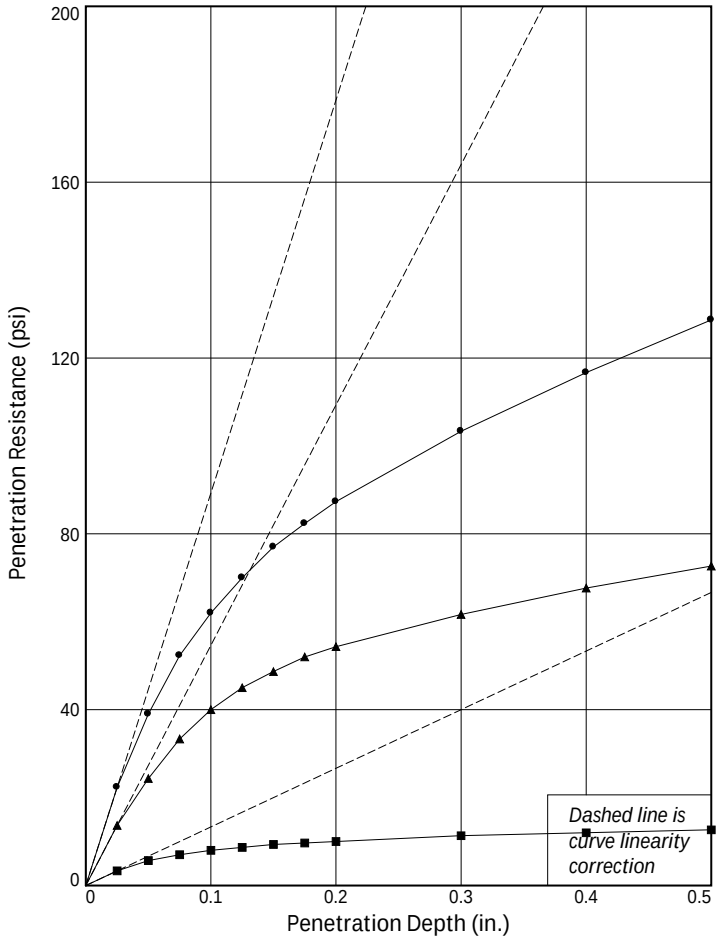
Test Remarks:

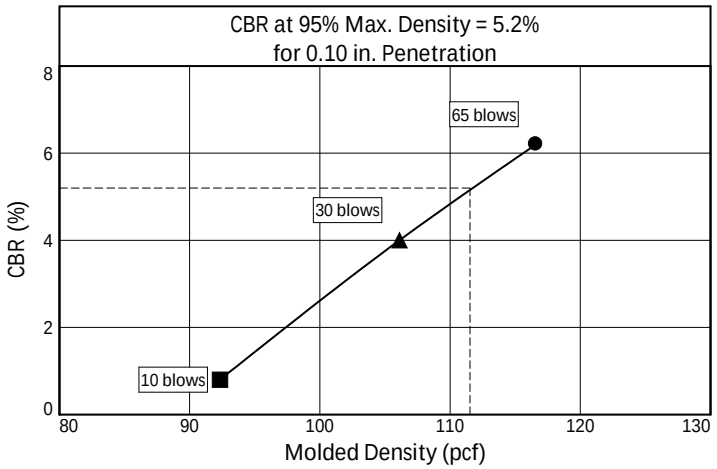
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 116.6 | 99.3 | 11.8 | 115.2 | 98.1 | 20.6 | 6.2 | 5.8 | 0.000 | 10 | 1.2 |
| 2 ▲ | 106.1 | 90.4 | 11.8 | 105.5 | 89.9 | 21.4 | 4.0 | 3.6 | 0.000 | 10 | 0.6 |
| 3 ■ | 92.3 | 78.6 | 11.8 | 92.0 | 78.4 | 23.6 | 0.8 | 0.7 | 0.000 | 10 | 0.3 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy lean clay with gravel | CL | 117.4 | 11.8 | 28 | 9 |

Project No: IRN 25-N-599

Project: Speedway, Sherman County, OR

Sample Number: WTG-07, TRT Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

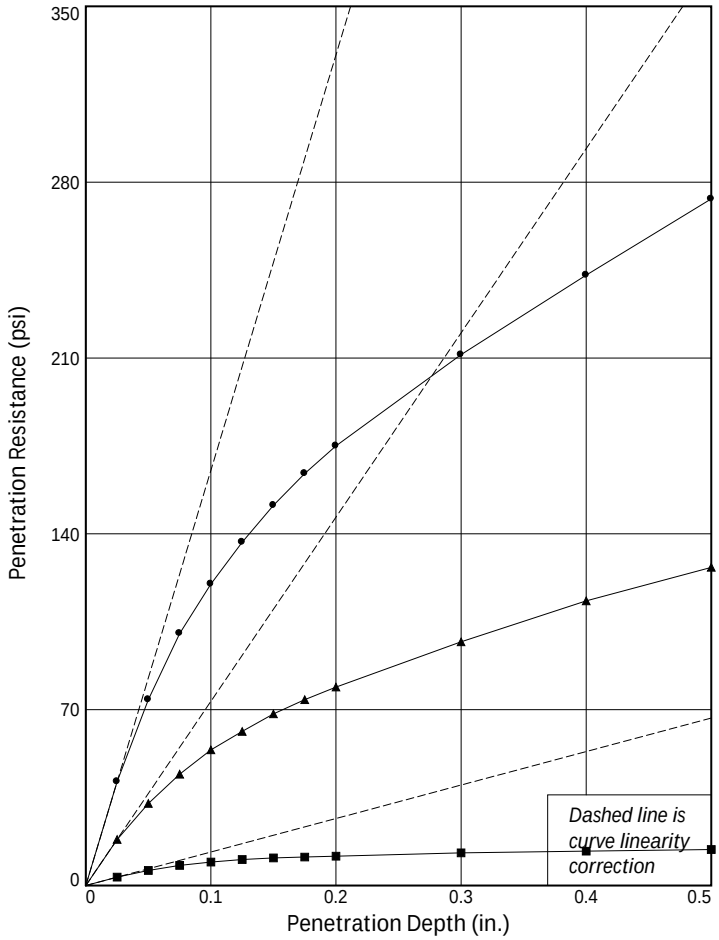
Test Remarks:

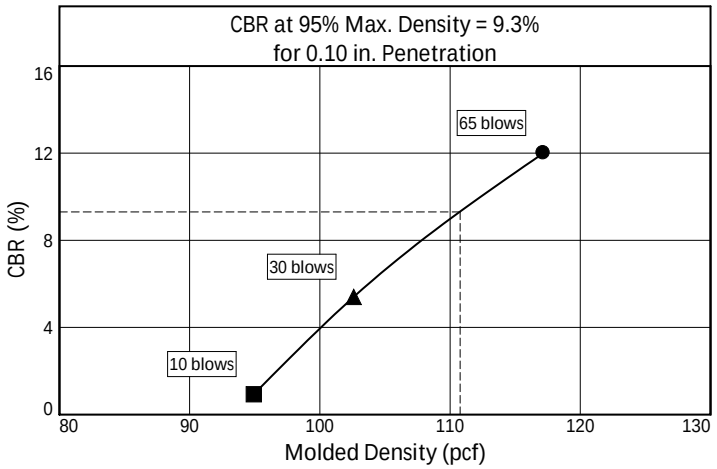
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 117.2 | 100.5 | 12.9 | 117.1 | 100.4 | 13.1 | 12.0 | 11.7 | 0.000 | 10 | 0.1 |
| 2 ▲ | 102.6 | 88 | 12.9 | 102.6 | 88 | 15.0 | 5.4 | 5.3 | 0.000 | 10 | 0 |
| 3 ■ | 94.9 | 81.4 | 12.9 | 94.9 | 81.4 | 17.7 | 0.9 | 0.8 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown clayey gravel with sand | GC | 116.6 | 12.9 | 36 | 14 |

Project No: IRN 25-N-599

Project: Speedway, Sherman County, OR

Sample Number: WTG-08, TRT Depth: 1'-2'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

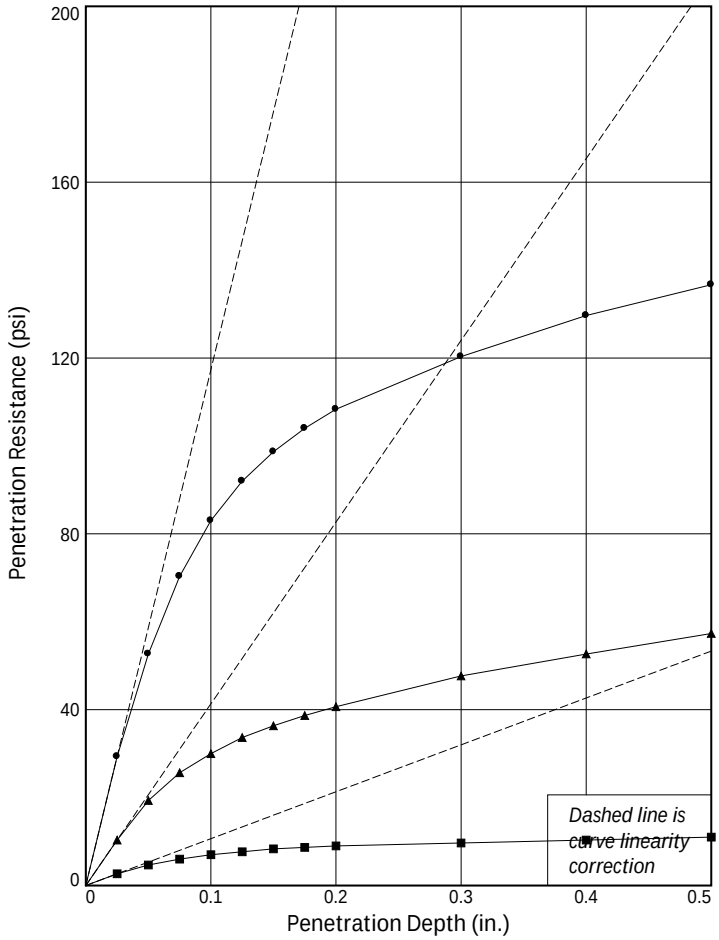
Test Remarks:

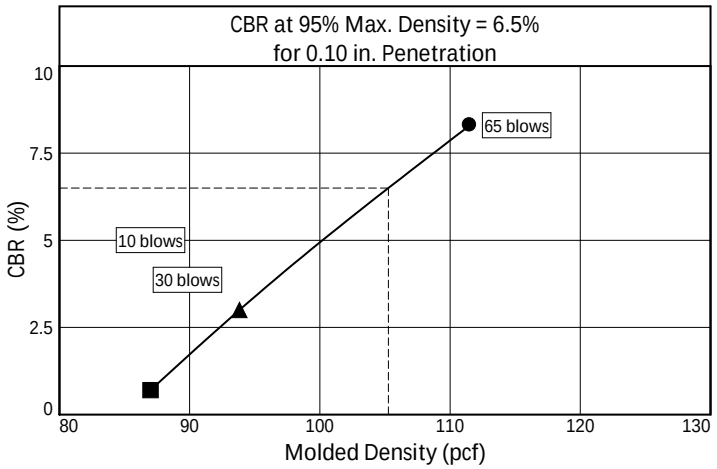
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 111.5 | 100.6 | 16.2 | 111.5 | 100.6 | 19.6 | 8.3 | 7.2 | 0.000 | 10 | 0.1 |
| 2 ▲ | 93.8 | 84.7 | 16.2 | 93.8 | 84.7 | 21.4 | 3.0 | 2.7 | 0.000 | 10 | 0 |
| 3 ■ | 87.0 | 78.5 | 16.2 | 87.0 | 78.6 | 22.3 | 0.7 | 0.6 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown silty sand | SM | 110.8 | 16.2 | NV | NP |

Project No: IRN 25-T-215

Project: Speedway, Sherman County, OR

Sample Number: SB-01, TRT Depth: 2'-5'

Date: 11/10/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

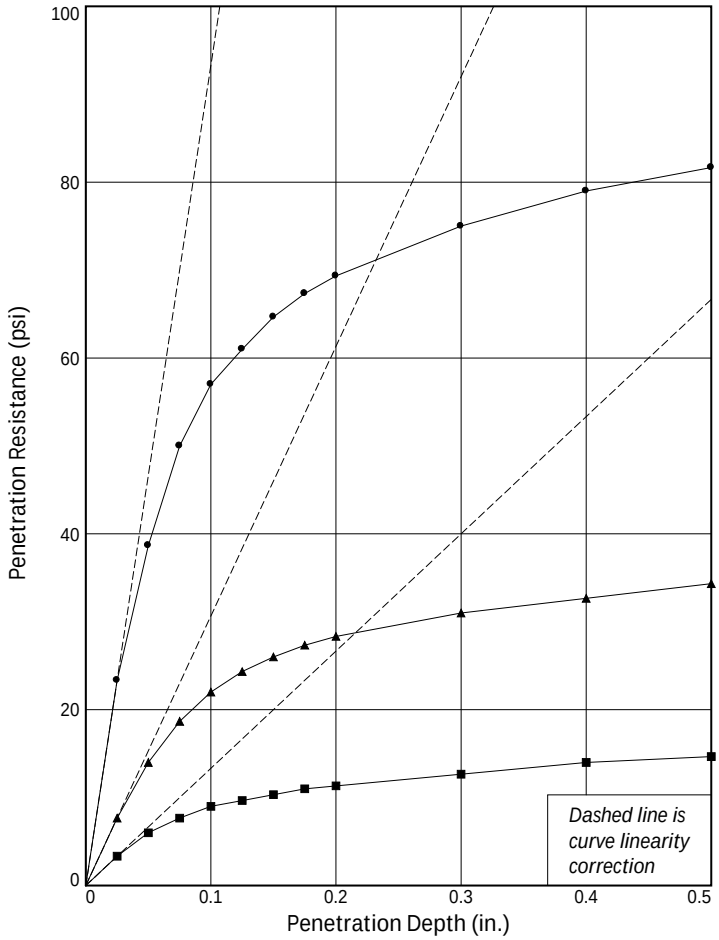
Test Remarks:

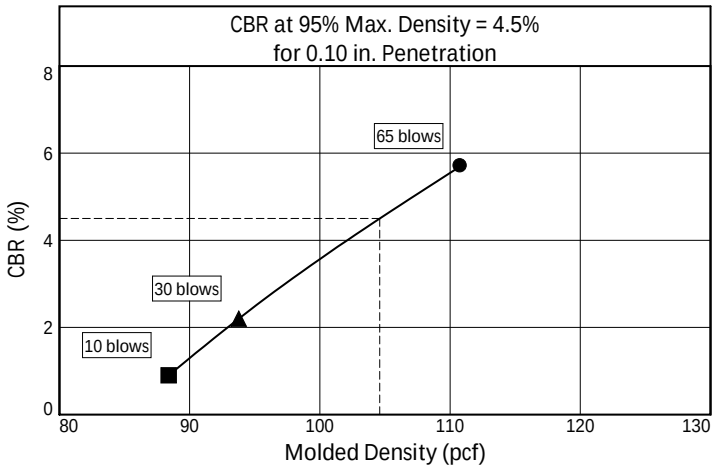
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: JE Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 110.8 | 100.6 | 14.7 | 110.5 | 100.4 | 17.9 | 5.7 | 4.6 | 0.000 | 10 | 0.3 |
| 2 ▲ | 93.8 | 85.2 | 14.7 | 93.6 | 85 | 18.8 | 2.2 | 1.9 | 0.000 | 10 | 0.2 |
| 3 ■ | 88.4 | 80.3 | 14.7 | 88.4 | 80.3 | 20.5 | 0.9 | 0.8 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy lean clay | CL | 110.1 | 14.7 | 32 | 10 |

Project No: IRN 25-T-215

Project: Speedway, Sherman County, OR

Sample Number: SB-02, TRT Depth: 2'-5'

Date: 11/10/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

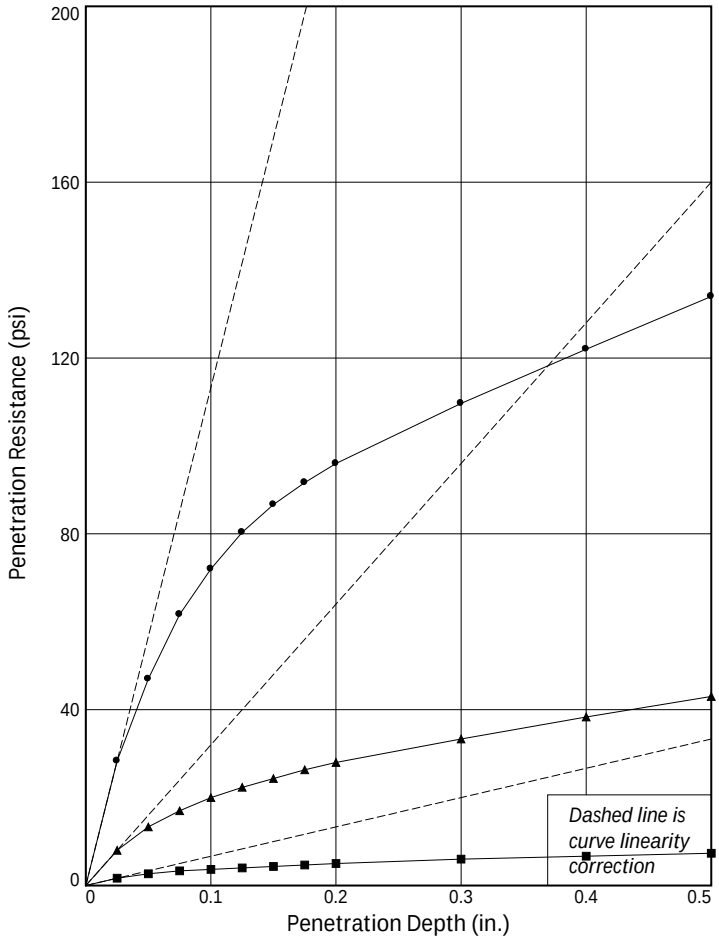
Test Remarks:

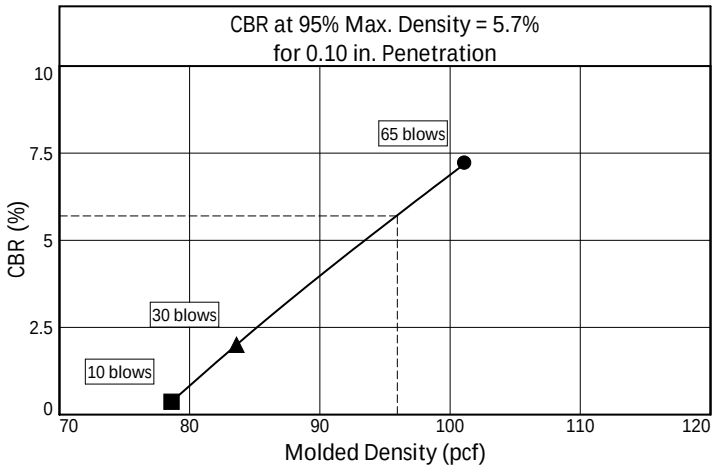
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: JE Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 101.1 | 100.1 | 20.3 | 100.0 | 99 | 20.5 | 7.2 | 6.4 | 0.000 | 10 | 1.2 |
| 2 ▲ | 83.6 | 82.8 | 20.3 | 83.5 | 82.6 | 23.7 | 2.0 | 1.9 | 0.000 | 10 | 0.2 |
| 3 ■ | 78.6 | 77.8 | 20.3 | 78.4 | 77.7 | 18.4 | 0.4 | 0.3 | 0.000 | 10 | 0.2 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Light Brown sandy silty clay | CL-ML | 101.0 | 20.3 | 26 | 5 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: PV-08, CBR Depth: 2'-5'

Date: 10/21/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

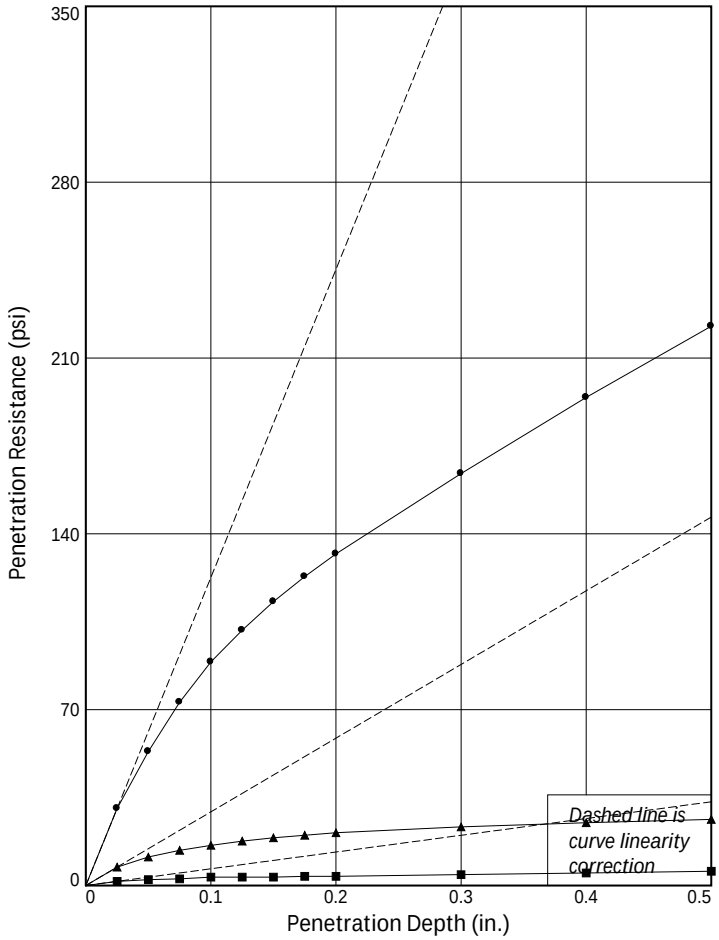
Test Remarks:

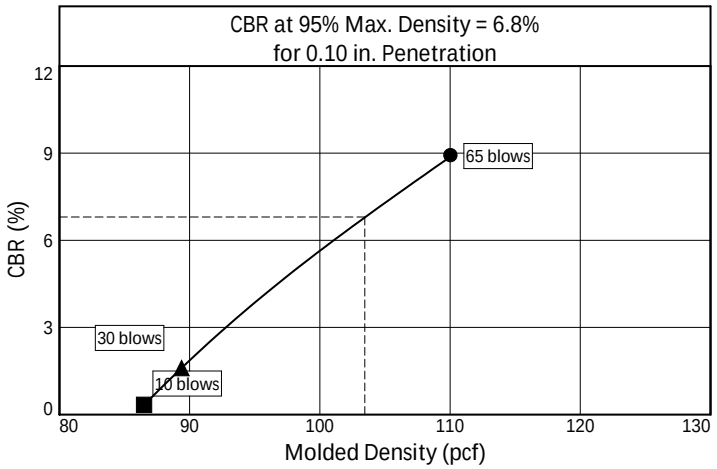
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: ST Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 110.1 | 101.1 | 15.4 | 109.9 | 100.9 | 20.4 | 8.9 | 8.8 | 0.000 | 10 | 0.2 |
| 2 ▲ | 89.4 | 82.1 | 15.4 | 89.3 | 82 | 26.6 | 1.6 | 1.4 | 0.000 | 10 | 0.1 |
| 3 ■ | 86.5 | 79.4 | 15.4 | 86.4 | 79.4 | 28.6 | 0.3 | 0.2 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Dark Brown sandy silty clay | CL-ML | 108.9 | 15.4 | 22 | 5 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: PV-21, CBR  Depth: 2'-5'

Date: 10/21/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

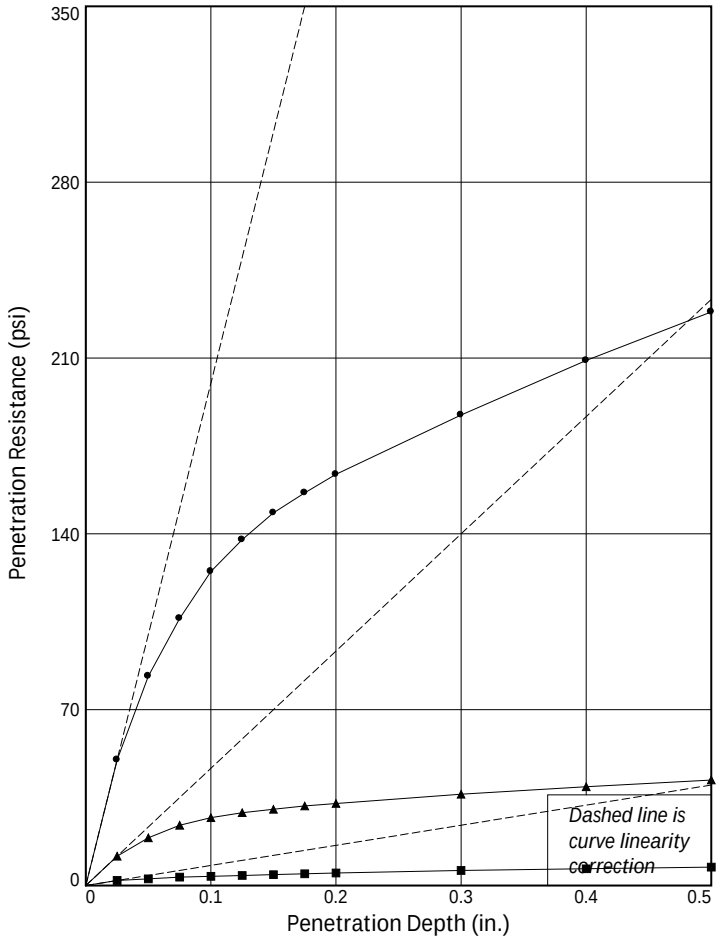
Test Remarks:

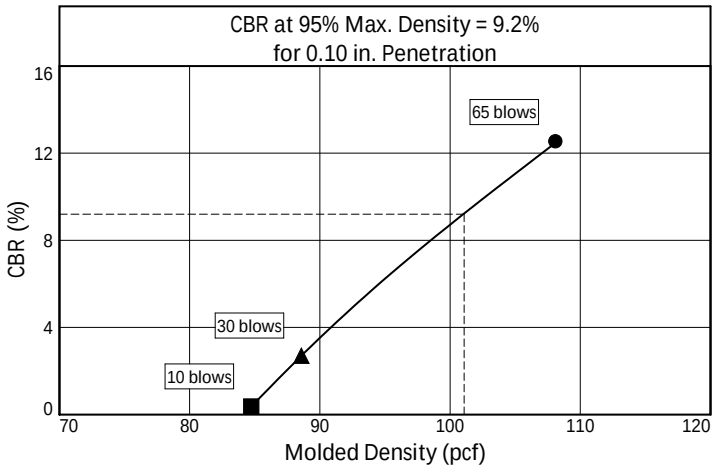
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: ST  Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 108.2 | 101.7 | 16.2 | 107.8 | 101.3 | 24.0 | 12.5 | 10.9 | 0.000 | 10 | 0.3 |
| 2 ▲ | 88.6 | 83.3 | 16.2 | 88.5 | 83.2 | 26.8 | 2.7 | 2.2 | 0.000 | 10 | 0.1 |
| 3 ■ | 84.7 | 79.6 | 16.2 | 84.7 | 79.6 | 28.6 | 0.4 | 0.3 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Light Brown silty, clayey sand | SC-SM | 106.4 | 16.2 | 27 | 6 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: PV-24, CBR Depth: 2'-5'

Date: 10/21/2025

Test Remarks:

Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

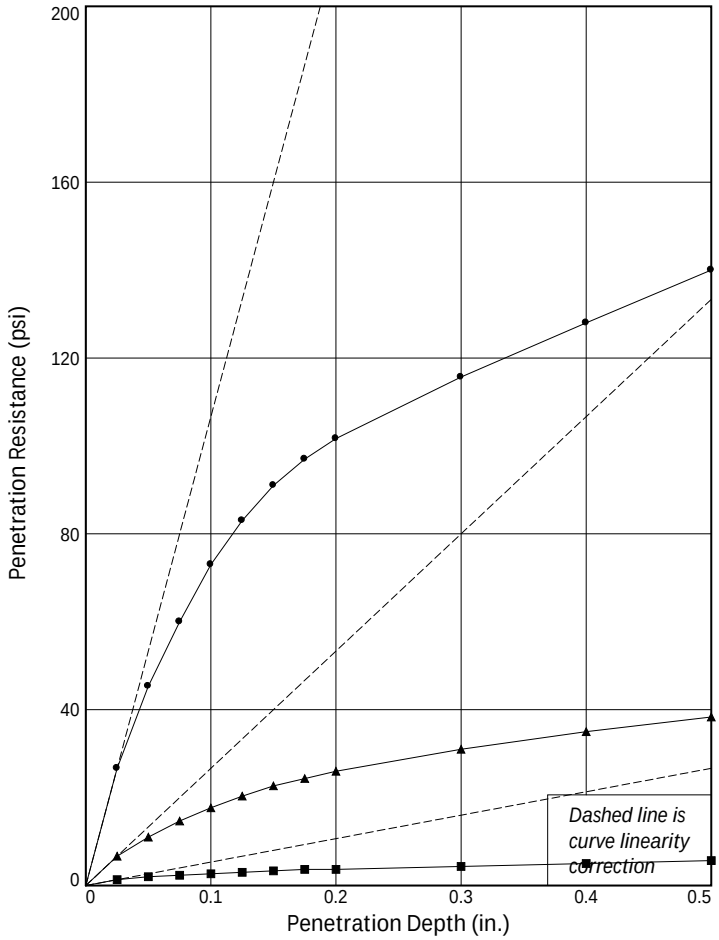
BEARING RATIO TEST REPORT

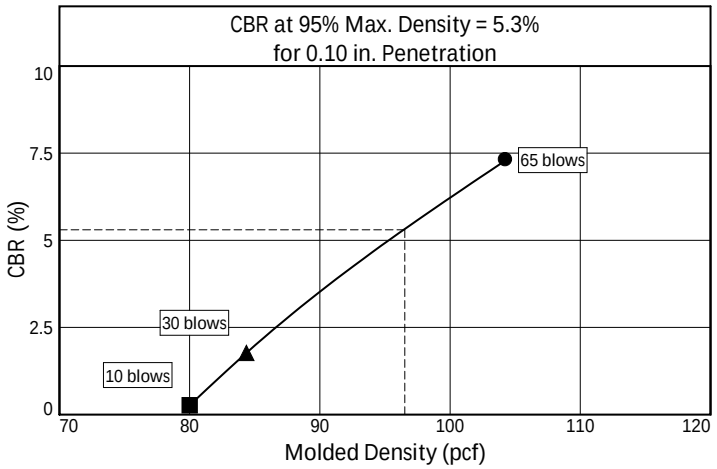
ANS CONSULTANTS, INC.

Figure _____

Tested By: FM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 104.3 | 102.7 | 17.7 | 103.2 | 101.6 | 24.6 | 7.3 | 6.8 | 0.000 | 10 | 1.1 |
| 2 ▲ | 84.4 | 83.1 | 17.7 | 84.3 | 83 | 27.0 | 1.8 | 1.7 | 0.000 | 10 | 0.1 |
| 3 ■ | 80.0 | 78.7 | 17.7 | 79.9 | 78.7 | 29.8 | 0.3 | 0.2 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Light Brown sandy silty clay | CL-ML | 101.6 | 17.7 | 24 | 5 |

Project No: IRN 25-N-570

Project: Speedway, Sherman County, OR

Sample Number: PV-34, CBR Depth: 2'-5'

Date: 10/21/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

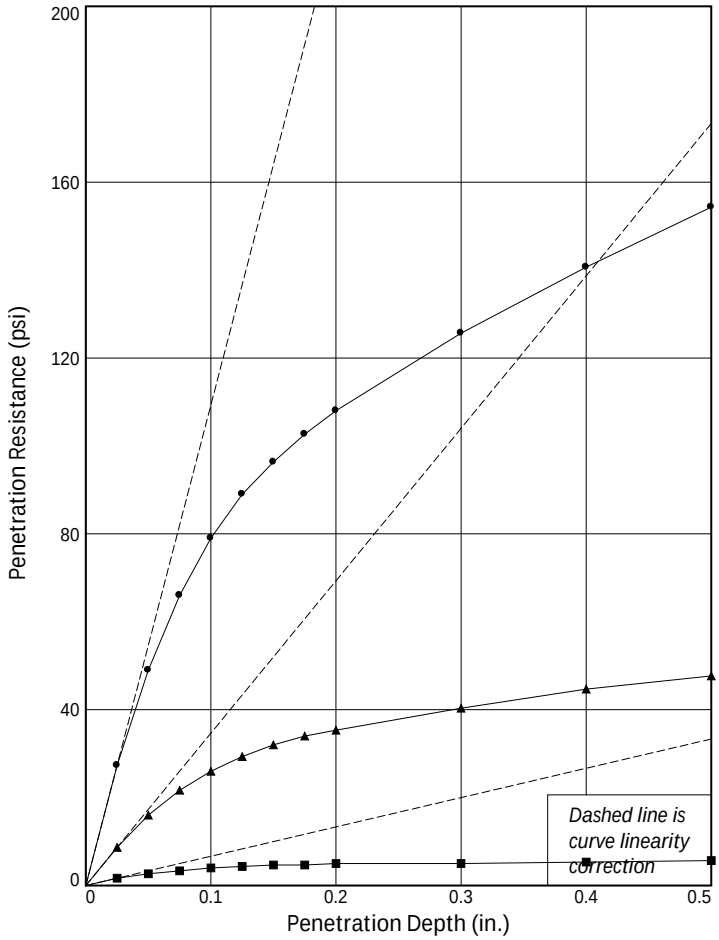
Test Remarks:

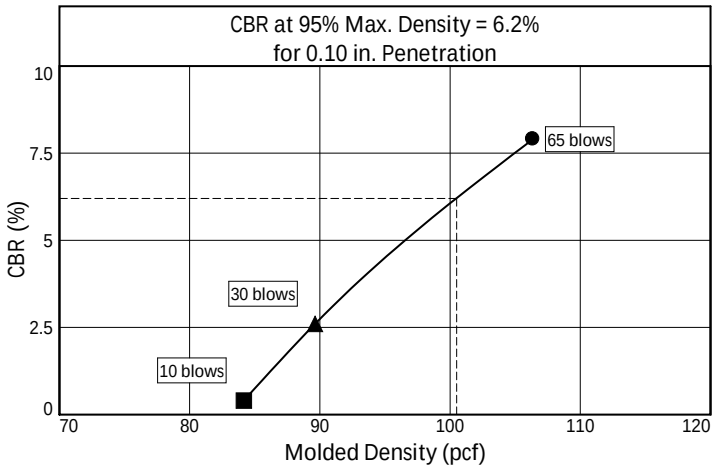
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: ST Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 106.4 | 100.6 | 16.6 | 105.5 | 99.7 | 23.9 | 7.9 | 7.2 | 0.000 | 10 | 0.8 |
| 2 ▲ | 89.6 | 84.7 | 16.6 | 89.6 | 84.6 | 25.8 | 2.6 | 2.4 | 0.000 | 10 | 0.1 |
| 3 ■ | 84.2 | 79.6 | 16.6 | 84.1 | 79.5 | 28.4 | 0.4 | 0.3 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown silty clay with sand | CL-ML | 105.8 | 16.6 | 26 | 6 |

Project No: IRN 25-N-597

Project: Speedway, Sherman County, OR

Sample Number: PV-045, TRT Depth: 2'-5'

Date: 10/22/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

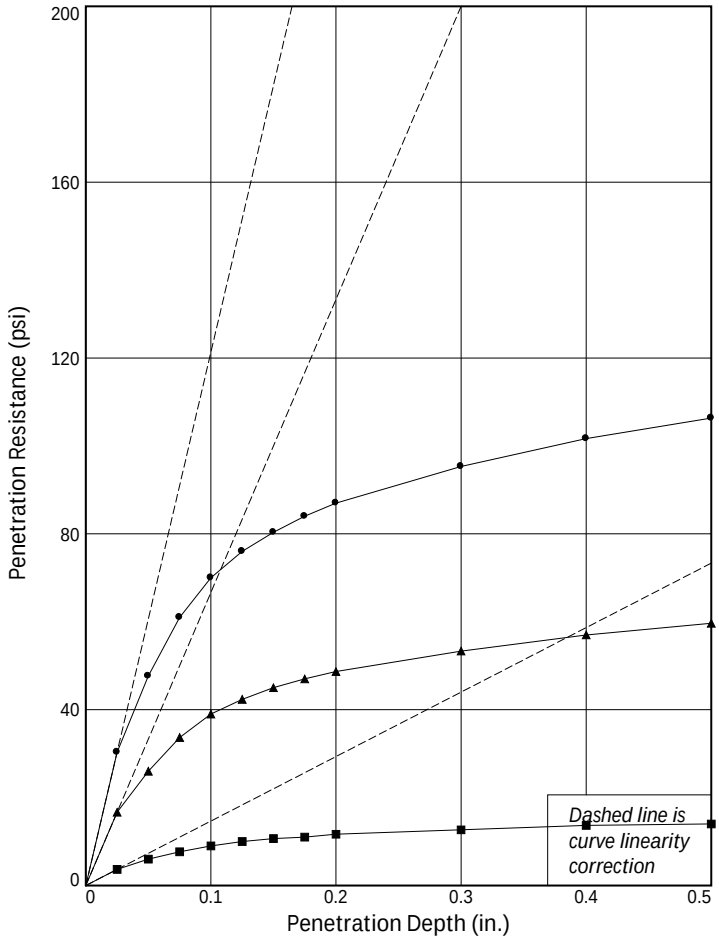
Test Remarks:

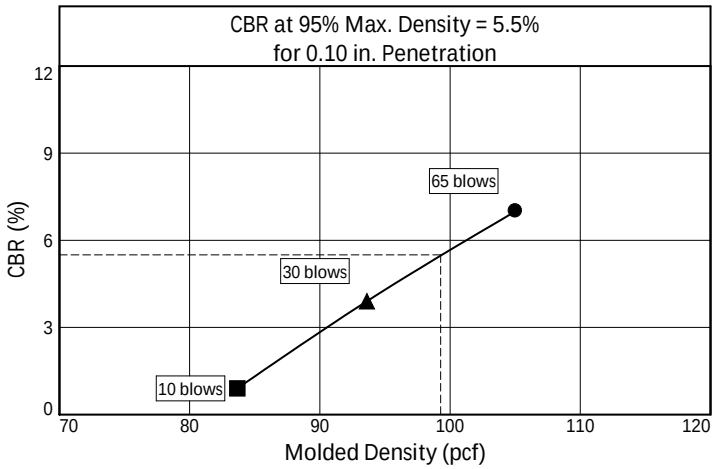
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 105.0 | 100.5 | 19.6 | 104.9 | 100.4 | 24.2 | 7.0 | 5.8 | 0.000 | 10 | 0.1 |
| 2 ▲ | 93.6 | 89.6 | 19.6 | 93.6 | 89.6 | 25.7 | 3.9 | 3.2 | 0.000 | 10 | 0 |
| 3 ■ | 83.7 | 80.1 | 19.6 | 83.7 | 80.1 | 25.9 | 0.9 | 0.8 | 0.000 | 10 | -0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Light Brown sandy silt with gravel | ML | 104.5 | 19.6 | 36 | 10 |

Project No: IRN 25-T-215

Project: Speedway, Sherman County, OR

Sample Number: PV-058, TRT Depth: 2'-5'

Date: 11/10/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

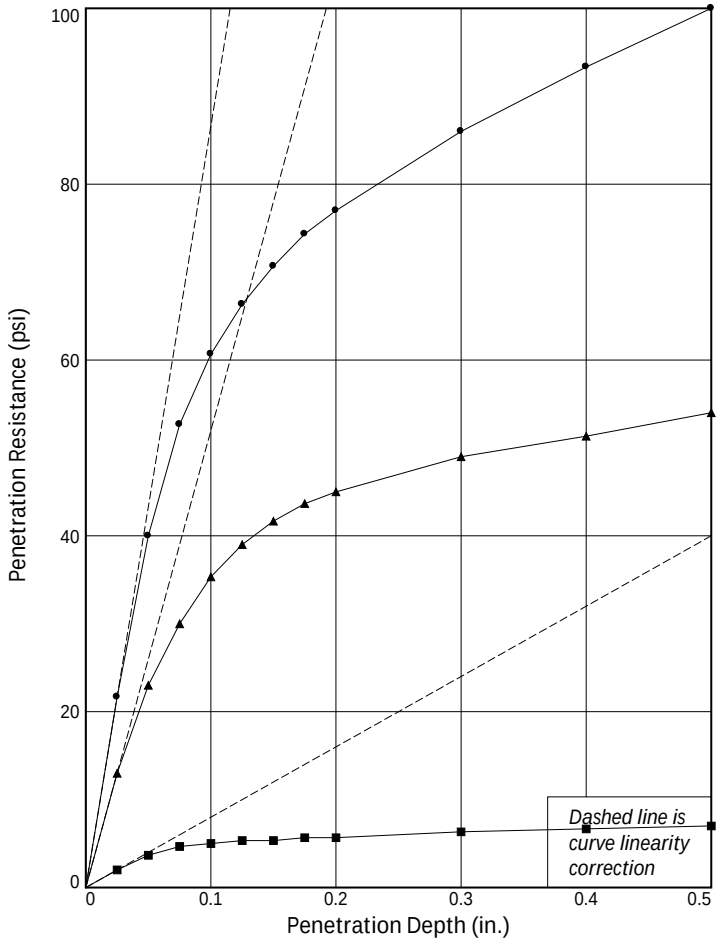
Test Remarks:

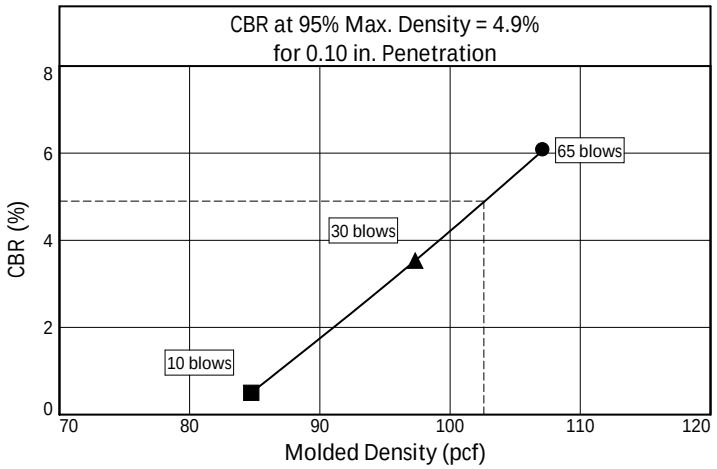
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: ES Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 107.1 | 99.2 | 16.7 | 107.1 | 99.1 | 25.4 | 6.1 | 5.1 | 0.000 | 10 | 0.1 |
| 2 ▲ | 97.3 | 90.1 | 16.7 | 97.3 | 90.1 | 26.8 | 3.5 | 3.0 | 0.000 | 10 | 0 |
| 3 ■ | 84.7 | 78.4 | 16.7 | 84.7 | 78.5 | 27.7 | 0.5 | 0.4 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Dark Brown lean clay with sand | CL | 108.0 | 16.7 | 32 | 13 |

Project No: IRN 25-T-215

Project: Speedway, Sherman County, OR

Sample Number: PV-079, TRT Depth: 2'-5'

Date: 11/10/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

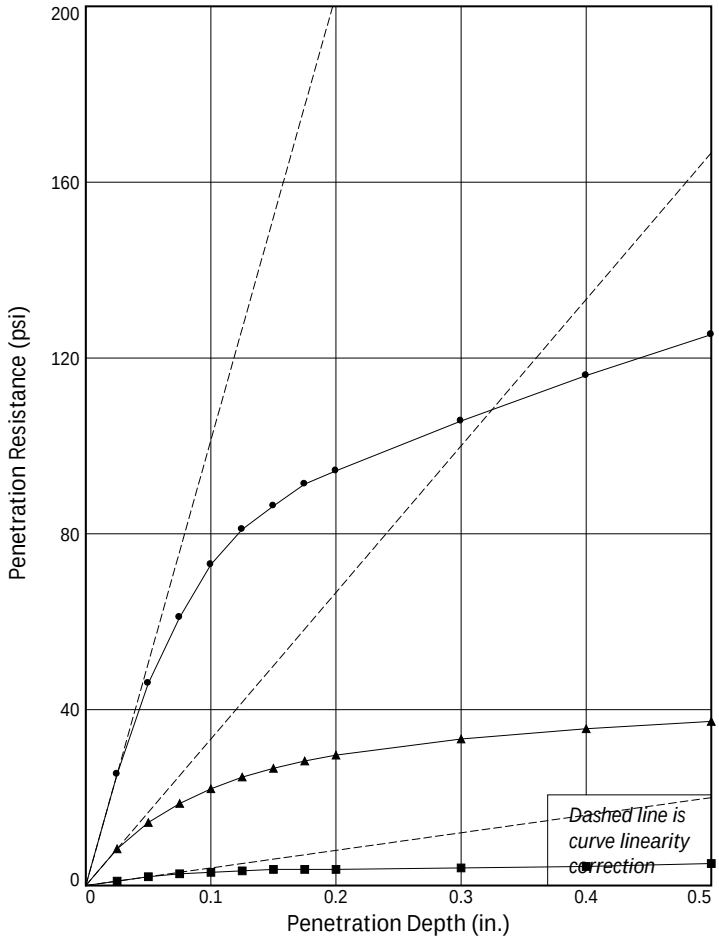
Test Remarks:

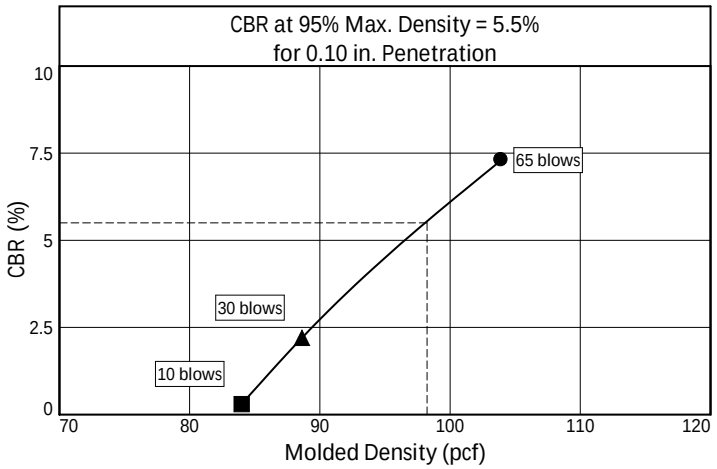
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: JE Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 103.9 | 100.5 | 16.9 | 102.8 | 99.4 | 24.6 | 7.3 | 6.3 | 0.000 | 10 | 1.1 |
| 2 ▲ | 88.6 | 85.7 | 16.9 | 88.3 | 85.4 | 26.3 | 2.2 | 2.0 | 0.000 | 10 | 0.3 |
| 3 ■ | 84.0 | 81.2 | 16.9 | 84.0 | 81.2 | 28.0 | 0.3 | 0.2 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy silty clay | CL-ML | 103.4 | 16.9 | 24 | 5 |

Project No: IRN 25-N-597

Project: Speedway, Sherman County, OR

Sample Number: PV-089, TRT Depth: 2'-5'

Date: 10/22/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

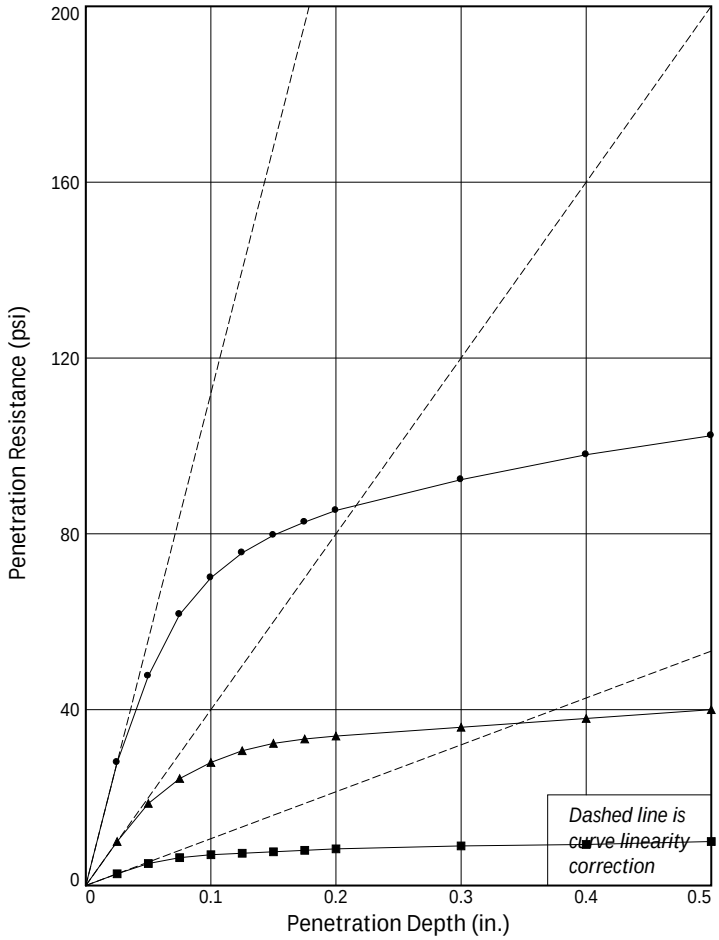
Test Remarks:

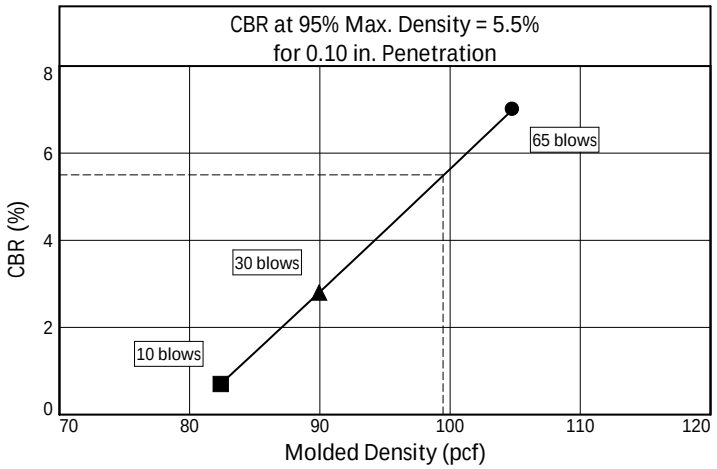
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: MF

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 104.8 | 100.1 | 18.6 | 104.2 | 99.5 | 23.3 | 7.0 | 5.7 | 0.000 | 10 | 0.6 |
| 2 ▲ | 89.9 | 85.9 | 18.6 | 89.7 | 85.7 | 24.8 | 2.8 | 2.3 | 0.000 | 10 | 0.2 |
| 3 ■ | 82.4 | 78.7 | 18.6 | 82.4 | 78.7 | 27.7 | 0.7 | 0.6 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown lean clay with sand | CL | 104.7 | 18.6 | 32 | 11 |

Project No: IRN 25-T-215

Project: Speedway, Sherman County, OR

Sample Number: PV-100, TRT Depth: 2'-5'

Date: 11/10/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

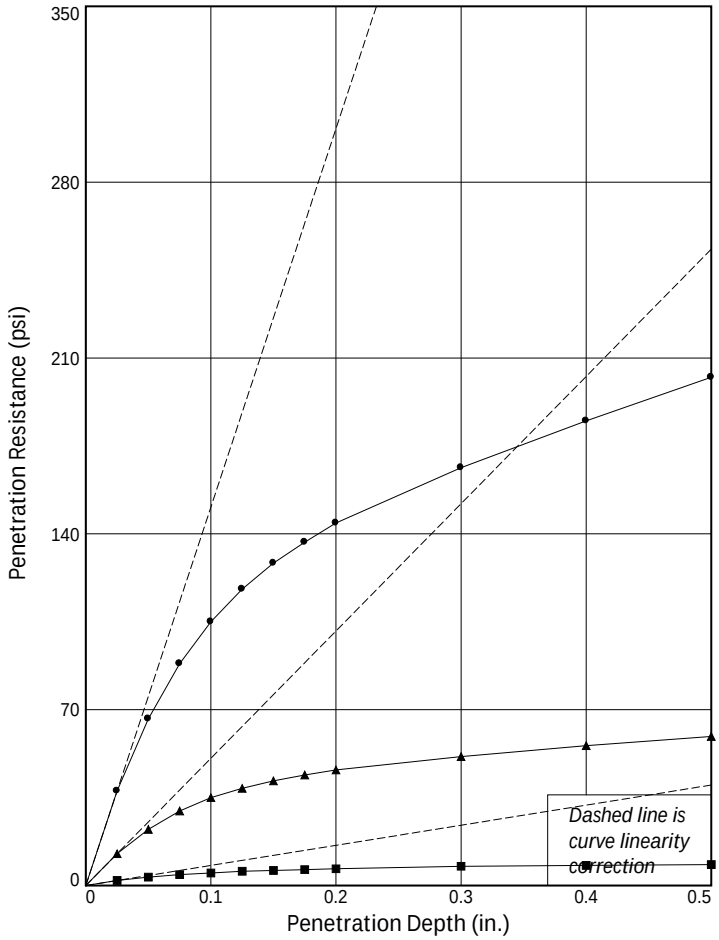
Test Remarks:

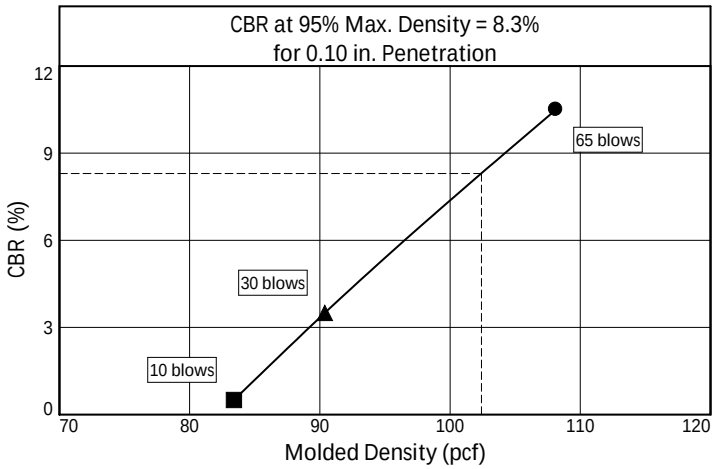
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: JE Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 108.1 | 100.3 | 16.4 | 107.7 | 99.9 | 19.4 | 10.5 | 9.6 | 0.000 | 10 | 0.4 |
| 2 ▲ | 90.4 | 83.9 | 16.4 | 90.2 | 83.7 | 21.2 | 3.5 | 3.1 | 0.000 | 10 | 0.2 |
| 3 ■ | 83.4 | 77.4 | 16.4 | 83.4 | 77.4 | 22.5 | 0.5 | 0.4 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown silty sand | SM | 107.8 | 16.4 | 31 | 6 |

Project No: IRN 25-N-597

Project: Speedway, Sherman County, OR

Sample Number: PV-114, TRT Depth: 2'-5'

Date: 10/22/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

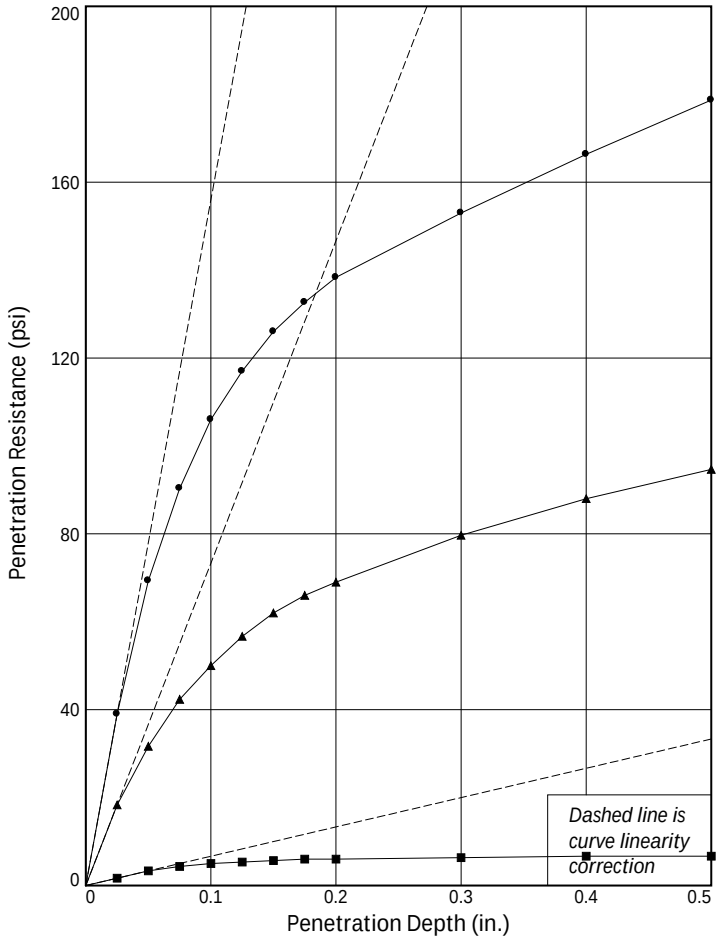
Test Remarks:

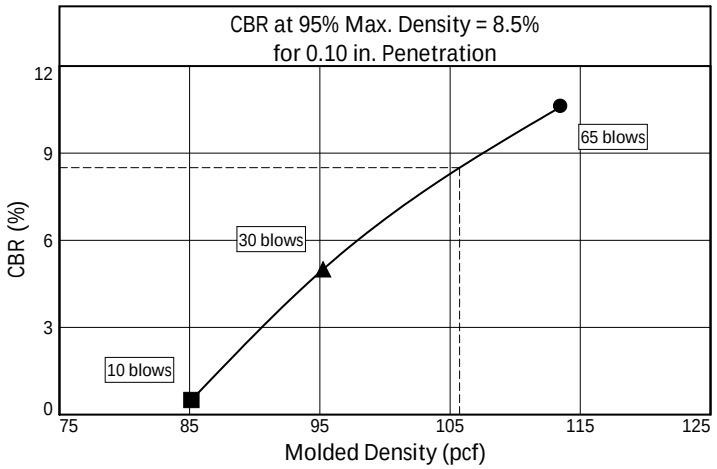
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 113.5 | 102 | 13.0 | 112.3 | 100.9 | 26.8 | 10.6 | 9.2 | 0.000 | 10 | 1.1 |
| 2 ▲ | 95.2 | 85.5 | 13.0 | 95.1 | 85.4 | 29.5 | 5.0 | 4.6 | 0.000 | 10 | 0.2 |
| 3 ■ | 85.1 | 76.5 | 13.0 | 85.1 | 76.4 | 32.4 | 0.5 | 0.4 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy silt | ML | 111.3 | 13.0 | NV | NP |

Project No: IRN 25-N-597

Project: Speedway, Sherman County, OR

Sample Number: PV-123, TRT Depth: 2'-5'

Date: 10/22/2025

Test Remarks:

Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

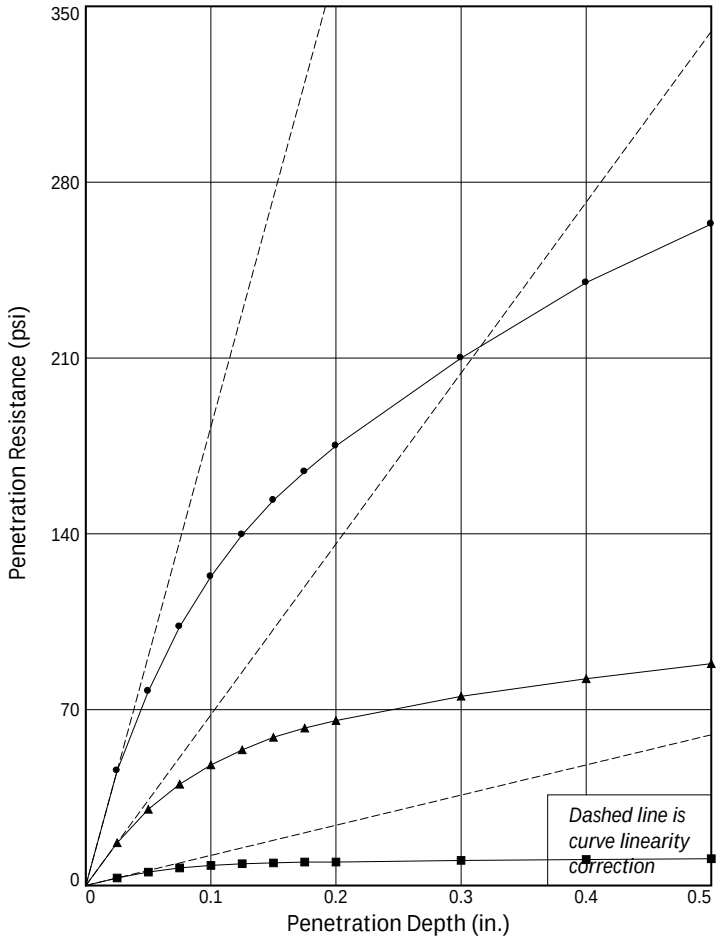
BEARING RATIO TEST REPORT

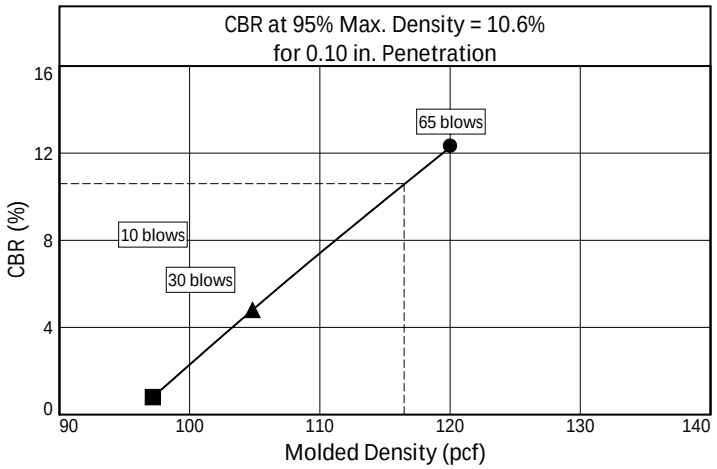
ANS CONSULTANTS, INC.

Figure _____

Tested By: MM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 120.1 | 98 | 11.8 | 119.3 | 97.3 | 17.1 | 12.3 | 11.7 | 0.000 | 10 | 0.6 |
| 2 ▲ | 104.8 | 85.5 | 11.8 | 104.7 | 85.4 | 18.4 | 4.8 | 4.4 | 0.000 | 10 | 0.1 |
| 3 ■ | 97.2 | 79.3 | 11.8 | 97.1 | 79.2 | 21.4 | 0.8 | 0.6 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown silty, clayey sand with gravel | SC-SM | 122.6 | 11.8 | 27 | 7 |

Project No: IRN 25-N-597

Project: Speedway, Sherman County, OR

Sample Number: PV-132, TRT Depth: 2'-5'

Date: 10/22/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

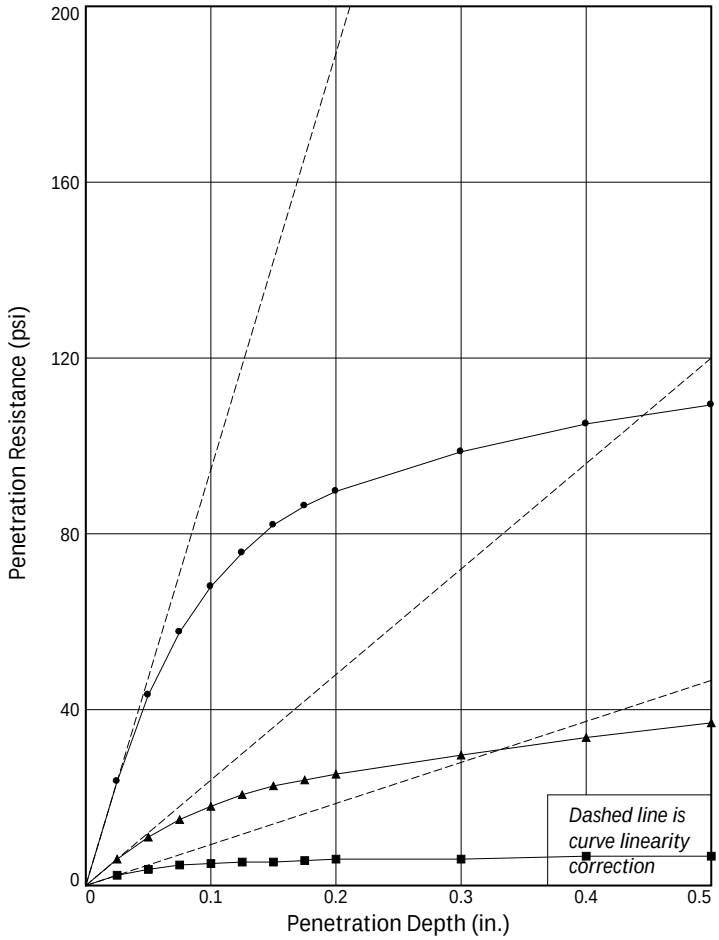
Test Remarks:

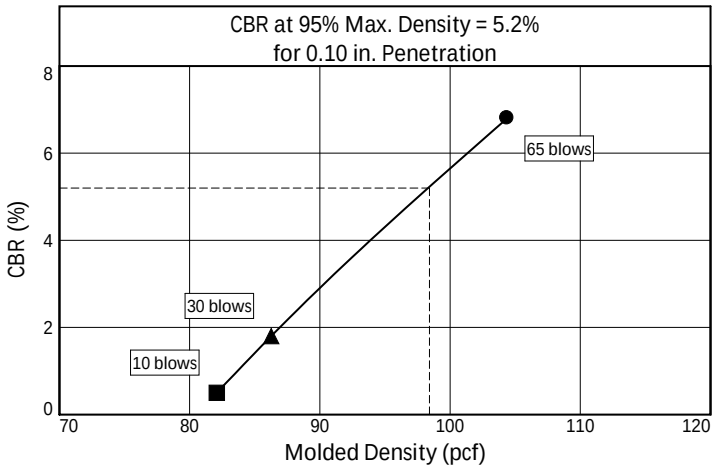
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 104.4 | 100.8 | 19.1 | 103.7 | 100.1 | 24.3 | 6.8 | 6.0 | 0.000 | 10 | 0.7 |
| 2 ▲ | 86.3 | 83.3 | 19.1 | 86.2 | 83.2 | 27.5 | 1.8 | 1.7 | 0.000 | 10 | 0.1 |
| 3 ■ | 82.1 | 79.2 | 19.1 | 82.1 | 79.2 | 31.1 | 0.5 | 0.4 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy silty clay | CL-ML | 103.6 | 19.1 | 24 | 5 |

Project No: IRN 25-N-597

Project: Speedway, Sherman County, OR

Sample Number: PV-144, TRT Depth: 2'-5'

Date: 10/22/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

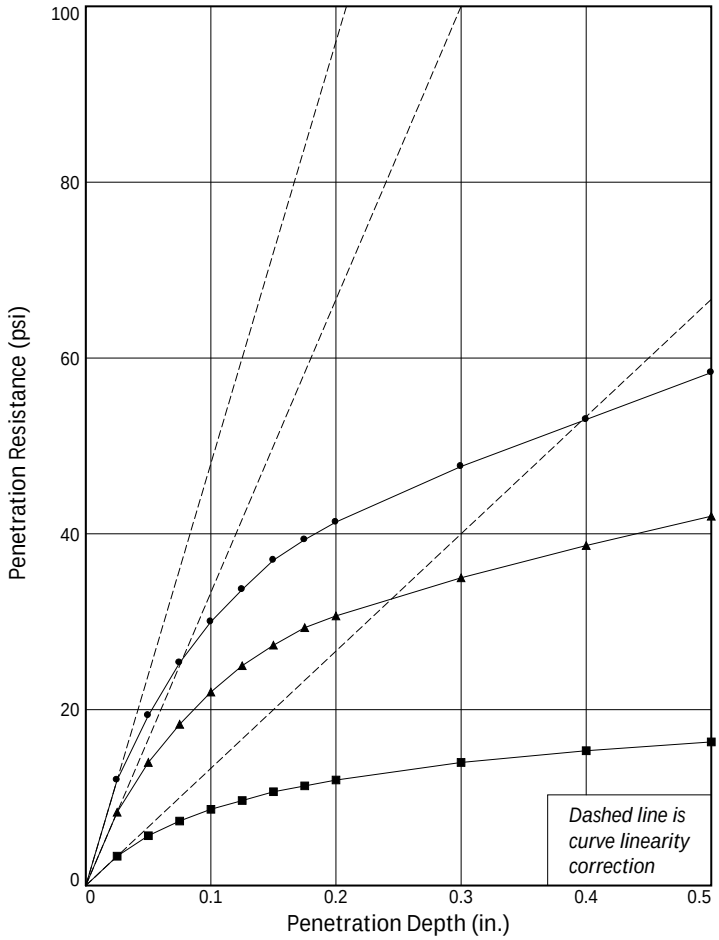
Test Remarks:

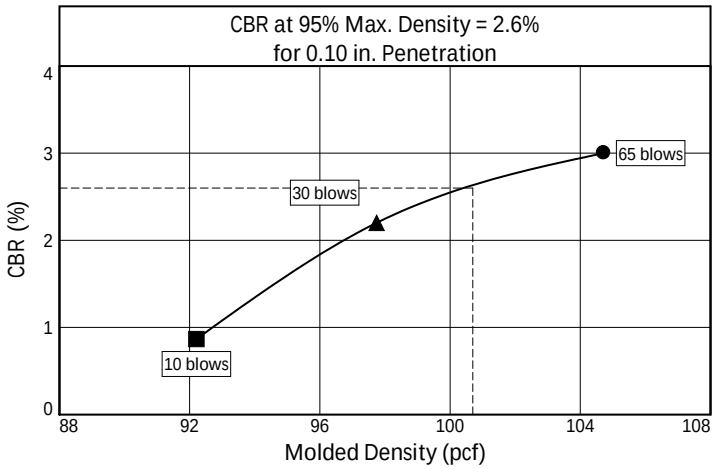
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 104.7 | 98.8 | 17.8 | 104.2 | 98.3 | 22.1 | 3.0 | 2.8 | 0.000 | 10 | 0.5 |
| 2 ▲ | 97.7 | 92.2 | 17.8 | 97.5 | 92 | 25.7 | 2.2 | 2.0 | 0.000 | 10 | 0.3 |
| 3 ■ | 92.2 | 87 | 17.8 | 92.2 | 87 | 30.3 | 0.9 | 0.8 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown gravelly lean clay with sand | CL | 106.0 | 17.8 | 31 | 12 |

Project No: IRN 25-N-598

Project: Speedway, Sherman County, OR

Sample Number: PV-151, CBR Depth: 1'-2'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

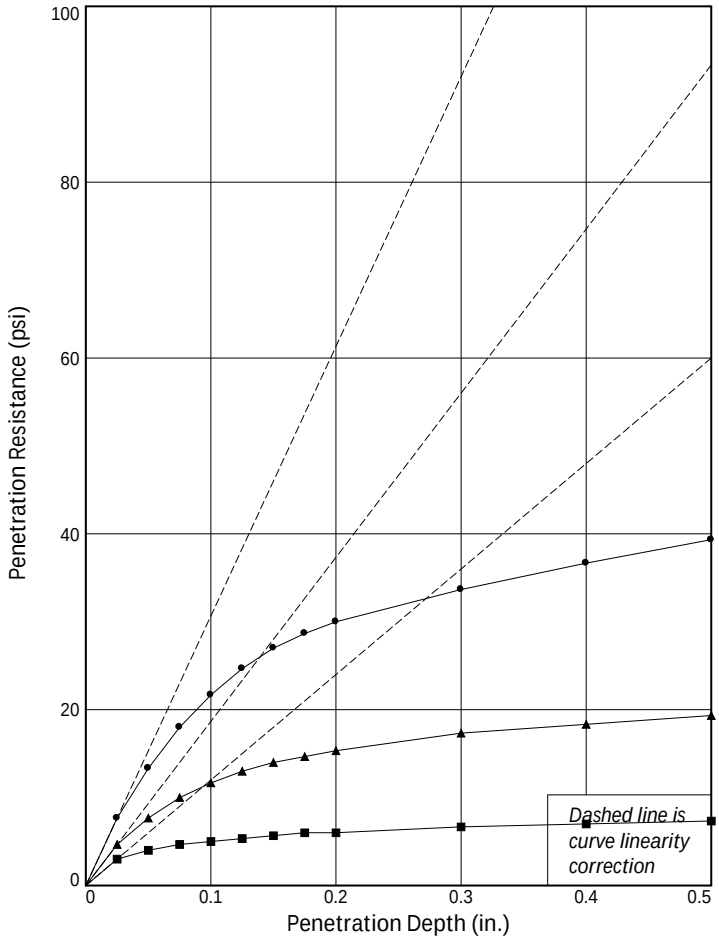
Test Remarks:

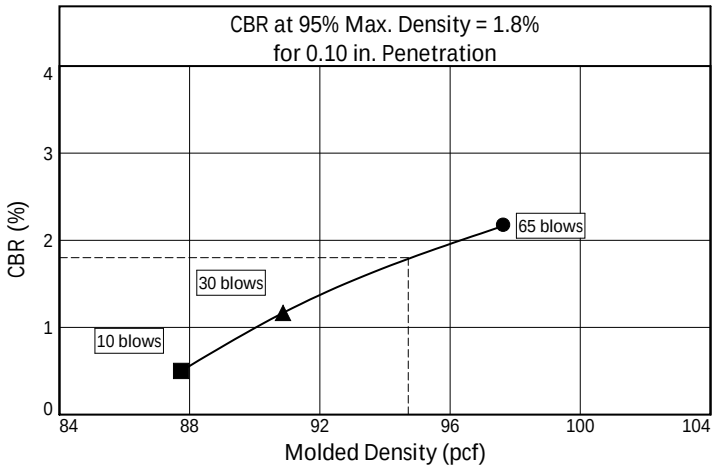
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: FM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 97.7 | 98 | 19.4 | 97.3 | 97.6 | 30.4 | 2.2 | 2.0 | 0.000 | 10 | 0.4 |
| 2 ▲ | 90.9 | 91.2 | 19.4 | 90.7 | 90.9 | 33.4 | 1.2 | 1.0 | 0.000 | 10 | 0.2 |
| 3 ■ | 87.7 | 88 | 19.4 | 87.7 | 88 | 36.8 | 0.5 | 0.4 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown lean clay with sand | CL | 99.7 | 19.4 | 32 | 13 |

Project No: IRN 25-N-598

Project: Speedway, Sherman County, OR

Sample Number: PV-164, CBR Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

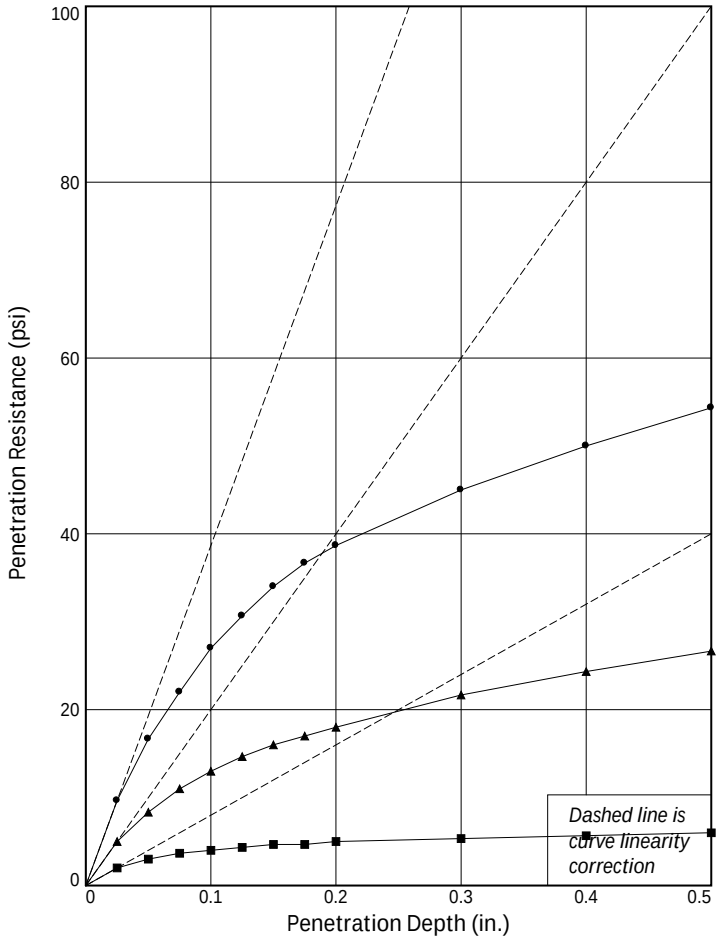
Test Remarks:

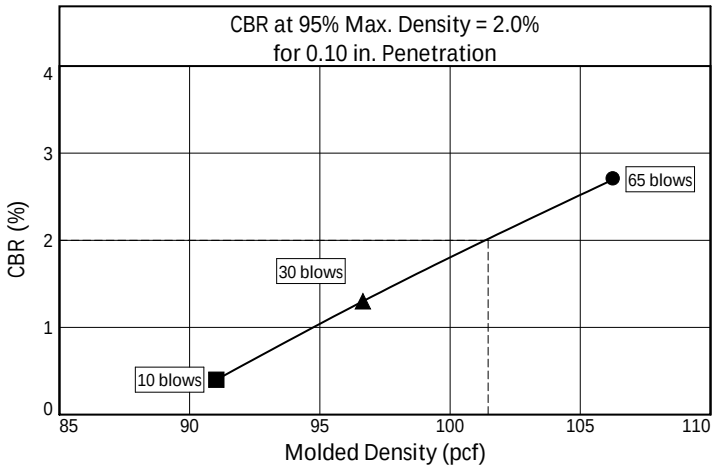
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: CB Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 106.3 | 99.5 | 16.7 | 105.9 | 99.2 | 22.4 | 2.7 | 2.6 | 0.000 | 10 | 0.3 |
| 2 ▲ | 96.7 | 90.5 | 16.7 | 96.5 | 90.4 | 26.8 | 1.3 | 1.2 | 0.000 | 10 | 0.2 |
| 3 ■ | 91.0 | 85.2 | 16.7 | 91.0 | 85.2 | 28.9 | 0.4 | 0.3 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Pale Brown silty, clayey sand with gravel | SC-SM | 106.8 | 16.7 | 27 | 6 |

Project No: IRN 25-N-598

Project: Speedway, Sherman County, OR

Sample Number: PV-178, CBR Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

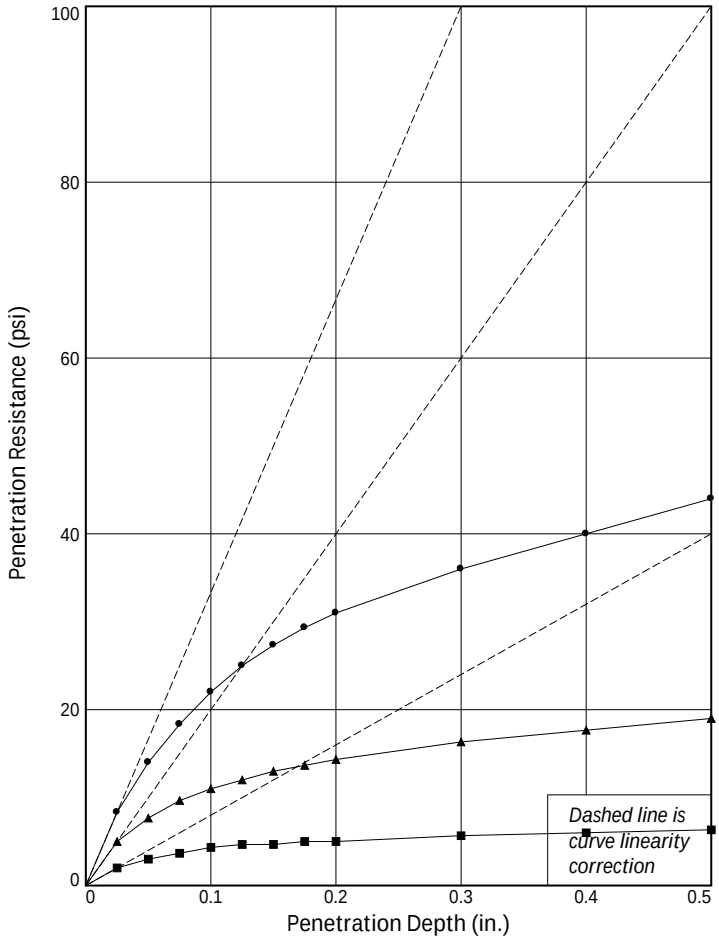
Test Remarks:

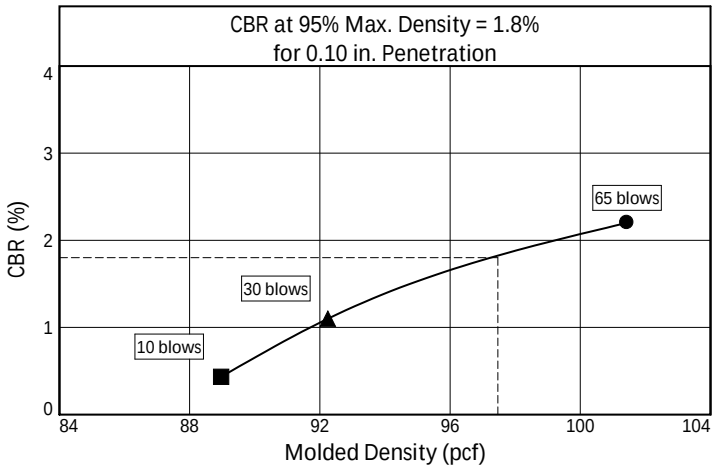
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 101.4 | 98.8 | 18.3 | 101.0 | 98.4 | 27.6 | 2.2 | 2.1 | 0.000 | 10 | 0.5 |
| 2 ▲ | 92.2 | 89.9 | 18.3 | 92.1 | 89.8 | 30.9 | 1.1 | 1.0 | 0.000 | 10 | 0.2 |
| 3 ■ | 89.0 | 86.7 | 18.3 | 88.9 | 86.7 | 33.9 | 0.4 | 0.3 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown lean clay | CL | 102.6 | 18.3 | 31 | 12 |

Project No: IRN 25-N-598

Project: Speedway, Sherman County, OR

Sample Number: PV-183, CBR Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

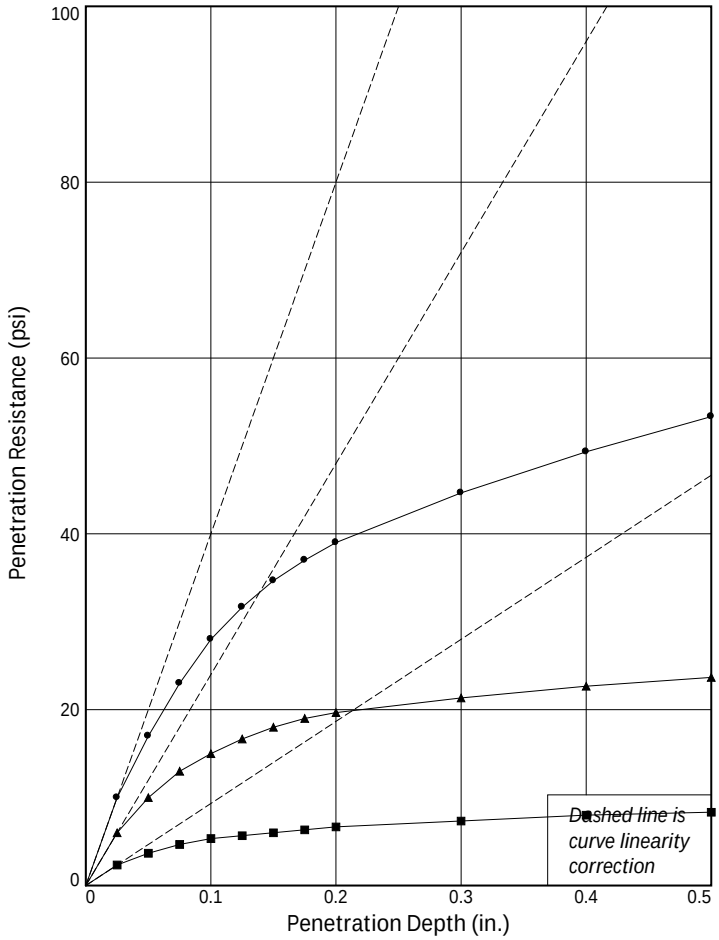
Test Remarks:

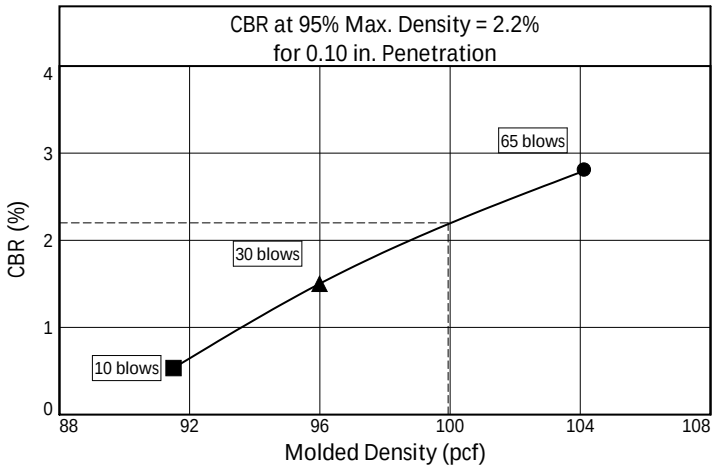
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: FM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 104.1 | 99 | 16.5 | 103.7 | 98.6 | 25.2 | 2.8 | 2.6 | 0.000 | 10 | 0.4 |
| 2 ▲ | 96.0 | 91.3 | 16.5 | 95.7 | 91 | 27.6 | 1.5 | 1.3 | 0.000 | 10 | 0.3 |
| 3 ■ | 91.5 | 87 | 16.5 | 91.4 | 86.9 | 29.5 | 0.5 | 0.4 | 0.000 | 10 | 0.1 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown sandy lean clay | CL | 105.2 | 16.5 | 31 | 12 |

Project No: IRN 25-N-598

Project: Speedway, Sherman County, OR

Sample Number: PV-195, CBR Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

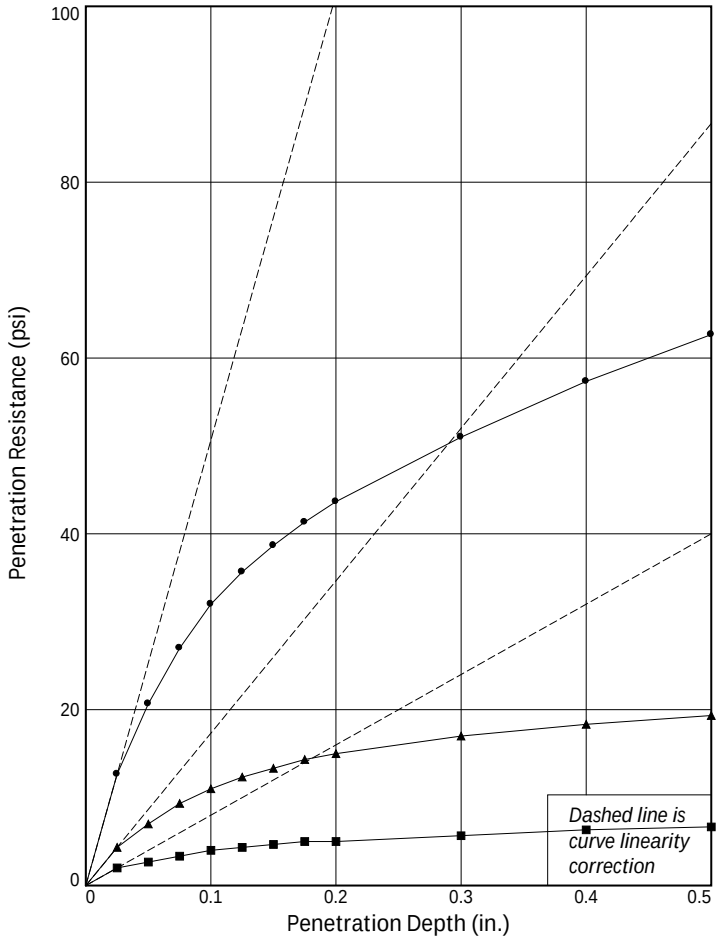
Test Remarks:

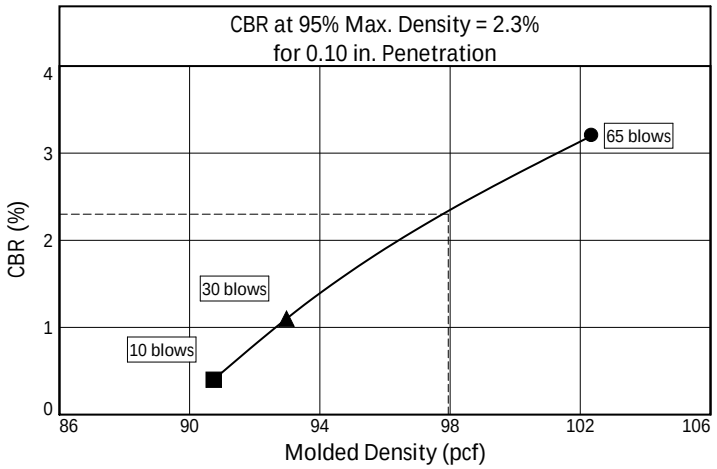
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: CC Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 102.4 | 99.3 | 19.8 | 101.3 | 98.2 | 29.1 | 3.2 | 2.9 | 0.000 | 10 | 1.1 |
| 2 ▲ | 93.0 | 90.2 | 19.8 | 92.4 | 89.6 | 31.8 | 1.1 | 1.0 | 0.000 | 10 | 0.7 |
| 3 ■ | 90.7 | 88 | 19.8 | 90.5 | 87.7 | 33.9 | 0.4 | 0.3 | 0.000 | 10 | 0.3 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Dark Brown lean clay with sand | CL | 103.1 | 19.8 | 34 | 15 |

Project No: IRN 25-N-598

Project: Speedway, Sherman County, OR

Sample Number: PV-207, CBR Depth: 2'-5'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

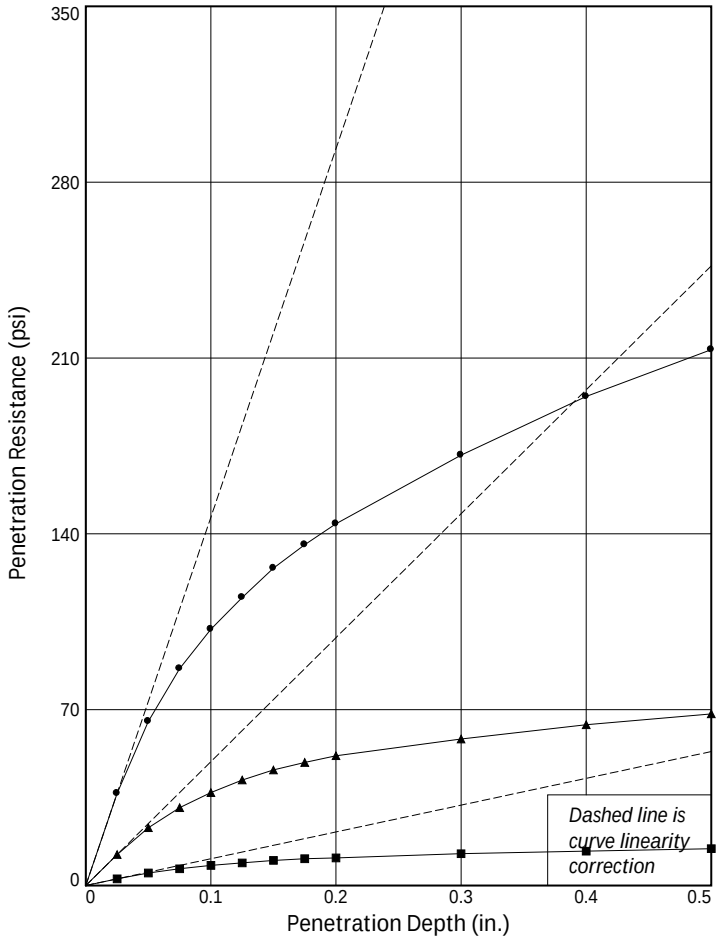
Test Remarks:

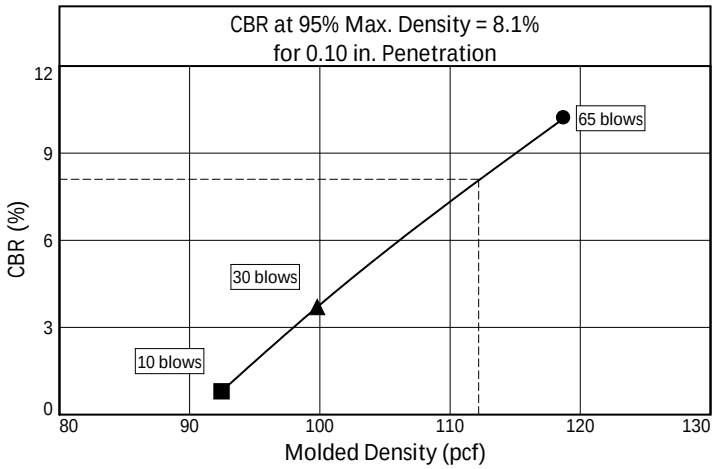
Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: FM Checked By: ANS

# BEARING RATIO TEST REPORT
## ASTM D1883-21




| | Molded | | | Soaked | | | CBR (%) | | Linearity Correction (in.) | Surcharge (lbs.) | Max. Swell (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Density (pcf) | Percent of Max. Dens. | Moisture (%) | Density (pcf) | Percent of Max. Dens. | Moisture (%) | 0.10 in. | 0.20 in. | | | |
| 1 ● | 118.7 | 100.5 | 12.3 | 118.6 | 100.4 | 18.8 | 10.2 | 9.6 | 0.000 | 10 | 0.1 |
| 2 ▲ | 99.8 | 84.5 | 12.3 | 99.8 | 84.5 | 20.3 | 3.7 | 3.4 | 0.000 | 10 | 0 |
| 3 ■ | 92.4 | 78.2 | 12.3 | 92.4 | 78.3 | 22.5 | 0.8 | 0.7 | 0.000 | 10 | 0 |

| Material Description | USCS | Max. Dens. (pcf) | Optimum Moisture (%) | LL | PI |
|---|---|---|---|---|---|
| Brown clayey sand with gravel | SC | 118.1 | 12.3 | 31 | 11 |

Project No: IRN 25-N-599

Project: Speedway, Sherman County, OR

Sample Number: PV-214, TRT Depth: 1'-2'

Date: 11/6/2025

BEARING RATIO TEST REPORT

ANS CONSULTANTS, INC.

Test Remarks:

Saturated Sample tested; Max swell value corresponds to the swell observed post-soaking per ASTM D1883.

Figure _____

Tested By: MG Checked By: ANS

# CORROSION SUITE

**ANS CONSULTANTS, INC.**
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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-569
Date: 10/14/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 1 | PV-01 CORR | 2'-5' | 13,100 | 9.0 | <15 | 93 | <0.1 | 103 |
| | | 13.4% | | Brown S&C, little cmf Sand (Vis.) | | | | |
| 2 | PV-03 CORR | 2'-5' | 20,700 (Sat.=4.4k) | 8.0 | <15 | 75 | <0.1 | 154 |
| | | 9.9% | | Brown C&S, little mf Gravel, trace cmf Sand (Vis.) | | | | |
| 3 | PV-08 CORR | 2'-5' | 32,800 (Sat.=4.4k) | 8.9 | 30 | 2.8 | <0.1 | 133 |
| | | 6.6% | | Grayish Brown C&S, little mf Gravel, little cmf Sand (Vis.) | | | | |
| 4 | PV-12 CORR | 2'-5' | 32,600 (Sat.=6.8k) | 8.0 | <15 | 57 | <0.1 | 157 |
| | | 5.0% | | Brown C&S, little mf Gravel, little cmf Sand (Vis.) | | | | |
| 5 | PV-15 CORR | 2'-5' | 5,810 | 9.6 | <15 | 243 | <0.1 | 120 |
| | | 16.2% | | Olive Brown C&S, trace mf Gravel, trace cmf Sand (Vis.) | | | | |
| 6 | PV-16 CORR | 2'-5' | 21,100 (Sat.=6.1k) | 9.5 | <15 | 24 | <0.1 | 126 |
| | | 10.6% | | Grayish Brown C&S, little mf Gravel, little cmf Sand (Vis.) | | | | |
| 7 | PV-21 CORR | 2'-5' | 7,810 | 9.4 | <15 | 153 | <0.1 | 123 |
| | | 11.6% | | Light Brown C&S, little mf Gravel, trace cmf Sand (Vis.) | | | | |
| 8 | PV-24 CORR | 2'-5' | 23,100 (Sat.=2.8k) | 9.6 | <15 | 18 | <0.1 | 122 |
| | | 8.1% | | Light Brown C&S, little mf Gravel, trace cmf Sand (Vis.) | | | | |
| 9 | PV-26 CORR | 2'-5' | 8,890 | 8.9 | <15 | 42 | <0.1 | 142 |
| | | 20.7% | | Brown S&C, trace mf Gravel, trace cmf Sand (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-569
Date: 10/14/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 10 | PV-29 CORR | 2'-5' | 2,290 | 8.7 | 210 | 153 | <0.1 | 155 |
| | | 15.7% | | Olive Brown C&S, trace mf Gravel, trace cmf Sand (Vis.) | | | | |
| 11 | PV-34 CORR | 0.5'-2' | 18,900 (Sat.=3.9k) | 9.6 | 30 | 153 | <0.1 | 125 |
| | | 10.8% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 12 | PV-36 CORR | 2'-5' | 117,000 (Sat.3.9k) | 8.6 | <15 | <10 | <0.1 | 155 |
| | | 8.9% | | Grayish Brown C&S, some mf Gravel, little cmf Sand (Vis.) | | | | |
| 13 | PV-40 CORR | 2'-5' | 3,740 | 8.7 | 120 | 60 | <0.1 | 152 |
| | | 17.9% | | Brown C&S, little mf Gravel, trace cmf Sand (Vis.) | | | | |
| 14 | PV-47 CORR | 2'-5' | 56,400 (Sat.=4.9k) | 8.0 | <15 | <10 | <0.1 | 154 |
| | | 6.3% | | Brown C&S, some mf Gravel, little cmf Sand (Vis.) | | | | |
| 15 | PV-49 CORR | 2'-5' | 13,800 | 8.1 | <15 | <10 | <0.1 | 168 |
| | | 9.2% | | Olive Brown S&C, some mf Gravel, trace cmf Sand (Vis.) | | | | |
| 16 | PV-52 CORR | 2'-5' | 4,390 | 8.5 | <15 | <10 | <0.1 | 163 |
| | | 43.1% | | Brownish Gray C&S, some mf Gravel, trace cmf Sand (Vis.) | | | | |
| 17 | WTG-01 CORR | 2'-5' | 8,120 | 9.5 | <15 | 24 | <0.1 | 119 |
| | | 18.6% | | Yellowish Brown C&, little cmf Sand (Vis.) | | | | |
| 18 | WTG-02 CORR | 2'-5' | 8,500 | 9.6 | <15 | 69 | <0.1 | 121 |
| | | 16.2% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-569
Date: 10/14/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 19 | WTG-03 CORR | 2'-5' | 47,800 (Sat.=5.2k) | 8.8 | <15 | 27 | <0.1 | 147 |
| | | 7.0% | | Light Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |

Remarks:

1. Turbidimetric procedure used for ASTM C1580.
2. Mohr's procedure with Silver Nitrate used for AASHTO T291.
3. Miller 400D Resistance Meter used for Resistivity testing, Multiplication factor = 1.
4. As per ASTM G187, gravel and small stones removed from sample.
5. Tests conducted under standard laboratory conditions of temperature (72°F) and humidity.
6. Sat soil resistivity indicates minimum electrical resistivity value (Saturated conditions).

Tested By: CB
Checked By: ANS

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-595
Date: 10/28/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 10 | WTG-04 CORR | 2'-5' | 7,300 | 8.3 | 90 | 42 | <0.1 | 256 |
| | | 14.1% | | Brown C&S, little mf Gravel, trace cmf Sand (Vis.) | | | | |
| 11 | WTG-05 CORR | 2'-5' | 47,700 (Sat.=2.6k) | 7.8 | <15 | <10 | <0.1 | 264 |
| | | 6.6% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 12 | WTG-06 CORR | 2'-5' | 71,600 (Sat.=4.2k) | 7.7 | 60 | 12 | <0.1 | 266 |
| | | 6.3% | | Brown C&S, little cmf Sand, little mf Gravel (Vis.) | | | | |
| 13 | WTG-07 CORR | 2'-5' | 5,040 | 8.0 | <15 | 36 | <0.1 | 262 |
| | | 16.6% | | Brown C&S, little mf Gravel, trace cmf Sand (Vis.) | | | | |
| 14 | WTG-08 CORR | 1'-2' | 5,560 | 7.8 | 90 | 33 | <0.1 | 276 |
| | | 13.9% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-T-215
Date: 11/10/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 1 | PV-058 CORR | 2'-5' | 23,600 (Sat.=6.4k) | 8.6 | <15 | 87 | <0.1 | 174 |
| | | 8.4% | | Light Brown sandy silt with gravel | | | | |
| 2 | PV-064 CORR | 2'-5' | 5,580 | 9.7 | 180 | 144 | <0.1 | 148 |
| | | 10.5% | | Light Brown silty clay with sand | | | | |
| 3 | PV-068 CORR | 2'-5' | 121,000 (Sat.=8.1k) | 7.3 | 60 | 114 | <0.1 | 188 |
| | | 7.6% | | Brown silty sand with gravel | | | | |
| 4 | PV-071 CORR | 1'-2' | 15,900 | 7.5 | 60 | 75 | <0.1 | 175 |
| | | 19.7% | | Light Brown silty clay with sand | | | | |
| 5 | PV-074 CORR | 1'-2' | 12,900 | 8.7 | 150 | 60 | <0.1 | 143 |
| | | 6.9% | | Dark Brown clayey sand with gravel | | | | |
| 6 | SB-01 CORR | 1'-3' | 7,360 | 9.3 | <15 | 111 | <0.1 | 115 |
| | | 21.3% | | Brown silty sand | | | | |
| 7 | SB-02 CORR | 1'-2' | 8,140 | 7.9 | <15 | 66 | <0.1 | 125 |
| | | 10.2% | | Brown sandy lean clay | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-593
Date: 10/22/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 1 | PV-043 CORR | 2'-5' | 32,000 (Sat.=3.0k) | 8.1 | 30 | 21 | <0.1 | 216 |
| | | 6.5% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 2 | PV-045 CORR | 2'-5' | 15,500 (Sat.=4.1k) | 8.4 | <15 | 36 | <0.1 | 214 |
| | | 8.5% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 3 | PV-079 CORR | 2'-5' | 6,870 | 8.1 | <15 | 105 | <0.1 | 222 |
| | | 15.7% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 4 | PV-081 CORR | 2'-5' | 8,550 | 8.3 | 30 | 114 | <0.1 | 219 |
| | | 15.3% | | Brown C&S little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 5 | PV-084 CORR | 2'-5' | 2,880 | 9.2 | <15 | 33 | <0.1 | 213 |
| | | 29.4% | | Brown C&S, trace cmf Sand (Vis.) | | | | |
| 6 | PV-089 CORR | 2'-5' | 9,320 | 9.5 | <15 | 39 | <0.1 | 195 |
| | | 9.3% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 7 | PV-090 CORR | 2'-5' | 6,460 | 9.2 | <15 | 12 | <0.1 | 166 |
| | | 12.4% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 8 | PV-095 CORR | 2'-5' | 6,560 | 8.9 | <15 | 45 | <0.1 | 204 |
| | | 19.3% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 9 | PV-097 CORR | 2'-5' | 4,050 | 9.5 | <15 | 69 | <0.1 | 182 |
| | | 22.2% | | Brown C&S, trace cmf Sand (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-593
Date: 10/22/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 10 | PV-100 CORR | 2'-5' | 3,820 | 8.7 | <15 | 48 | <0.1 | 205 |
| | | 18.8% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 11 | PV-105 CORR | 1'-2' | 8,490 | 8.4 | <15 | 45 | <0.1 | 236 |
| | | 10.6% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 12 | PV-109 CORR | 2'-5' | 6,540 | 9.2 | <15 | 60 | <0.1 | 224 |
| | | 16.4% | | Brown C&S, trace cmf Sand (Vis.) | | | | |
| 13 | PV-111 CORR | 2'-5' | 10,400 | 8.6 | <15 | 39 | <0.1 | 236 |
| | | 10.9% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 14 | PV-114 CORR | 2'-5' | 22,100 (Sat.=2.5k) | 8.3 | 90 | <10 | <0.1 | 238 |
| | | 8.3% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 15 | PV-119 CORR | 1'-2' | 17,200 (Sat.=3.1k) | 8.3 | <15 | <10 | <0.1 | 243 |
| | | 7.0% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 16 | PV-121 CORR | 2'-5' | 37,100 (Sat.=2.7k) | 8.8 | <15 | 21 | <0.1 | 222 |
| | | 7.4% | | Brown C&S, some mf Gravel, little cmf Sand (Vis.) | | | | |
| 17 | PV-123 CORR | 2'-5' | 19,400 (Sat.=3.1k) | 9.1 | <15 | 15 | <0.1 | 187 |
| | | 8.1% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 18 | PV-126 CORR | 1'-2' | 37,200 (Sat.=2.4k) | 8.2 | <15 | <10 | <0.1 | 230 |
| | | 7.2% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-593
Date: 10/22/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 19 | PV-127 CORR | 2'-5' | 7,430 | 9.6 | <15 | 66 | <0.1 | 199 |
| | | 12.6% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 20 | PV-132 CORR | 2'-5' | 46,200 (Sat.=3.5k) | 8.5 | 30 | <10 | <0.1 | 216 |
| | | 6.0% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |

Remarks:

1. Turbidimetric procedure used for ASTM C1580.
2. Mohr's procedure with Silver Nitrate used for AASHTO T291.
3. Miller 400D Resistance Meter used for Resistivity testing, Multiplication factor = 1.
4. As per ASTM G187, gravel and small stones removed from sample.
5. Tests conducted under standard laboratory conditions of temperature (72°F) and humidity.
6. Sat soil resistivity indicates minimum electrical resistivity value (Saturated conditions).

Tested By: CB/GE
Checked By: ANS

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-594
Date: 10/25/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 1 | PV-137 CORR | 2'-5' | 37,300 (Sat.=2.0k) | 8.3 | <15 | 15 | <0.1 | 168 |
| | | 9.1% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 2 | PV-142 CORR | 1'-2' | 1,600 | 9.8 | <15 | 12 | <0.1 | 204 |
| | | 6.6% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 3 | PV-144 CORR | 2'-5' | 7,860 | 8.5 | <15 | 33 | <0.1 | 174 |
| | | 15.9% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 4 | PV-145 CORR | 2'-5' | 10,500 | 9.7 | <15 | 42 | <0.1 | 150 |
| | | 13.6% | | Olive Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 5 | PV-151 CORR | 1'-2' | 24,700 (Sat.=2.3k) | 9.8 | 120 | 18 | <0.1 | 169 |
| | | 8.7% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 6 | PV-154 CORR | 2'-5' | 23,900 (Sat.=3.2k) | 8.6 | 30 | 15 | <0.1 | 189 |
| | | 7.7% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 7 | PV-158 CORR | 2'-5' | 37,200 (Sat.=4.4k) | 8.6 | 120 | 18 | <0.1 | 212 |
| | | 7.7% | | Light Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 8 | PV-160 CORR | 2'-5' | 13,800 | 9.7 | <15 | 39 | <0.1 | 180 |
| | | 13.3% | | Brown C&S, little cmf Sand | | | | |
| 9 | PV-164 CORR | 2'-5' | 19,900 (Sat.=2.9k) | 8.4 | <15 | 12 | <0.1 | 225 |
| | | 10.6% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-594
Date: 10/25/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 10 | PV-169 CORR | 2'-5' | 75,300 (Sat.=2.9k) | 8.5 | <15 | 12 | <0.1 | 216 |
| | | 7.1% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 11 | PV-172 CORR | 2'-5' | 39,600 (Sat.=3.5k) | 9.2 | <15 | 15 | <0.1 | 198 |
| | | 8.6% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 12 | PV-178 CORR | 2'-5' | 28,500 (Sat.=3.3k) | 9.2 | <15 | 15 | <0.1 | 193 |
| | | 7.4% | | Pale Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 13 | PV-179 CORR | 2'-5' | 23,800 (Sat.=2.9k) | 8.4 | <15 | 12 | <0.1 | 218 |
| | | 6.8% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 14 | PV-181 CORR | 1'-2' | 28,800 (Sat.=3.0k) | 8.4 | 30 | <10 | <0.1 | 210 |
| | | 7.4% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 15 | PV-183 CORR | 2'-5' | 48,000 (Sat.=1.8k) | 8.0 | 30 | <10 | <0.1 | 234 |
| | | 7.1% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 16 | PV-188 CORR | 2'-5' | 55,300 (Sat.=4.7k) | 9.2 | <15 | 24 | <0.1 | 216 |
| | | 7.7% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 17 | PV-189 CORR | 2'-5' | 38,800 (Sat.=4.4k) | 8.6 | <15 | 27 | <0.1 | 233 |
| | | 6.9% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 18 | PV-193 CORR | 2'-5' | 6,250 | 8.4 | 30 | 42 | <0.1 | 232 |
| | | 18.1% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-594
Date: 10/25/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 19 | PV-195 CORR | 2'-5' | 27,100 (Sat.=3.2k) | 8.0 | 30 | <10 | <0.1 | 244 |
| | | 7.9% | | Brown C&S, little cmf Sand , trace mf Gravel (Vis.) | | | | |
| 20 | PV-198 CORR | 2'-5' | 8,760 | 8.8 | <15 | 42 | <0.1 | 234 |
| | | 19.7% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |

Remarks:

1. Turbidimetric procedure used for ASTM C1580.
2. Mohr's procedure with Silver Nitrate used for AASHTO T291.
3. Miller 400D Resistance Meter used for Resistivity testing, Multiplication factor = 1.
4. As per ASTM G187, gravel and small stones removed from sample.
5. Tests conducted under standard laboratory conditions of temperature (72°F) and humidity.
6. Sat soil resistivity indicates minimum electrical resistivity value (Saturated conditions).

Tested By: CB/KB
Checked By: ANS

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## Corrosivity Testing of Soil

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-595
Date: 10/28/2025

| S.No. | Sample | Depth | Soil Resistivity (ohm-cm) | pH of Soil | Sulfate Content (mg/kg) | Chloride Content (mg/kg) | Sulfide Content (mg/kg) | Oxidation-Reduction Pot. (mV) |
|---|---|---|---|---|---|---|---|---|
| | | Natural Moisture | ASTM G187 | ASTM G51 | ASTM C1580 | AASHTO T291 | ASTM D4658 | ASTM G201 |
| 1 | PV-204 CORR | 2'-5' | 12,300 | 8.3 | 30 | 45 | <0.1 | 226 |
| | | 16.7% | | Brown C&S, little cmf Sand (Vis.) | | | | |
| 2 | PV-207 CORR | 2'-5' | 6,040 | 7.6 | 30 | 84 | <0.1 | 243 |
| | | 16.5% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 3 | PV-210 CORR | 2'-5' | 9,590 | 8.5 | <15 | 90 | <0.1 | 226 |
| | | 12.8% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 4 | PV-212 CORR | 1'-2' | 14,400 | 7.8 | <15 | 39 | <0.1 | 247 |
| | | 7.1% | | Brown C&S, little cmf Sand, little mf Gravel (Vis.) | | | | |
| 5 | PV-214 CORR | 1'-2' | 9,190 | 8.5 | <15 | 24 | <0.1 | 222 |
| | | 9.8% | | Brown C&S, some mf Gravel, some cmf Sand (Vis.) | | | | |
| 6 | PV-217 CORR | 1'-3' | 9,440 | 8.4 | 30 | 42 | <0.1 | 242 |
| | | 9.1% | | Brown C&S, little cmf Sand, little mf Gravel (Vis.) | | | | |
| 7 | PV-223 CORR | 1'-2' | 4,760 | 7.9 | 30 | 39 | <0.1 | 256 |
| | | 16.7% | | Brown C&S, trace cmf Sand, trace mf Gravel (Vis.) | | | | |
| 8 | PV-226 CORR | 1'-2' | 32,300 (Sat.=2.3k) | 8.1 | <15 | <10 | <0.1 | 262 |
| | | 4.4% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |
| 9 | PV-230 CORR | 1'-2' | 6,550 | 8.3 | <15 | 60 | <0.1 | 259 |
| | | 12.6% | | Brown C&S, little cmf Sand, trace mf Gravel (Vis.) | | | | |

# THERMAL CONDUCTIVITY

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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: WTG-01, TRT, 2'-5'
Description: Brown silty, clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 91.8 PCF
In-Situ Moisture: 17.7 %
Optimum Moisture: 19.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5228 | 191.3 |
| 2 | ¼ OMC | 4.9 | 0.6978 | 143.3 |
| 3 | ½ OMC | 9.8 | 1.0312 | 97.0 |
| 4 | ¾ OMC | 14.6 | 1.1735 | 85.2 |
| 5 | OMC | 19.5 | 1.2889 | 77.6 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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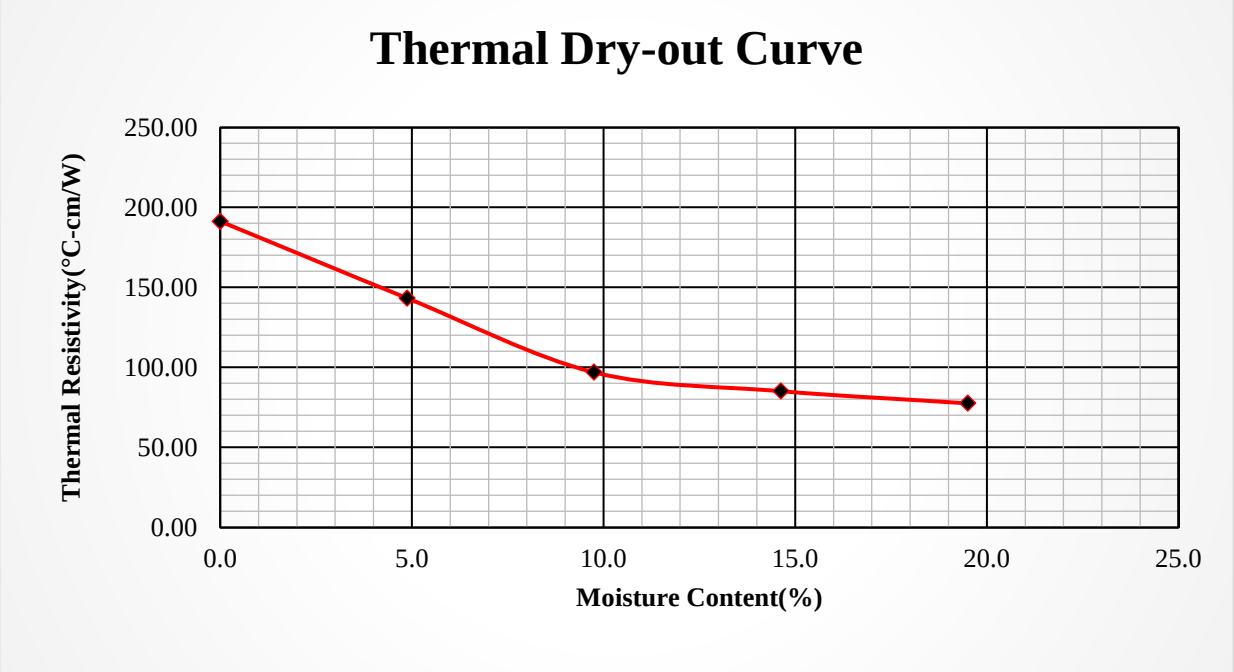
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: WTG-01, TRT, 2'-5'

Description: Brown silty, clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 91.8 PCF |
| In-Situ Moisture: | 17.7 % | Optimum Moisture: | 19.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: WTG-02, TRT, 2'-5'
Description: Grayish Brown silty, clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.4 PCF
In-Situ Moisture: 15.1 %
Optimum Moisture: 16.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5291 | 189.0 |
| 2 | ¼ OMC | 4.2 | 0.7327 | 136.5 |
| 3 | ½ OMC | 8.4 | 1.0595 | 94.4 |
| 4 | ¾ OMC | 12.5 | 1.1906 | 84.0 |
| 5 | OMC | 16.7 | 1.3028 | 76.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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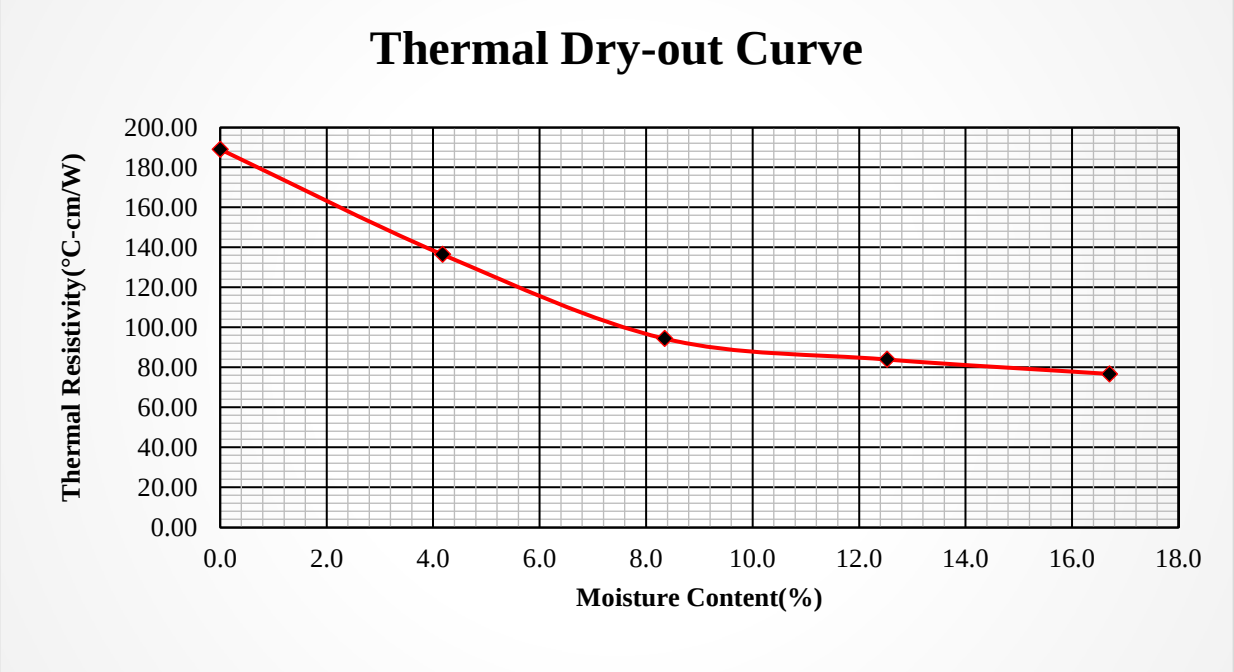
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: WTG-02, TRT, 2'-5'

Description: Grayish Brown silty, clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.4 PCF |
| In-Situ Moisture: | 15.1 % | Optimum Moisture: | 16.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: WTG-03, TRT, 2'-5'
Description: Brown silty, clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 95.8 PCF
In-Situ Moisture: 6.9 %
Optimum Moisture: 17.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5158 | 193.9 |
| 2 | ¼ OMC | 4.4 | 0.7141 | 140.0 |
| 3 | ½ OMC | 8.7 | 1.0172 | 98.3 |
| 4 | ¾ OMC | 13.1 | 1.1437 | 87.4 |
| 5 | OMC | 17.4 | 1.2541 | 79.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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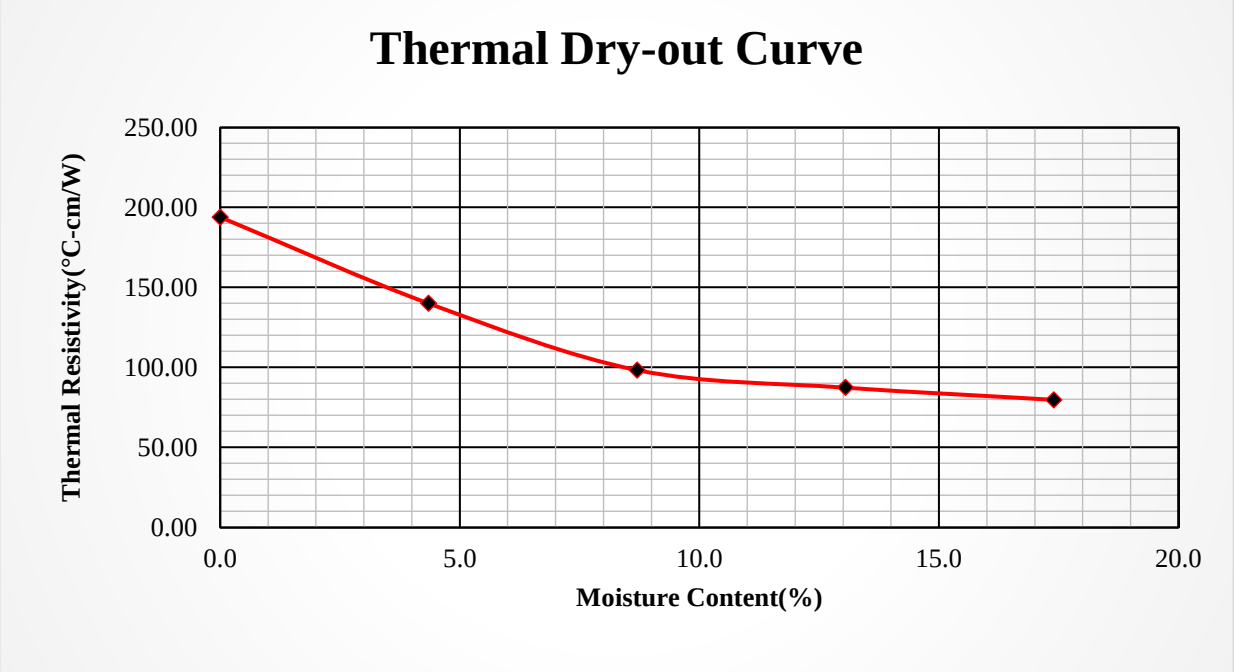
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: WTG-03, TRT, 2'-5'

Description: Brown silty, clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 95.8 PCF |
| In-Situ Moisture: | 6.9 % | Optimum Moisture: | 17.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: WTG-04, TRT, 2'-5'
Description: Brown sandy lean clay with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 102.1 PCF
In-Situ Moisture: 13.6 %
Optimum Moisture: 12.0 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5353 | 186.8 |
| 2 | ¼ OMC | 3.0 | 0.6418 | 155.8 |
| 3 | ½ OMC | 6.0 | 0.9008 | 111.0 |
| 4 | ¾ OMC | 9.0 | 1.0424 | 95.9 |
| 5 | OMC | 12.0 | 1.1359 | 88.0 |
| 6 | In-Situ | 13.6 | 1.1651 | 85.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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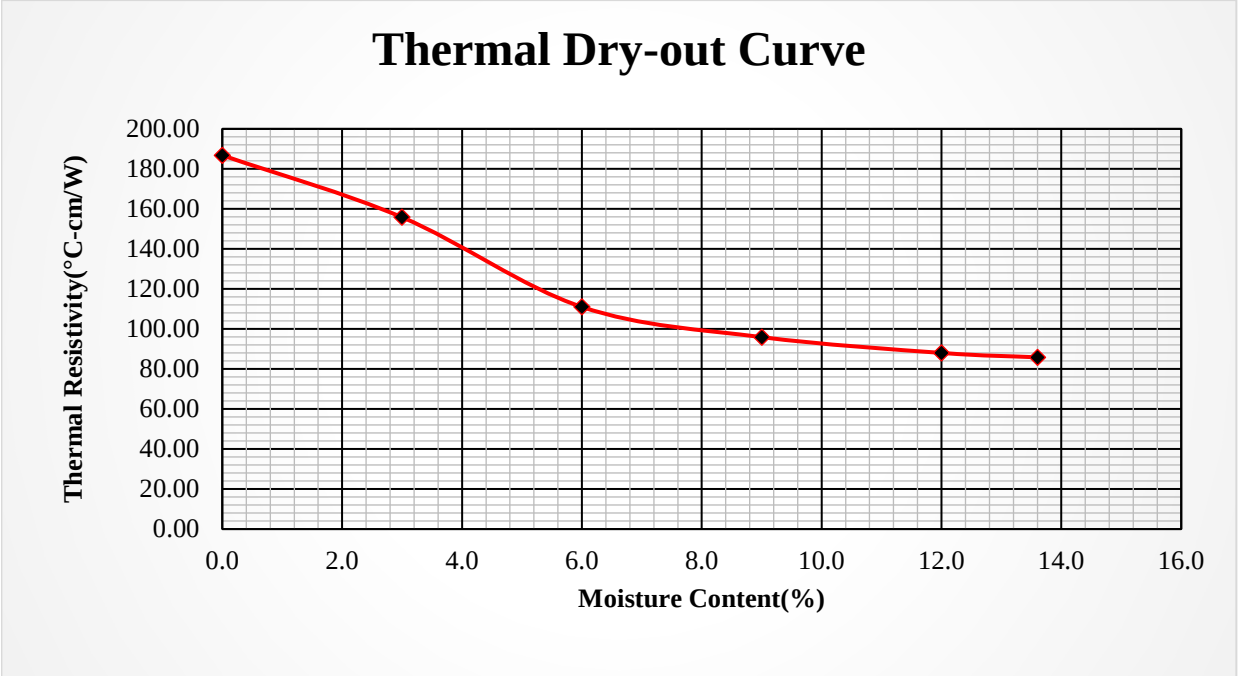
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: WTG-04, TRT, 2'-5'

Description: Brown sandy lean clay with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 102.1 PCF |
| In-Situ Moisture: | 13.6 % | Optimum Moisture: | 12.0 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: WTG-05, TRT, 2'-5'
Description: Brown clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 102.0 PCF
In-Situ Moisture: 6.6 %
Optimum Moisture: 11.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4564 | 219.1 |
| 2 | ¼ OMC | 2.8 | 0.5645 | 177.1 |
| 3 | ½ OMC | 5.6 | 0.9439 | 105.9 |
| 4 | ¾ OMC | 8.4 | 1.1561 | 86.5 |
| 5 | OMC | 11.2 | 1.2577 | 79.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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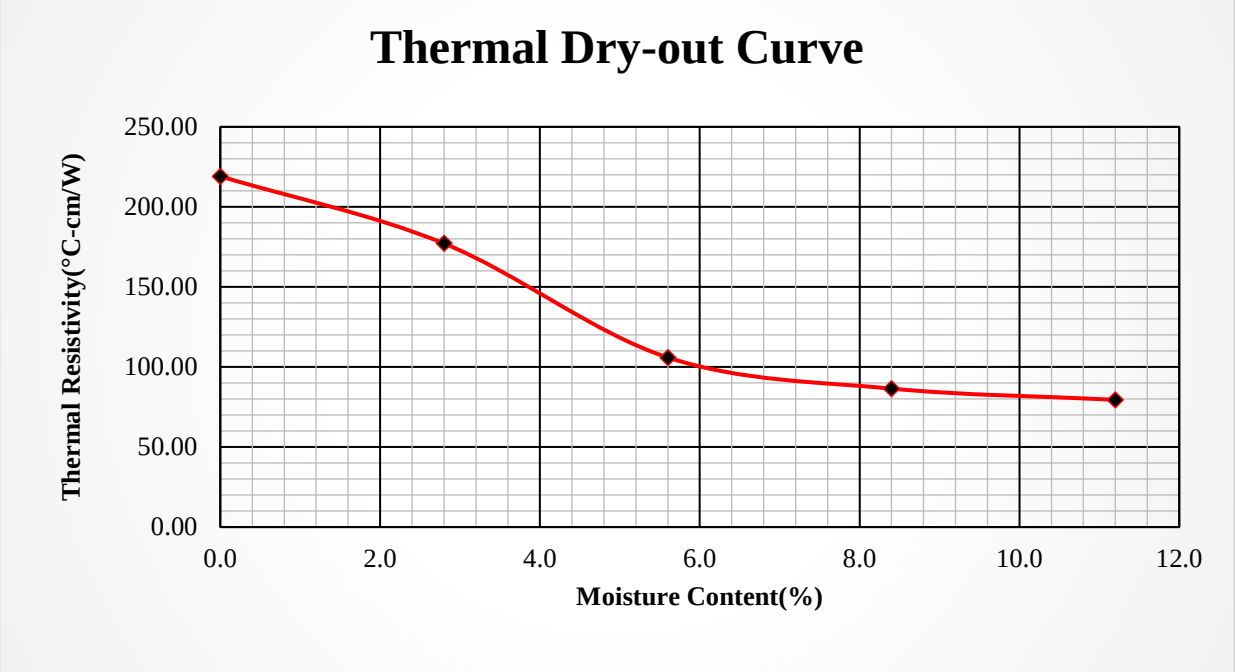
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: WTG-05, TRT, 2'-5'

Description: Brown clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 102.0 PCF |
| In-Situ Moisture: | 6.6 % | Optimum Moisture: | 11.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: WTG-06, TRT, 2'-5'
Description: Brown sandy lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 104.2 PCF
In-Situ Moisture: 6.3 %
Optimum Moisture: 13.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5357 | 186.7 |
| 2 | ¼ OMC | 3.4 | 0.6913 | 144.7 |
| 3 | ½ OMC | 6.8 | 1.0497 | 95.3 |
| 4 | ¾ OMC | 10.1 | 1.1959 | 83.6 |
| 5 | OMC | 13.5 | 1.3016 | 76.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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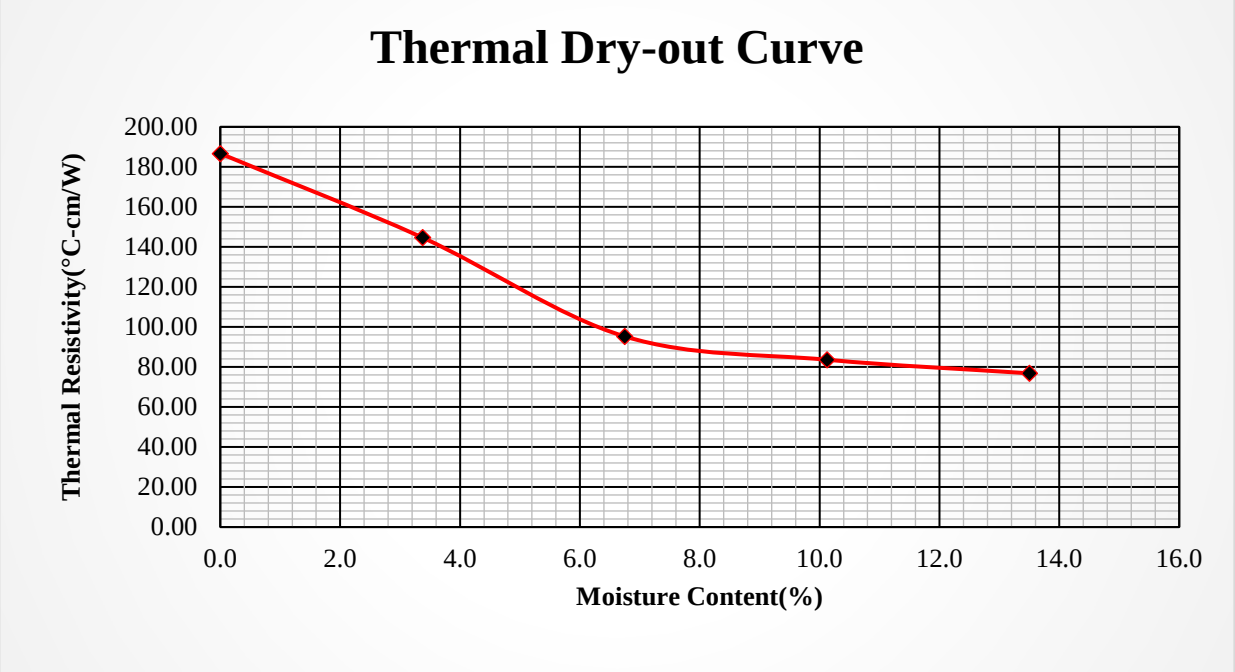
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: WTG-06, TRT, 2'-5'

Description: Brown sandy lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 104.2 PCF |
| In-Situ Moisture: | 6.3 % | Optimum Moisture: | 13.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-599
Date: 10/29/2025

Sample ID: WTG-07, TRT, 2'-5'
Description: Brown sandy lean clay with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 105.7 PCF
In-Situ Moisture: 18.9 %
Optimum Moisture: 11.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4516 | 221.4 |
| 2 | ¼ OMC | 3.0 | 0.5590 | 178.9 |
| 3 | ½ OMC | 5.9 | 0.7842 | 127.5 |
| 4 | ¾ OMC | 8.9 | 0.9145 | 109.3 |
| 5 | OMC | 11.8 | 1.0100 | 99.0 |
| 6 | In-Situ | 18.9 | 1.1843 | 84.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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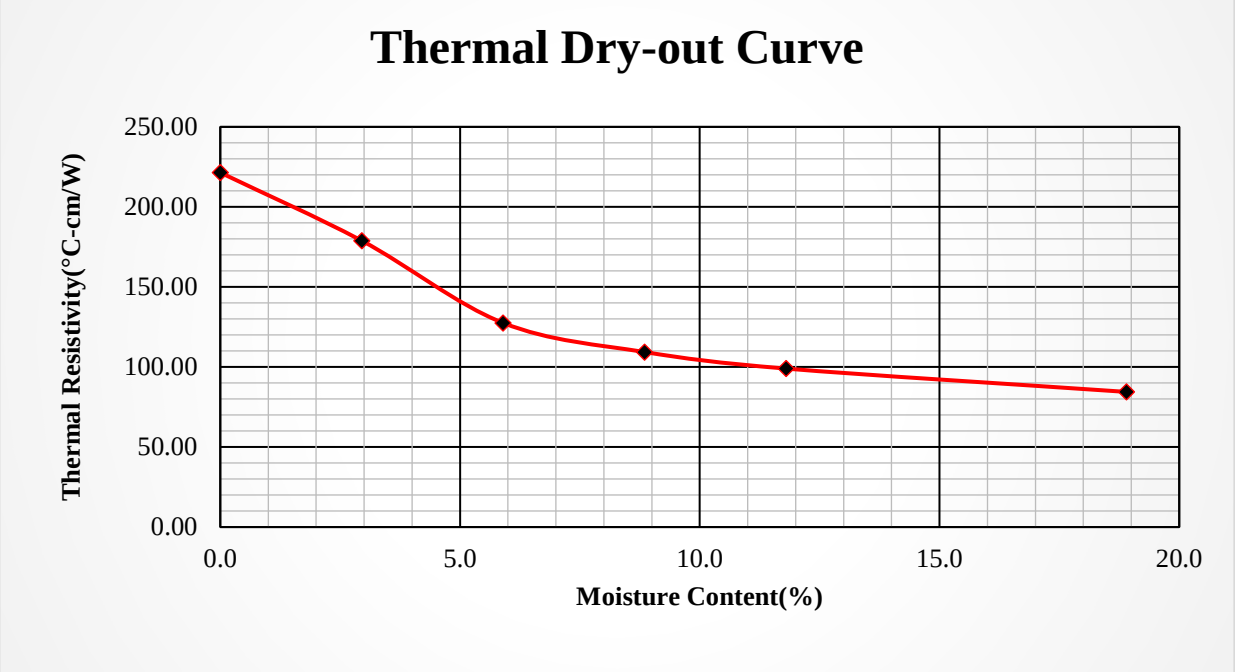
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: WTG-07, TRT, 2'-5'

Description: Brown sandy lean clay with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 105.7 PCF |
| In-Situ Moisture: | 18.9 % | Optimum Moisture: | 11.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: WTG-08, TRT, 1'-2'
Description: Brown clayey gravel with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 104.9 PCF
In-Situ Moisture: 13.6 %
Optimum Moisture: 12.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5385 | 185.7 |
| 2 | ¼ OMC | 3.2 | 0.6721 | 148.8 |
| 3 | ½ OMC | 6.5 | 0.9704 | 103.1 |
| 4 | ¾ OMC | 9.7 | 1.1096 | 90.1 |
| 5 | OMC | 12.9 | 1.2118 | 82.5 |
| 6 | In-Situ | 13.6 | 1.2149 | 82.3 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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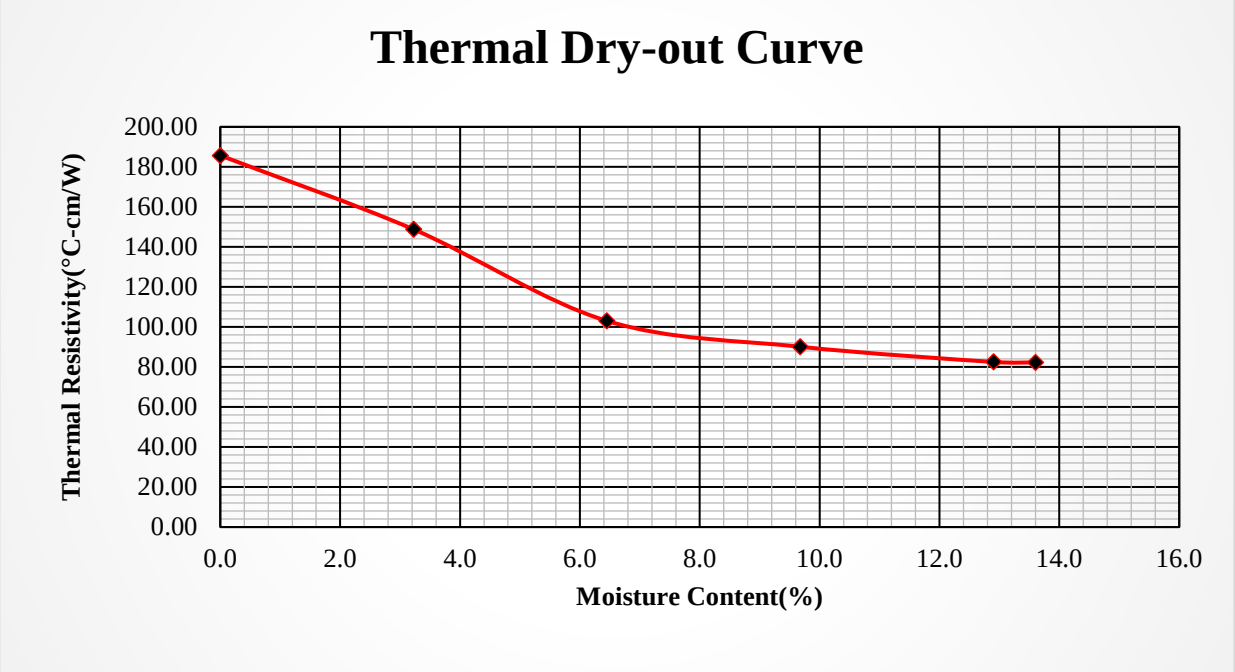
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: WTG-08, TRT, 1'-2'

Description: Brown clayey gravel with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 104.9 PCF |
| In-Situ Moisture: | 13.6 % | Optimum Moisture: | 12.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: SB-01, TRT, 2'-5'
Description: Brown silty sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.7 PCF
In-Situ Moisture: 18.0 %
Optimum Moisture: 16.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5667 | 176.5 |
| 2 | ¼ OMC | 4.1 | 0.7381 | 135.5 |
| 3 | ½ OMC | 8.1 | 1.0027 | 99.7 |
| 4 | ¾ OMC | 12.2 | 1.1283 | 88.6 |
| 5 | OMC | 16.2 | 1.2395 | 80.7 |
| 6 | In-Situ | 18.0 | 1.2747 | 78.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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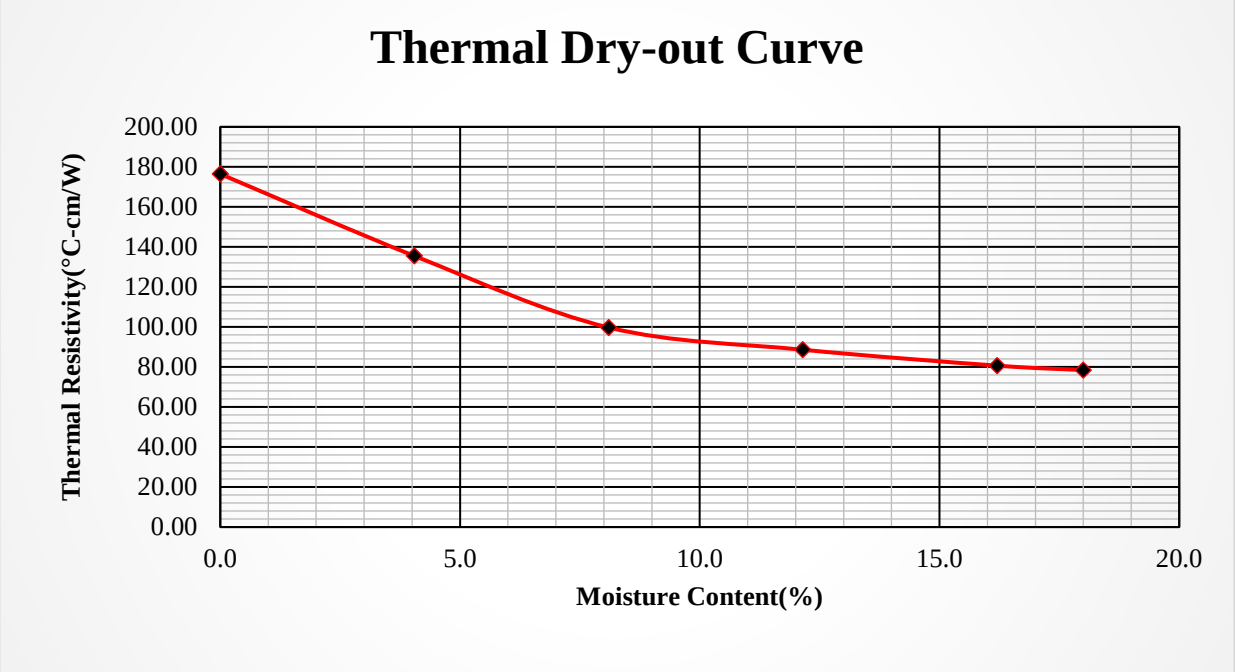
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: SB-01, TRT, 2'-5'

Description: Brown silty sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.7 PCF |
| In-Situ Moisture: | 18.0 % | Optimum Moisture: | 16.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: SB-02, TRT, 2'-5'
Description: Brown sandy lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.1 PCF
In-Situ Moisture: 12.0 %
Optimum Moisture: 14.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4820 | 207.5 |
| 2 | ¼ OMC | 3.7 | 0.6220 | 160.8 |
| 3 | ½ OMC | 7.4 | 1.0628 | 94.1 |
| 4 | ¾ OMC | 11.0 | 1.2742 | 78.5 |
| 5 | OMC | 14.7 | 1.3896 | 72.0 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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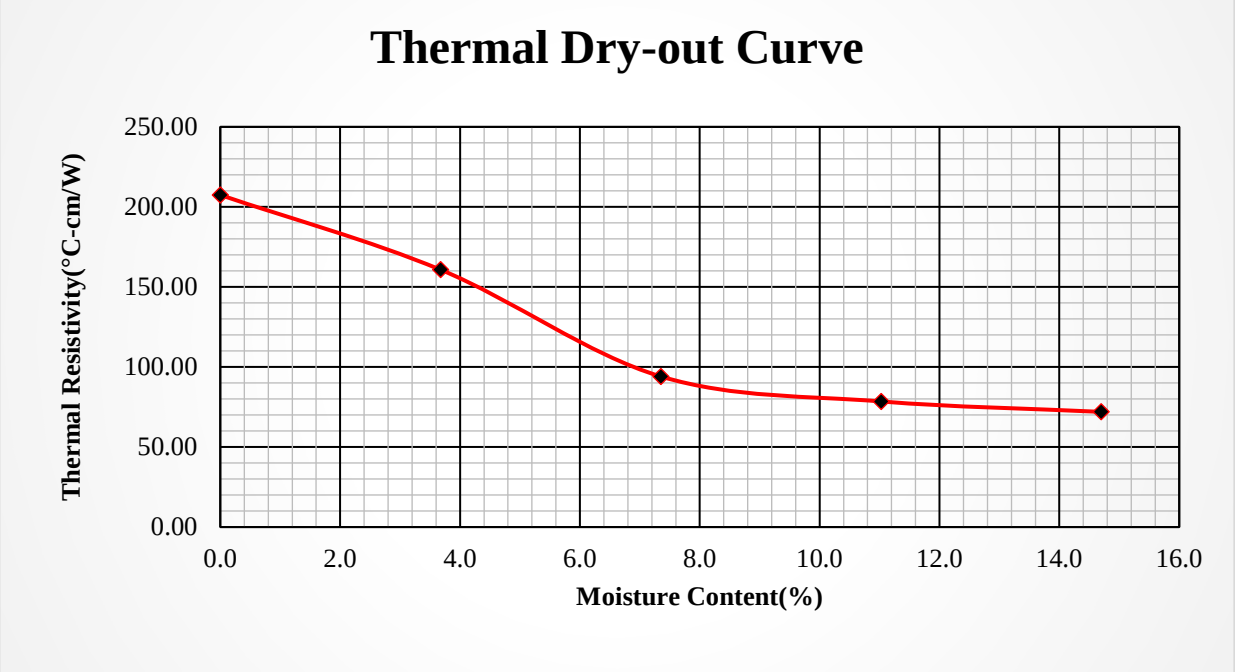
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: SB-02, TRT, 2'-5'

Description: Brown sandy lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.1 PCF |
| In-Situ Moisture: | 12.0 % | Optimum Moisture: | 14.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-01, TRT, 2'-5'
Description: Dark Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 96.4 PCF
In-Situ Moisture: 11.2 %
Optimum Moisture: 17.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4605 | 217.2 |
| 2 | ¼ OMC | 4.3 | 0.6200 | 161.3 |
| 3 | ½ OMC | 8.6 | 0.8417 | 118.8 |
| 4 | ¾ OMC | 12.9 | 0.9609 | 104.1 |
| 5 | OMC | 17.2 | 1.0706 | 93.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: CB
Checked By: ANS

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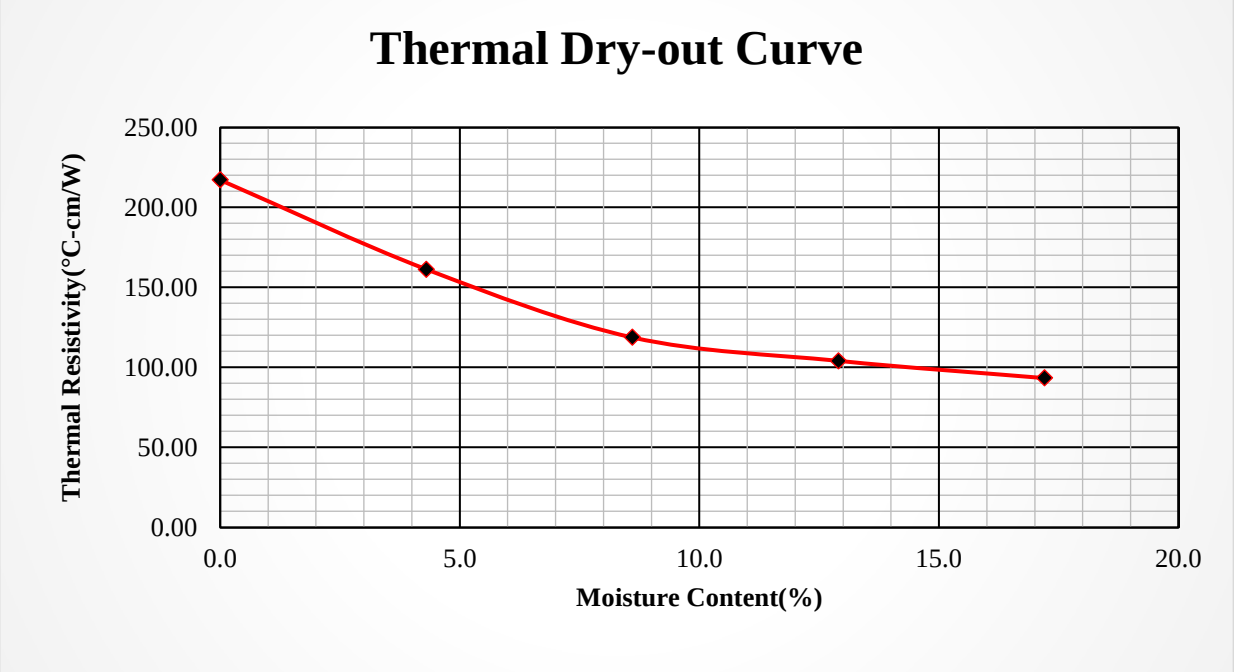
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-01, TRT, 2'-5'

Description: Dark Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 96.4 PCF |
| In-Situ Moisture: | 11.2 % | Optimum Moisture: | 17.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-03, TRT, 2'-5'
Description: Dark Brown sandy silty clay with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.5 PCF
In-Situ Moisture: 7.2 %
Optimum Moisture: 17.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5511 | 181.5 |
| 2 | ¼ OMC | 4.3 | 0.7714 | 129.6 |
| 3 | ½ OMC | 8.6 | 1.0940 | 91.4 |
| 4 | ¾ OMC | 12.8 | 1.2269 | 81.5 |
| 5 | OMC | 17.1 | 1.3437 | 74.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: CB
Checked By: ANS

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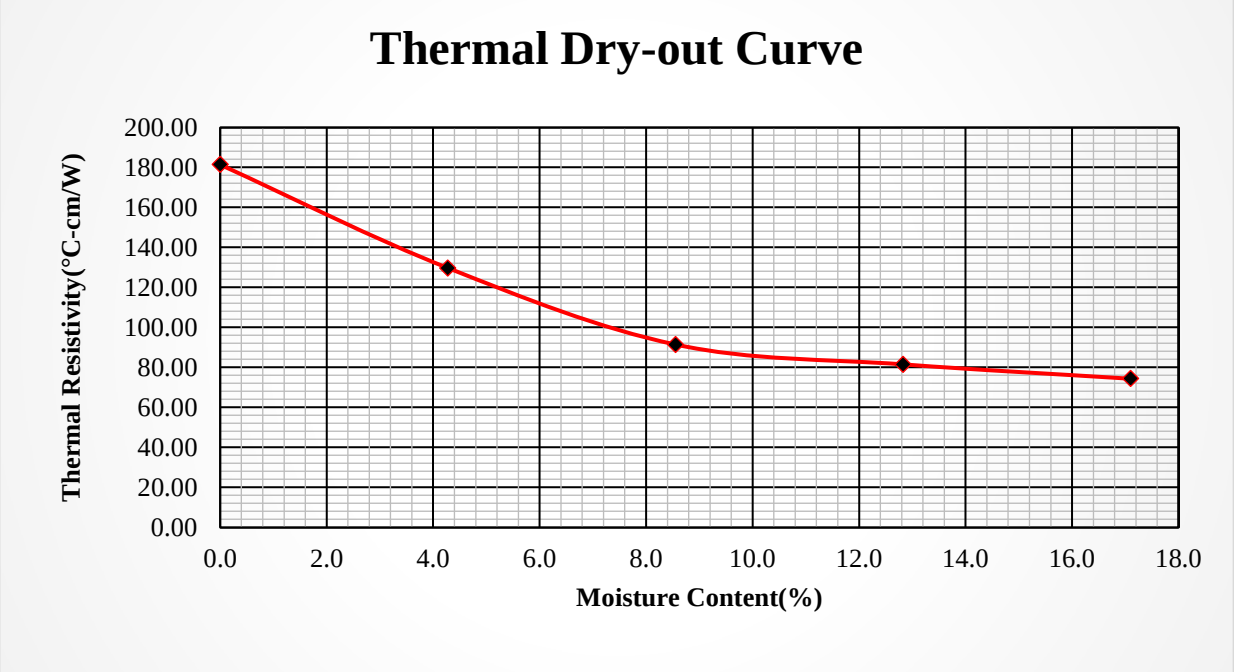
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-03, TRT, 2'-5'

Description: Dark Brown sandy silty clay with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.5 PCF |
| In-Situ Moisture: | 7.2 % | Optimum Moisture: | 17.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-08, TRT, 2'-5'
Description: Light Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 90.9 PCF
In-Situ Moisture: 1.8 %
Optimum Moisture: 20.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4465 | 224.0 |
| 2 | ¼ OMC | 5.1 | 0.6345 | 157.6 |
| 3 | ½ OMC | 10.2 | 0.8475 | 118.0 |
| 4 | ¾ OMC | 15.2 | 0.9680 | 103.3 |
| 5 | OMC | 20.3 | 1.0825 | 92.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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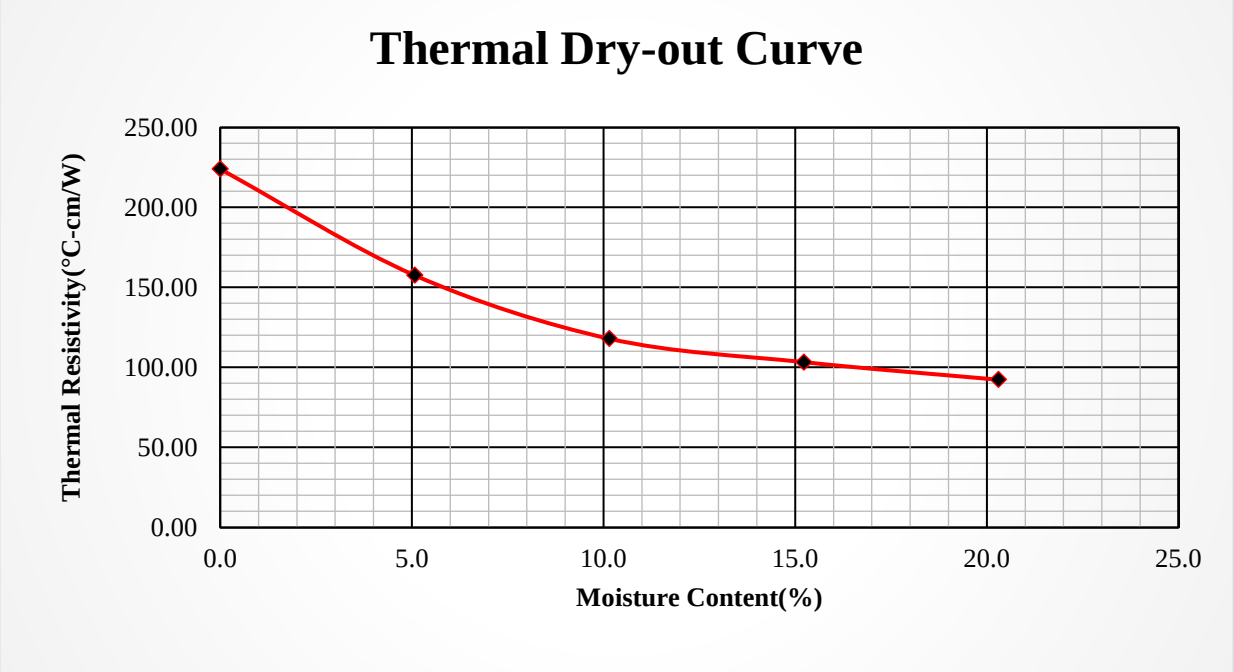
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-08, TRT, 2'-5'

Description: Light Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 90.9 PCF |
| In-Situ Moisture: | 1.8 % | Optimum Moisture: | 20.3 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-12, TRT, 2'-5'
Description: Light Brown silty clayey gravel with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.9 PCF
In-Situ Moisture: 2.5 %
Optimum Moisture: 15.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5395 | 185.4 |
| 2 | ¼ OMC | 3.8 | 0.7102 | 140.8 |
| 3 | ½ OMC | 7.6 | 1.0525 | 95.0 |
| 4 | ¾ OMC | 11.4 | 1.1867 | 84.3 |
| 5 | OMC | 15.2 | 1.2918 | 77.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ST
Checked By: ANS

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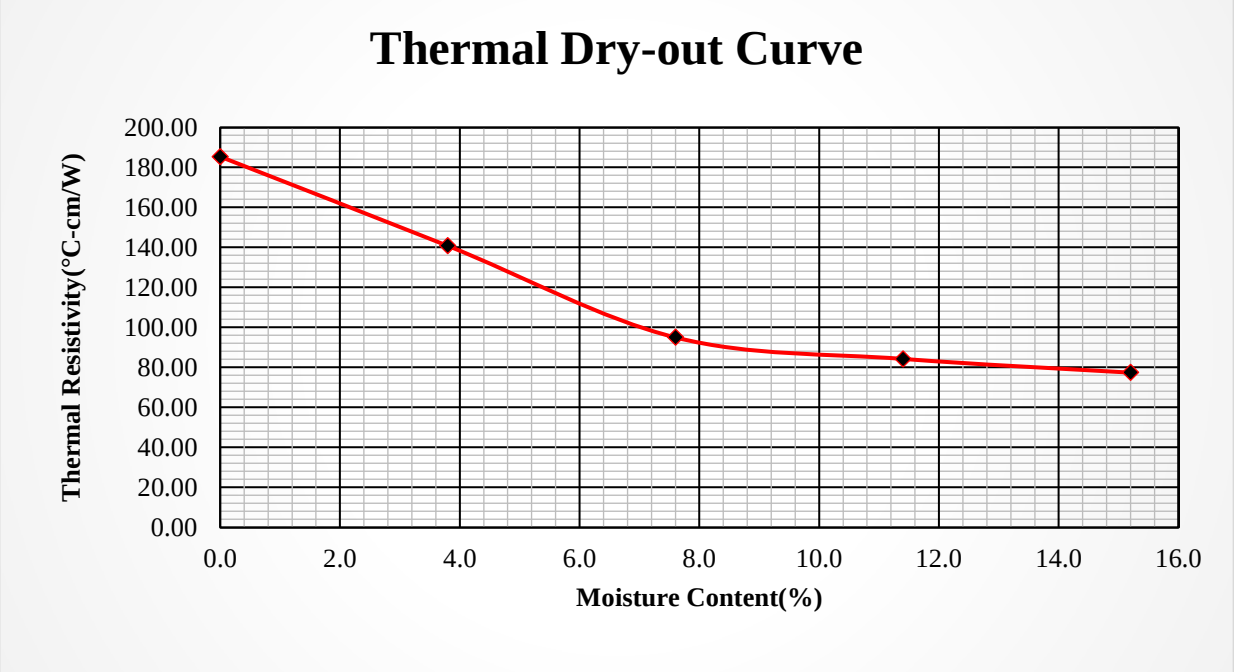
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-12, TRT, 2'-5'

Description: Light Brown silty clayey gravel with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.9 PCF |
| In-Situ Moisture: | 2.5 % | Optimum Moisture: | 15.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-15, TRT, 2'-5'
Description: Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 93.0 PCF
In-Situ Moisture: 17.1 %
Optimum Moisture: 20.6 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4856 | 205.9 |
| 2 | ¼ OMC | 5.2 | 0.7031 | 142.2 |
| 3 | ½ OMC | 10.3 | 0.9319 | 107.3 |
| 4 | ¾ OMC | 15.5 | 1.0592 | 94.4 |
| 5 | OMC | 20.6 | 1.1807 | 84.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ST
Checked By: ANS

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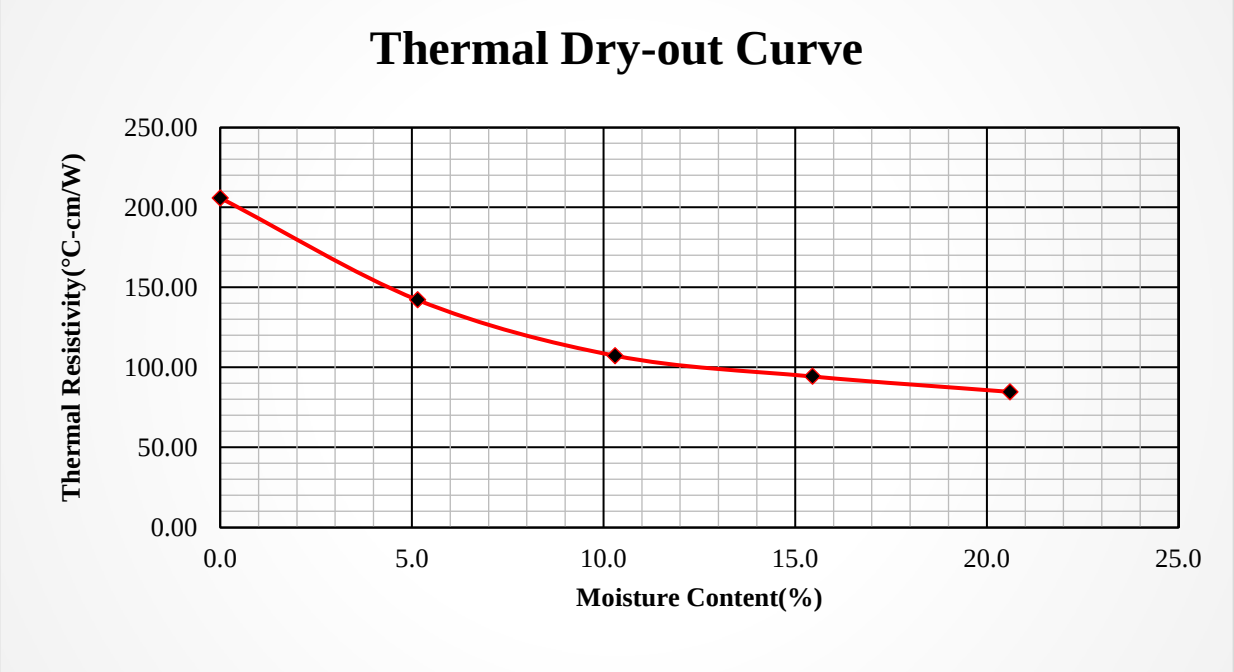
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-15, TRT, 2'-5'

Description: Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 93.0 PCF |
| In-Situ Moisture: | 17.1 % | Optimum Moisture: | 20.6 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-16, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 91.3 PCF
In-Situ Moisture: 10.8 %
Optimum Moisture: 21.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4494 | 222.5 |
| 2 | ¼ OMC | 5.3 | 0.6204 | 161.2 |
| 3 | ½ OMC | 10.6 | 0.7947 | 125.8 |
| 4 | ¾ OMC | 15.9 | 0.9176 | 109.0 |
| 5 | OMC | 21.2 | 1.0377 | 96.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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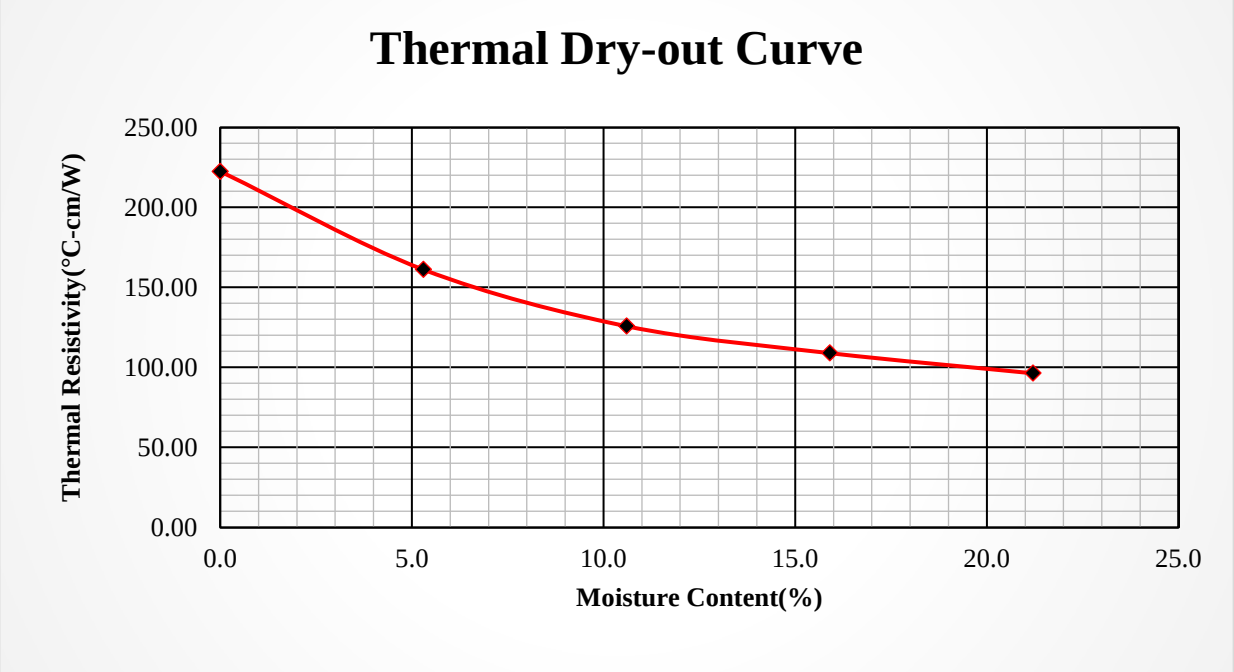
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-16, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 91.3 PCF |
| In-Situ Moisture: | 10.8 % | Optimum Moisture: | 21.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-21, TRT, 2'-5'
Description: Dark Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.0 PCF
In-Situ Moisture: 16.4 %
Optimum Moisture: 15.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5082 | 196.8 |
| 2 | ¼ OMC | 3.9 | 0.6684 | 149.6 |
| 3 | ½ OMC | 7.7 | 0.9722 | 102.9 |
| 4 | ¾ OMC | 11.6 | 1.1002 | 90.9 |
| 5 | OMC | 15.4 | 1.2040 | 83.1 |
| 6 | In-Situ | 16.4 | 1.2304 | 81.3 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ST
Checked By: ANS

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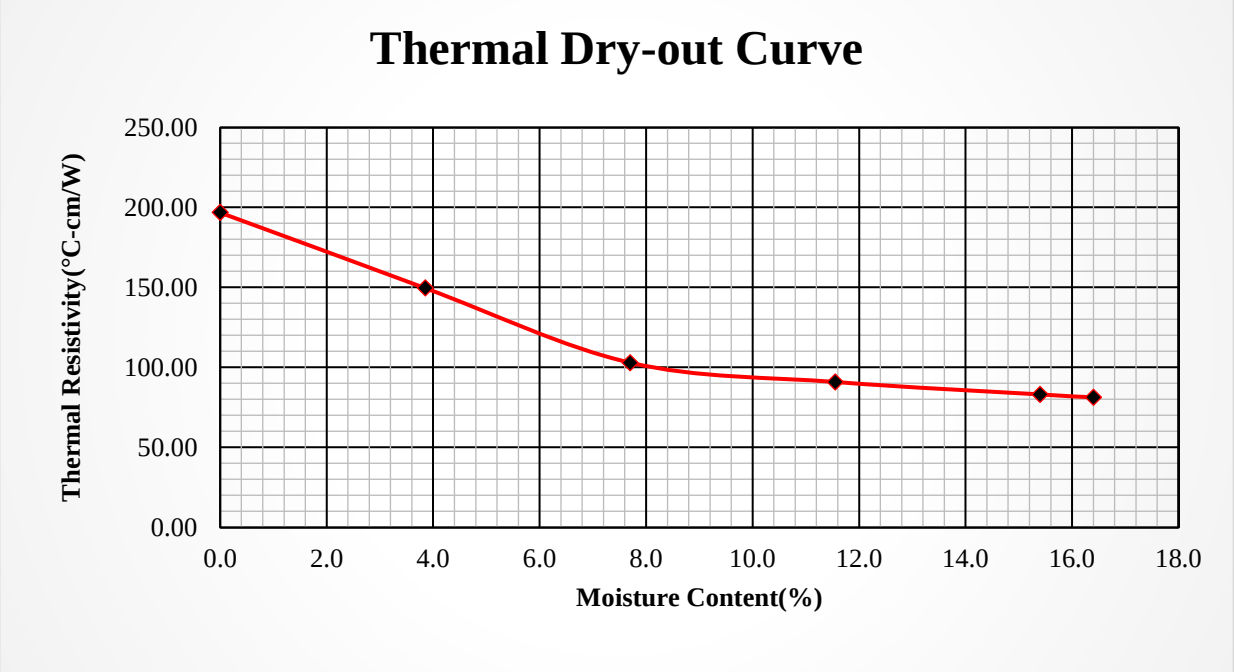
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-21, TRT, 2'-5'

Description: Dark Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.0 PCF |
| In-Situ Moisture: | 16.4 % | Optimum Moisture: | 15.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-24, TRT, 2'-5'
Description: Light Brown silty, clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 95.8 PCF
In-Situ Moisture: 11.4 %
Optimum Moisture: 16.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5438 | 183.9 |
| 2 | ¼ OMC | 4.1 | 0.7296 | 137.1 |
| 3 | ½ OMC | 8.1 | 1.0861 | 92.1 |
| 4 | ¾ OMC | 12.2 | 1.2180 | 82.1 |
| 5 | OMC | 16.2 | 1.3227 | 75.6 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: MM
Checked By: ANS

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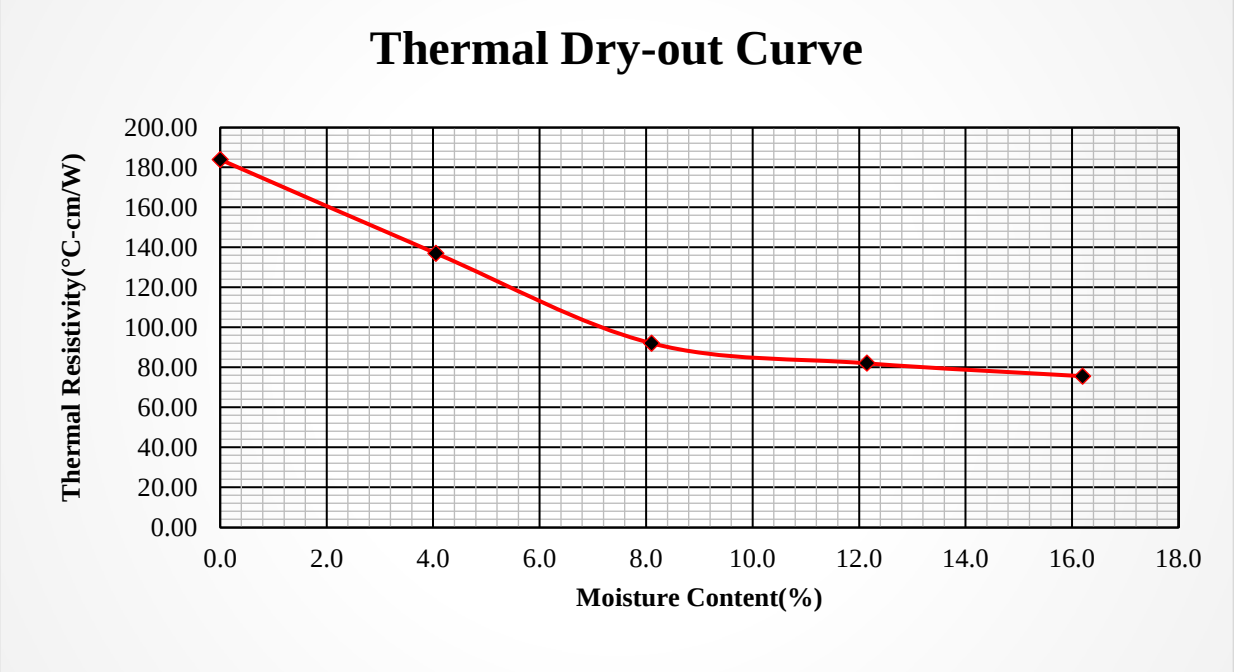
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-24, TRT, 2'-5'

Description: Light Brown silty, clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 95.8 PCF |
| In-Situ Moisture: | 11.4 % | Optimum Moisture: | 16.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-26, TRT, 2'-5'
Description: Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 96.4 PCF
In-Situ Moisture: 16.8 %
Optimum Moisture: 16.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4780 | 209.2 |
| 2 | ¼ OMC | 4.2 | 0.6452 | 155.0 |
| 3 | ½ OMC | 8.5 | 0.8976 | 111.4 |
| 4 | ¾ OMC | 12.7 | 1.0189 | 98.1 |
| 5 | OMC | 16.9 | 1.1272 | 88.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: MM
Checked By: ANS

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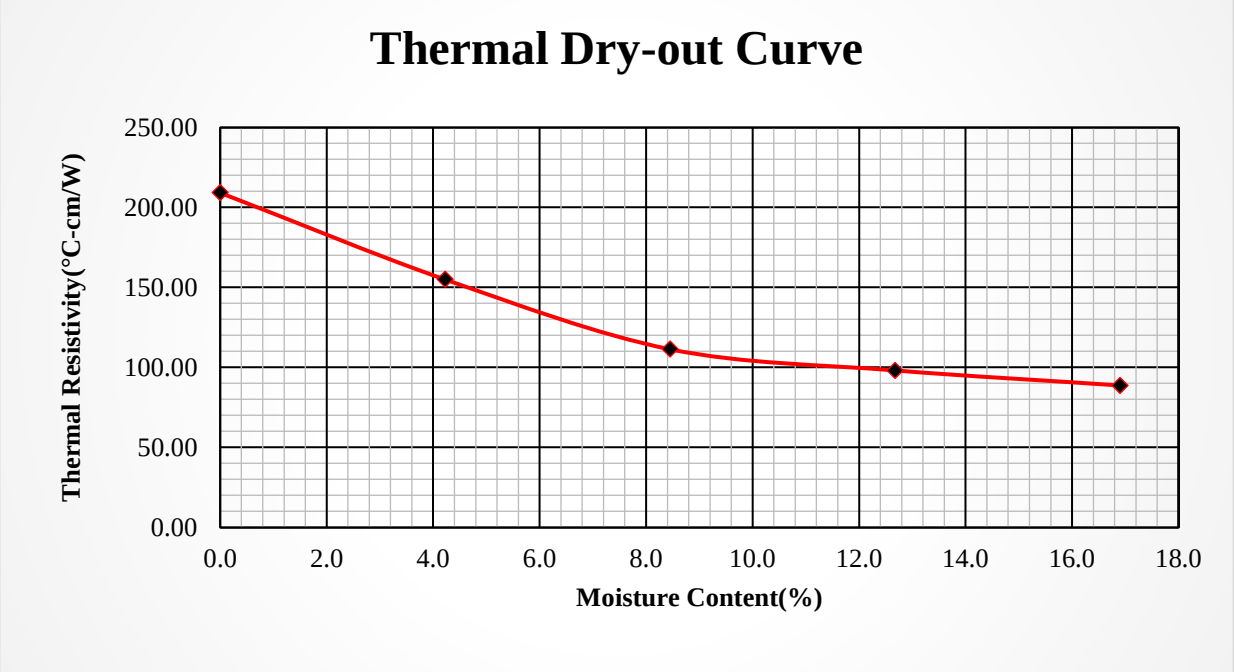
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-26, TRT, 2'-5'

Description: Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 96.4 PCF |
| In-Situ Moisture: | 16.8 % | Optimum Moisture: | 16.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-29, TRT, 2'-5'
Description: Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 96.4 PCF
In-Situ Moisture: 11.3 %
Optimum Moisture: 17.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4812 | 207.8 |
| 2 | ¼ OMC | 4.3 | 0.6446 | 155.1 |
| 3 | ½ OMC | 8.6 | 0.8749 | 114.3 |
| 4 | ¾ OMC | 12.9 | 0.9949 | 100.5 |
| 5 | OMC | 17.2 | 1.1046 | 90.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: MM
Checked By: ANS

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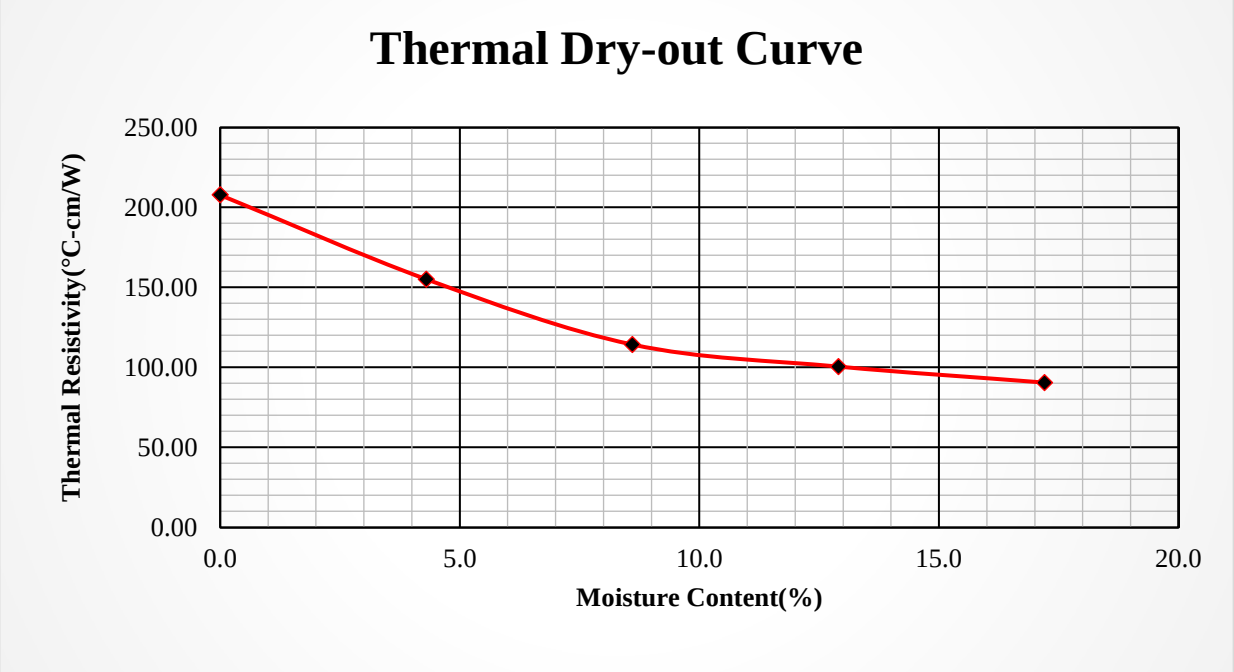
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-29, TRT, 2'-5'

Description: Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 96.4 PCF |
| In-Situ Moisture: | 11.3 % | Optimum Moisture: | 17.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-34, TRT, 2'-5'
Description: Light Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 91.4 PCF
In-Situ Moisture: 7.7 %
Optimum Moisture: 17.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4992 | 200.3 |
| 2 | ¼ OMC | 4.4 | 0.6393 | 156.4 |
| 3 | ½ OMC | 8.9 | 0.8381 | 119.3 |
| 4 | ¾ OMC | 13.3 | 0.9488 | 105.4 |
| 5 | OMC | 17.7 | 1.0503 | 95.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: CC
Checked By: ANS

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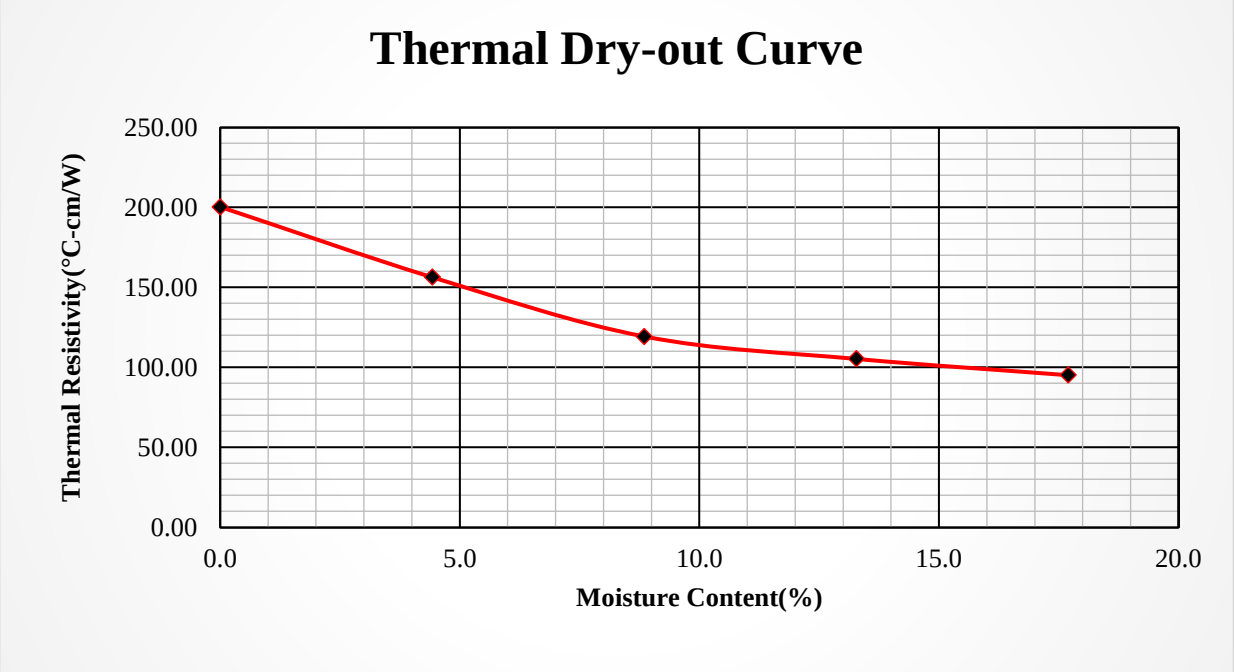
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-34, TRT, 2'-5'

Description: Light Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 91.4 PCF |
| In-Situ Moisture: | 7.7 % | Optimum Moisture: | 17.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-36, TRT, 0.5'-2'
Description: Brown silty, clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.8 PCF
In-Situ Moisture: 6.5 %
Optimum Moisture: 17.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5353 | 186.8 |
| 2 | ¼ OMC | 4.5 | 0.7587 | 131.8 |
| 3 | ½ OMC | 8.9 | 1.0640 | 94.0 |
| 4 | ¾ OMC | 13.4 | 1.1949 | 83.7 |
| 5 | OMC | 17.8 | 1.3123 | 76.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: CC
Checked By: ANS

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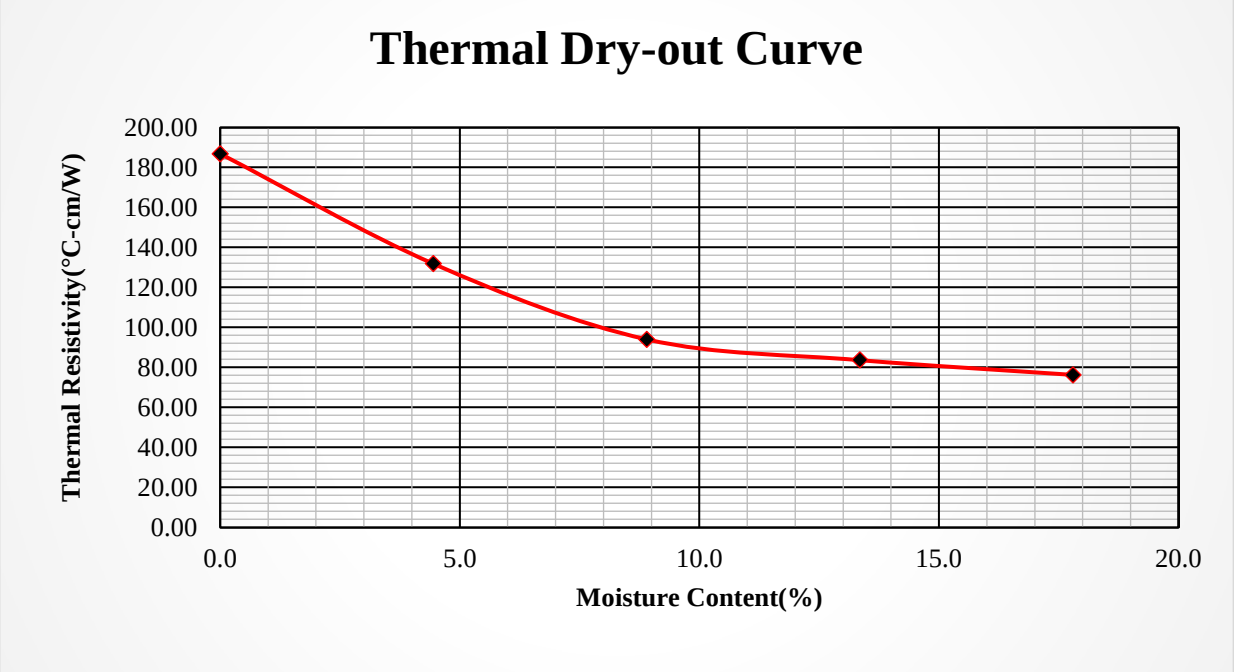
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-36, TRT, 0.5'-2'

Description: Brown silty, clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.8 PCF |
| In-Situ Moisture: | 6.5 % | Optimum Moisture: | 17.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-40, TRT, 2'-5'
Description: Dark Brown silty, clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 94.9 PCF
In-Situ Moisture: 16.6 %
Optimum Moisture: 18.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5176 | 193.2 |
| 2 | ¼ OMC | 4.7 | 0.6713 | 149.0 |
| 3 | ½ OMC | 9.5 | 0.8456 | 118.3 |
| 4 | ¾ OMC | 14.2 | 0.9652 | 103.6 |
| 5 | OMC | 18.9 | 1.0810 | 92.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ST
Checked By: ANS

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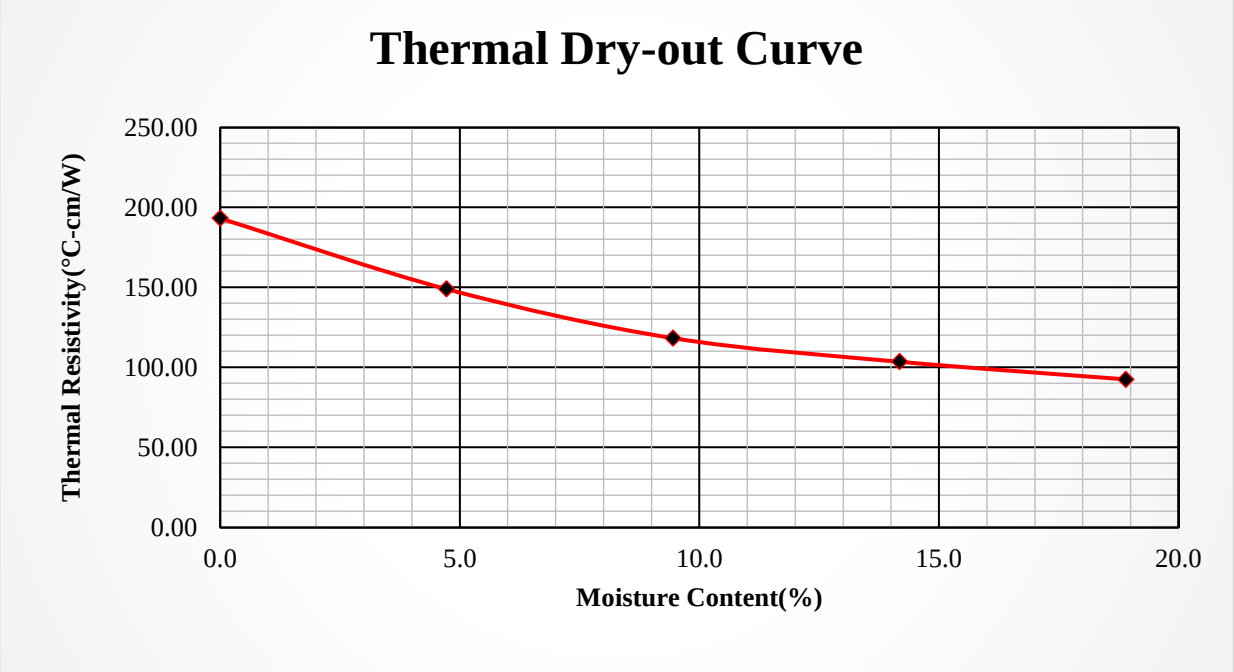
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-40, TRT, 2'-5'

Description: Dark Brown silty, clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 94.9 PCF |
| In-Situ Moisture: | 16.6 % | Optimum Moisture: | 18.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-043, TRT, 2'-5'
Description: Brown clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.7 PCF
In-Situ Moisture: 10.3 %
Optimum Moisture: 16.6 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5143 | 194.4 |
| 2 | ¼ OMC | 4.2 | 0.6522 | 153.3 |
| 3 | ½ OMC | 8.3 | 0.9218 | 108.5 |
| 4 | ¾ OMC | 12.5 | 1.0630 | 94.1 |
| 5 | OMC | 16.6 | 1.1751 | 85.1 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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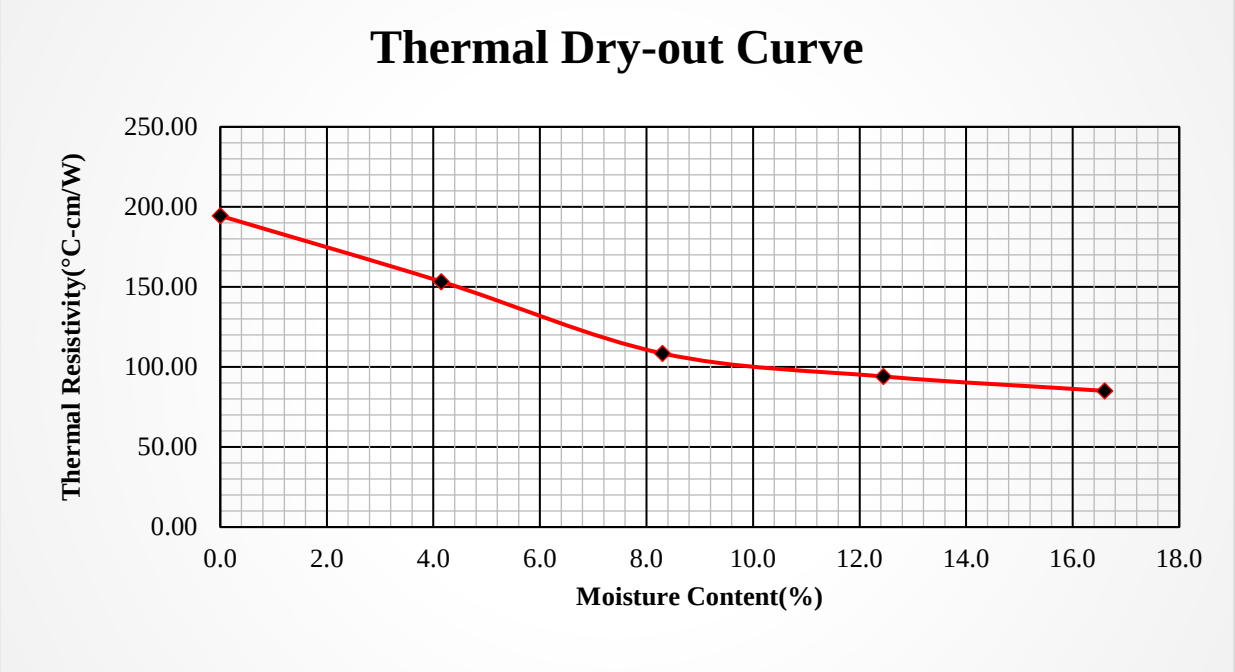
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-043, TRT, 2'-5'

Description: Brown clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.7 PCF |
| In-Situ Moisture: | 10.3 % | Optimum Moisture: | 16.6 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-045, TRT, 2'-5'
Description: Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 95.2 PCF
In-Situ Moisture: 8.0 %
Optimum Moisture: 16.6 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4699 | 212.8 |
| 2 | ¼ OMC | 4.2 | 0.6026 | 165.9 |
| 3 | ½ OMC | 8.3 | 0.8863 | 112.8 |
| 4 | ¾ OMC | 12.5 | 1.0306 | 97.0 |
| 5 | OMC | 16.6 | 1.1386 | 87.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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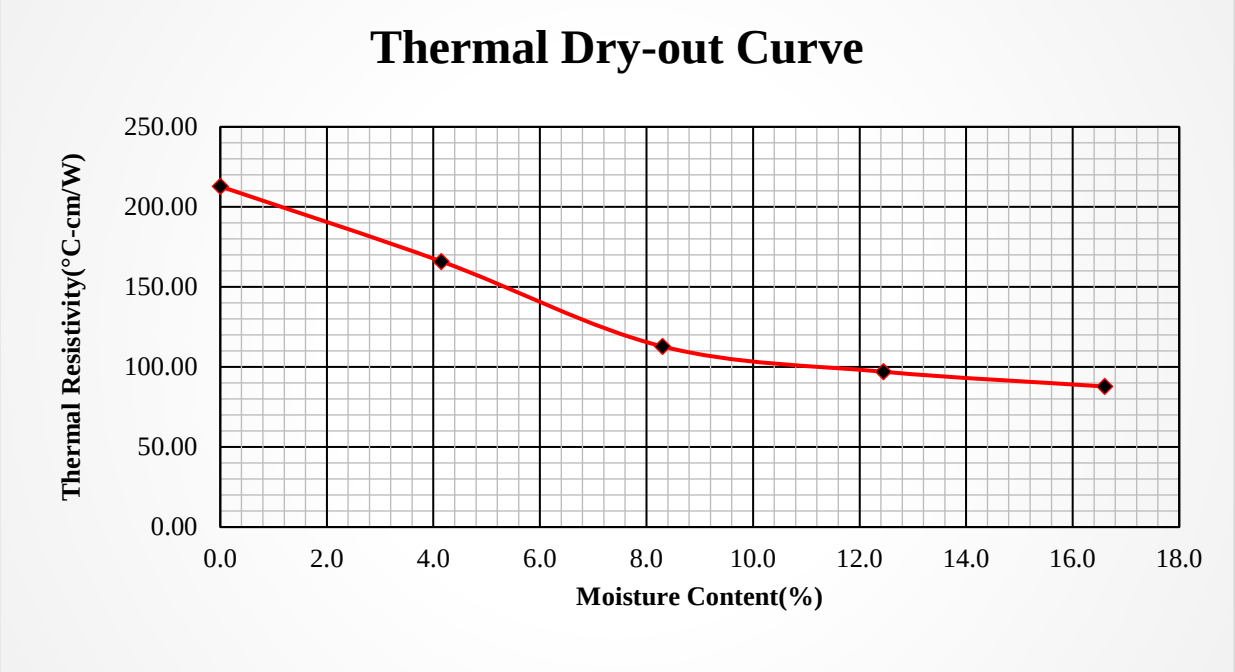
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-045, TRT, 2'-5'

Description: Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 95.2 PCF |
| In-Situ Moisture: | 8.0 % | Optimum Moisture: | 16.6 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-47, TRT, 2'-5'
Description: Dark Brown poorly graded sand with silty clay and gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 100.8 PCF
In-Situ Moisture: 7.8 %
Optimum Moisture: 17.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5721 | 174.8 |
| 2 | ¼ OMC | 4.3 | 0.7817 | 127.9 |
| 3 | ½ OMC | 8.7 | 1.0587 | 94.5 |
| 4 | ¾ OMC | 13.0 | 1.1906 | 84.0 |
| 5 | OMC | 17.3 | 1.3113 | 76.3 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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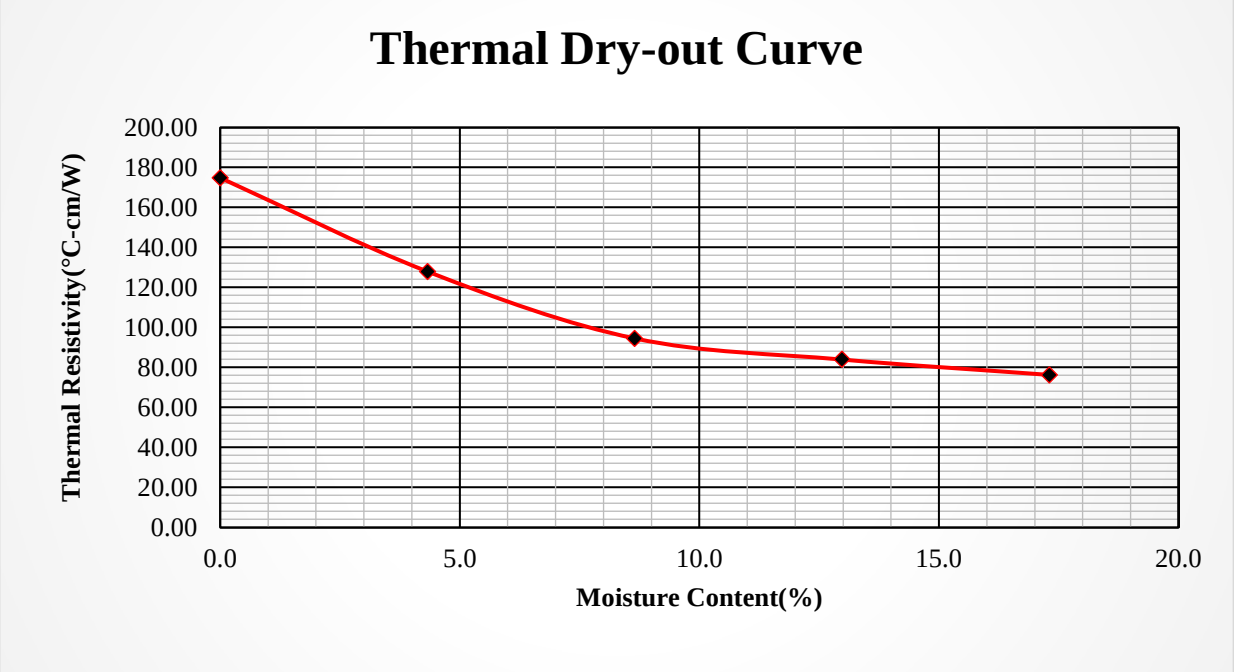
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-47, TRT, 2'-5'

Description: Dark Brown poorly graded sand with silty clay and gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 100.8 PCF |
| In-Situ Moisture: | 7.8 % | Optimum Moisture: | 17.3 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-49, TRT, 2'-5'
Description: Brown silty, clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.3 PCF
In-Situ Moisture: 8.9 %
Optimum Moisture: 15.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5482 | 182.4 |
| 2 | ¼ OMC | 4.0 | 0.7346 | 136.1 |
| 3 | ½ OMC | 8.0 | 1.0777 | 92.8 |
| 4 | ¾ OMC | 11.9 | 1.2102 | 82.6 |
| 5 | OMC | 15.9 | 1.3179 | 75.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ST
Checked By: ANS

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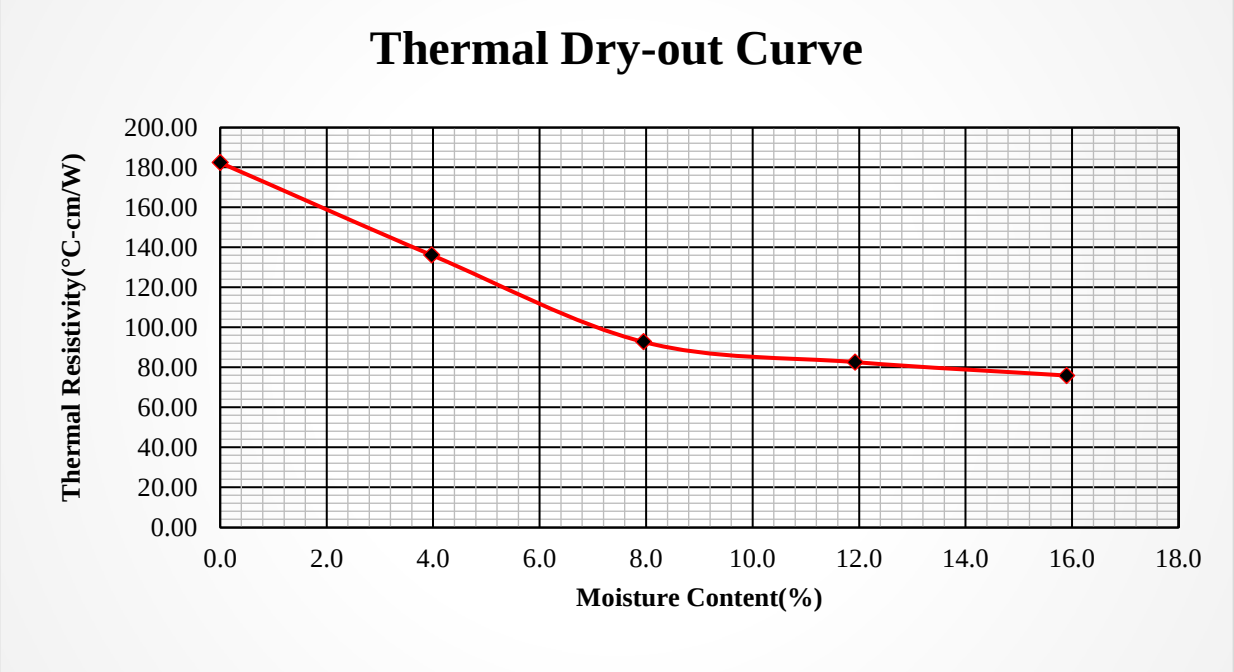
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-49, TRT, 2'-5'

Description: Brown silty, clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.3 PCF |
| In-Situ Moisture: | 8.9 % | Optimum Moisture: | 15.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: TetraTech
LAB IRN: 25-N-570
Project Name: Speedway, Sherman County, OR
Date: 10/21/2025

Sample ID: PV-52, TRT, 2'-5'
Description: Grayish Brown silty, clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 90.0 PCF
In-Situ Moisture: 30.3 %
Optimum Moisture: 22.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5391 | 185.5 |
| 2 | ¼ OMC | 5.5 | 0.7029 | 142.3 |
| 3 | ½ OMC | 11.1 | 0.9157 | 109.2 |
| 4 | ¾ OMC | 16.6 | 1.0457 | 95.6 |
| 5 | OMC | 22.1 | 1.1681 | 85.6 |
| 6 | In-Situ | 30.3 | 1.2869 | 77.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: FM
Checked By: ANS

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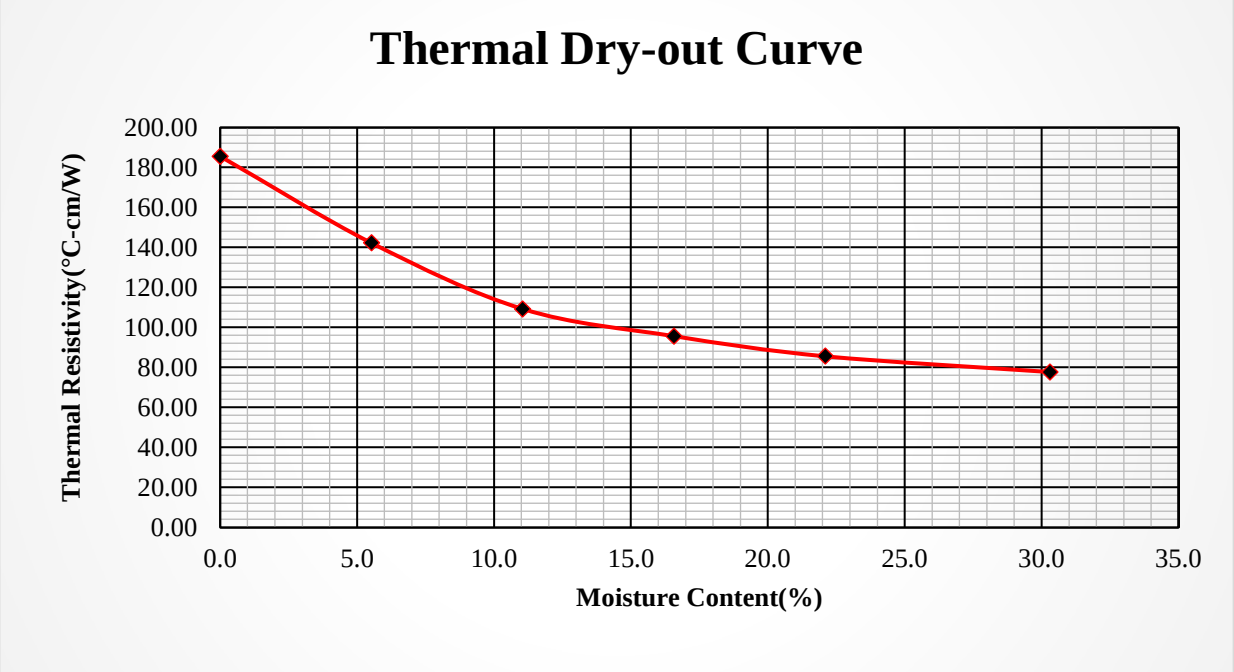
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | TetraTech | LAB IRN: | 25-N-570 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/21/2025 |

Sample ID: PV-52, TRT, 2'-5'

Description: Grayish Brown silty, clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 90.0 PCF |
| In-Situ Moisture: | 30.3 % | Optimum Moisture: | 22.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-058, TRT, 2'-5'
Description: Light Brown sandy silt with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 94.1 PCF
In-Situ Moisture: 8.8 %
Optimum Moisture: 19.6 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5097 | 196.2 |
| 2 | ¼ OMC | 4.9 | 0.8582 | 116.5 |
| 3 | ½ OMC | 9.8 | 1.0847 | 92.2 |
| 4 | ¾ OMC | 14.7 | 1.2068 | 82.9 |
| 5 | OMC | 19.6 | 1.3248 | 75.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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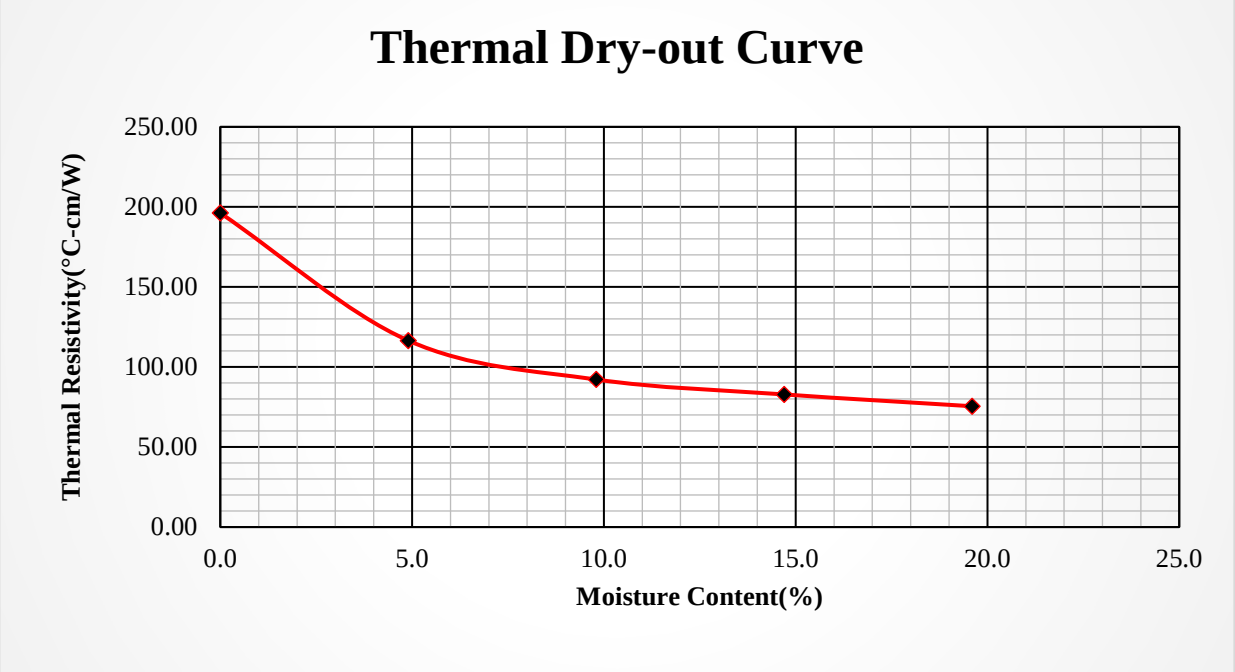
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-058, TRT, 2'-5'

Description: Light Brown sandy silt with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 94.1 PCF |
| In-Situ Moisture: | 8.8 % | Optimum Moisture: | 19.6 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-064, TRT, 2'-5'
Description: Light Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 90.8 PCF
In-Situ Moisture: 10.5 %
Optimum Moisture: 18.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4676 | 213.9 |
| 2 | ¼ OMC | 4.6 | 0.6505 | 153.7 |
| 3 | ½ OMC | 9.3 | 1.1198 | 89.3 |
| 4 | ¾ OMC | 13.9 | 1.2891 | 77.6 |
| 5 | OMC | 18.5 | 1.4014 | 71.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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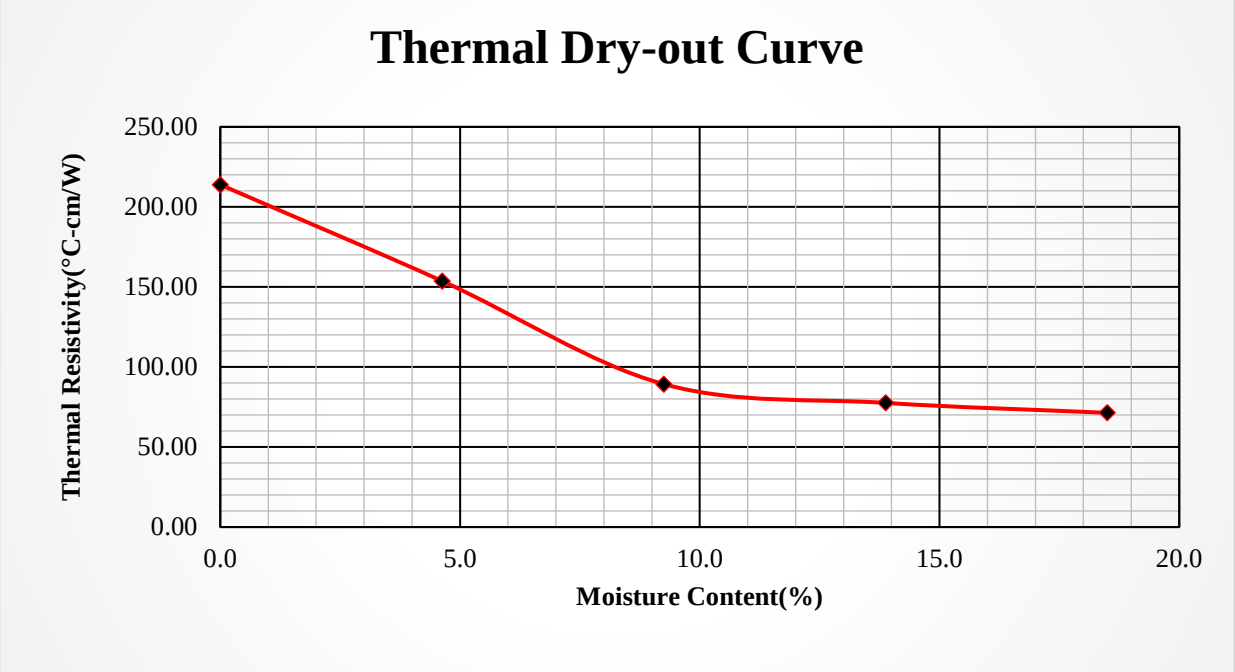
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-064, TRT, 2'-5'

Description: Light Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 90.8 PCF |
| In-Situ Moisture: | 10.5 % | Optimum Moisture: | 18.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-068, TRT, 2'-5'
Description: Brown silty sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 101.2 PCF
In-Situ Moisture: 9.9 %
Optimum Moisture: 15.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5749 | 173.9 |
| 2 | ¼ OMC | 3.9 | 0.7310 | 136.8 |
| 3 | ½ OMC | 7.7 | 1.1472 | 87.2 |
| 4 | ¾ OMC | 11.6 | 1.3306 | 75.2 |
| 5 | OMC | 15.4 | 1.4484 | 69.0 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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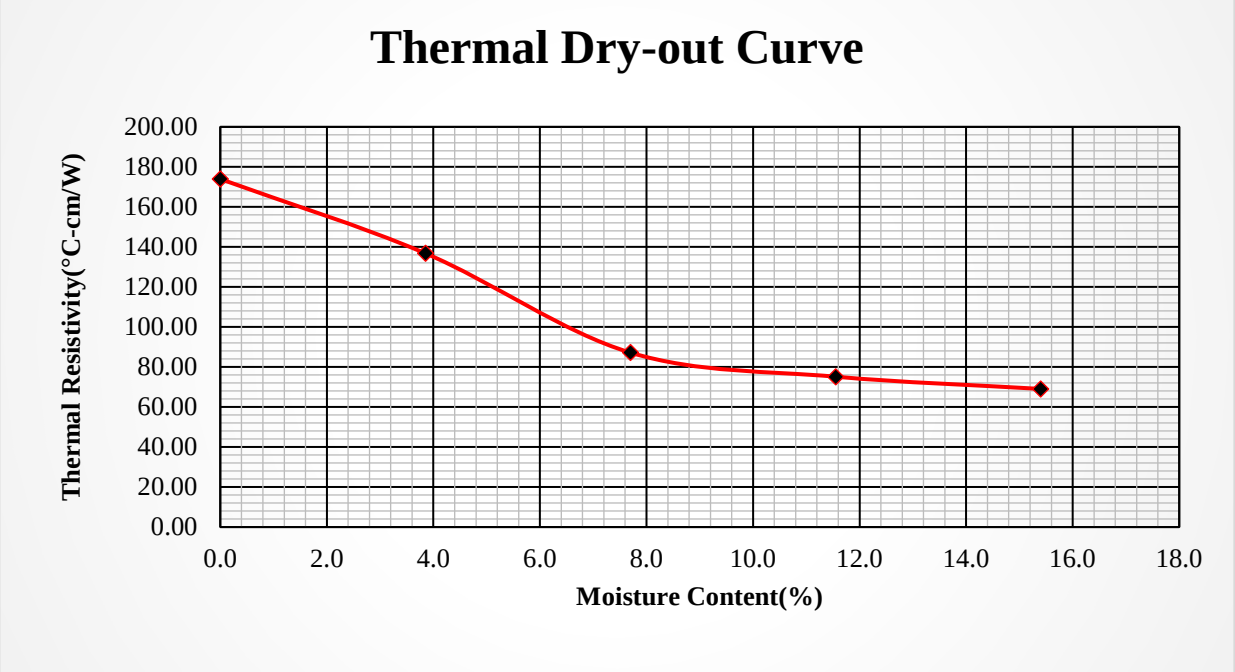
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-068, TRT, 2'-5'

Description: Brown silty sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 101.2 PCF |
| In-Situ Moisture: | 9.9 % | Optimum Moisture: | 15.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-071, TRT, 2'-5'
Description: Light Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 93.3 PCF
In-Situ Moisture: 9.2 %
Optimum Moisture: 17.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4389 | 227.8 |
| 2 | ¼ OMC | 4.3 | 0.5984 | 167.1 |
| 3 | ½ OMC | 8.7 | 1.0121 | 98.8 |
| 4 | ¾ OMC | 13.0 | 1.1805 | 84.7 |
| 5 | OMC | 17.3 | 1.2918 | 77.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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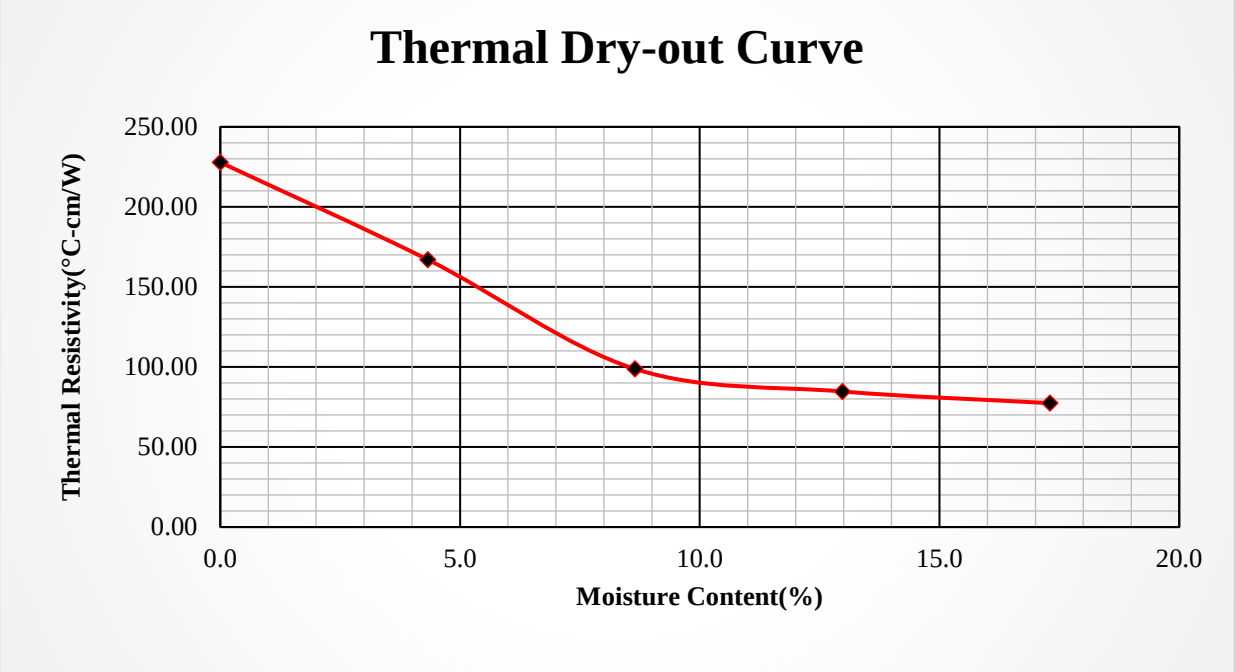
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-071, TRT, 2'-5'

Description: Light Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 93.3 PCF |
| In-Situ Moisture: | 9.2 % | Optimum Moisture: | 17.3 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-074, TRT, 2'-5'
Description: Dark Brown clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 92.8 PCF
In-Situ Moisture: 8.4 %
Optimum Moisture: 17.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5615 | 178.1 |
| 2 | ¼ OMC | 4.3 | 0.8272 | 120.9 |
| 3 | ½ OMC | 8.6 | 1.3641 | 73.3 |
| 4 | ¾ OMC | 12.9 | 1.5125 | 66.1 |
| 5 | OMC | 17.2 | 1.6189 | 61.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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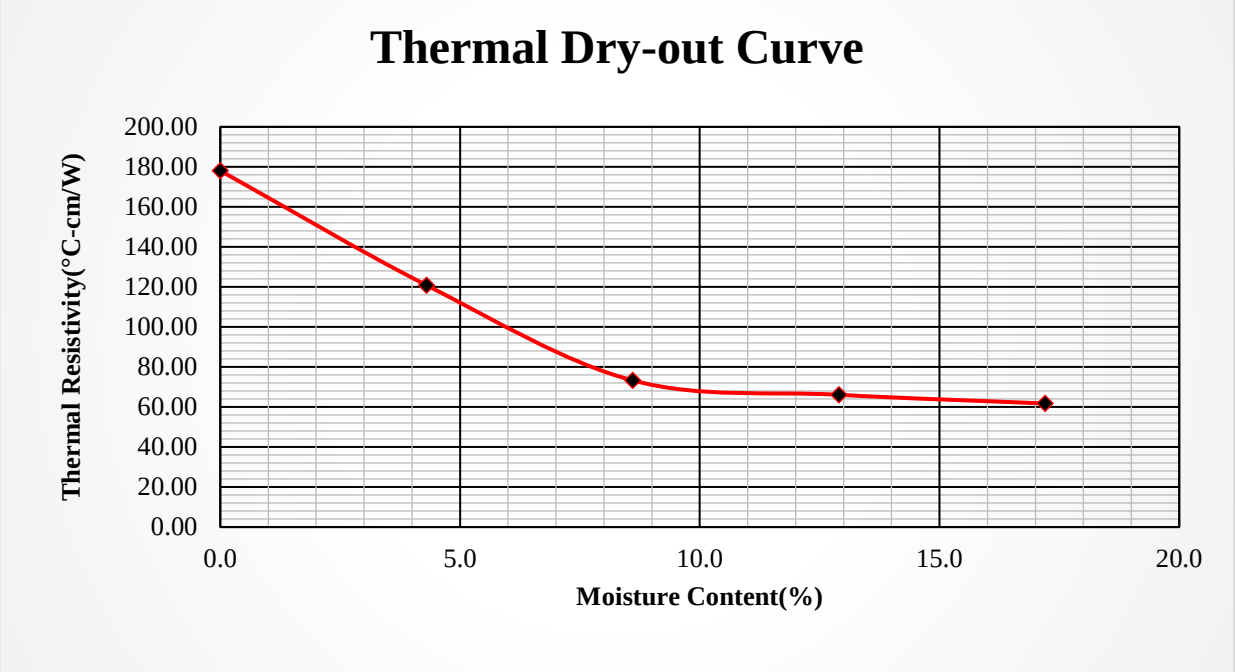
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-074, TRT, 2'-5'

Description: Dark Brown clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 92.8 PCF |
| In-Situ Moisture: | 8.4 % | Optimum Moisture: | 17.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-079, TRT, 2'-5'
Description: Dark Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.2 PCF
In-Situ Moisture: 15.4 %
Optimum Moisture: 16.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4312 | 231.9 |
| 2 | ¼ OMC | 4.2 | 0.5786 | 172.8 |
| 3 | ½ OMC | 8.4 | 0.9008 | 111.0 |
| 4 | ¾ OMC | 12.5 | 1.0525 | 95.0 |
| 5 | OMC | 16.7 | 1.1656 | 85.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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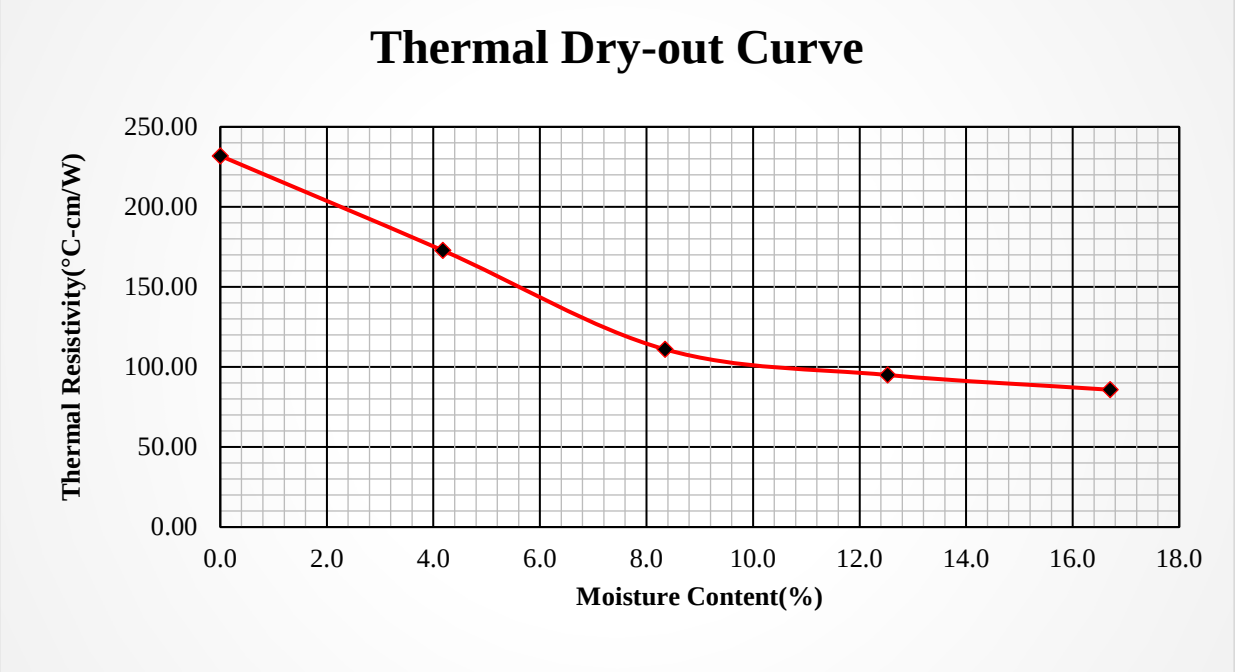
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-079, TRT, 2'-5'

Description: Dark Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.2 PCF |
| In-Situ Moisture: | 15.4 % | Optimum Moisture: | 16.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-081, TRT, 2'-5'
Description: Brown lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 91.6 PCF
In-Situ Moisture: 15.9 %
Optimum Moisture: 17.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4637 | 215.7 |
| 2 | ¼ OMC | 4.5 | 0.6395 | 156.4 |
| 3 | ½ OMC | 9.0 | 1.1181 | 89.4 |
| 4 | ¾ OMC | 13.4 | 1.2949 | 77.2 |
| 5 | OMC | 17.9 | 1.4070 | 71.1 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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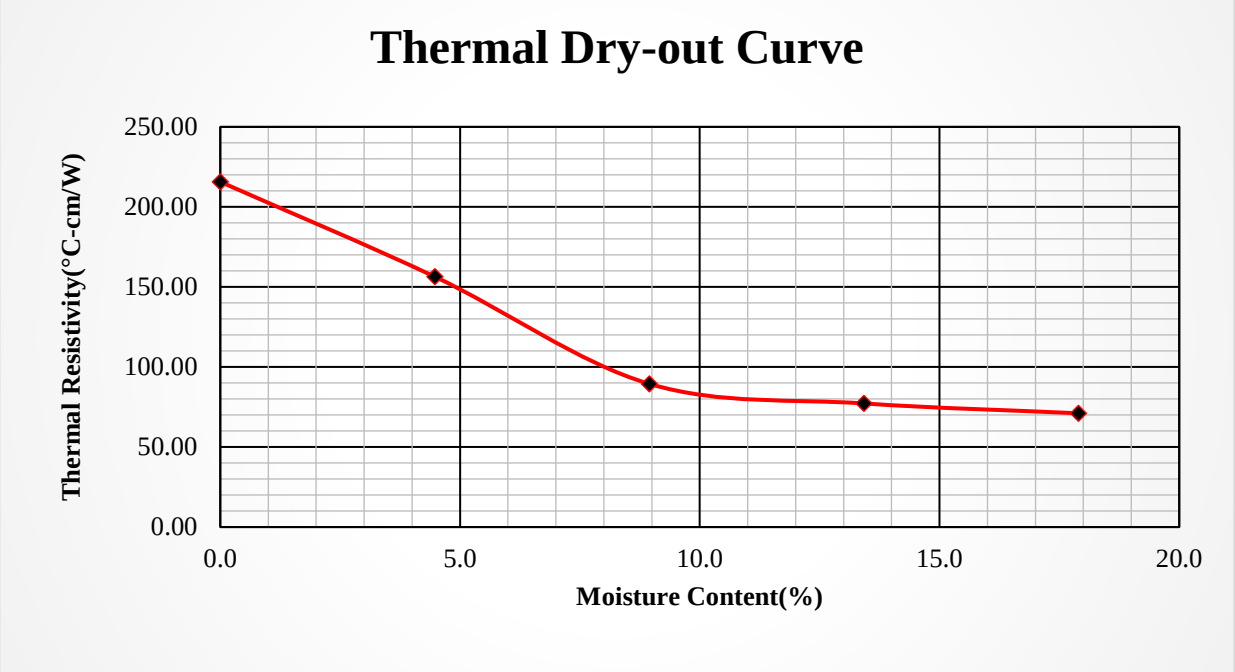
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-081, TRT, 2'-5'

Description: Brown lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 91.6 PCF |
| In-Situ Moisture: | 15.9 % | Optimum Moisture: | 17.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-084, TRT, 2'-5'
Description: Gray fat clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 90.1 PCF
In-Situ Moisture: 28.2 %
Optimum Moisture: 19.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4368 | 228.9 |
| 2 | ¼ OMC | 4.9 | 0.5453 | 183.4 |
| 3 | ½ OMC | 9.9 | 0.6545 | 152.8 |
| 4 | ¾ OMC | 14.8 | 0.7632 | 131.0 |
| 5 | OMC | 19.7 | 0.8716 | 114.7 |
| 6 | In-Situ | 28.2 | 1.0432 | 95.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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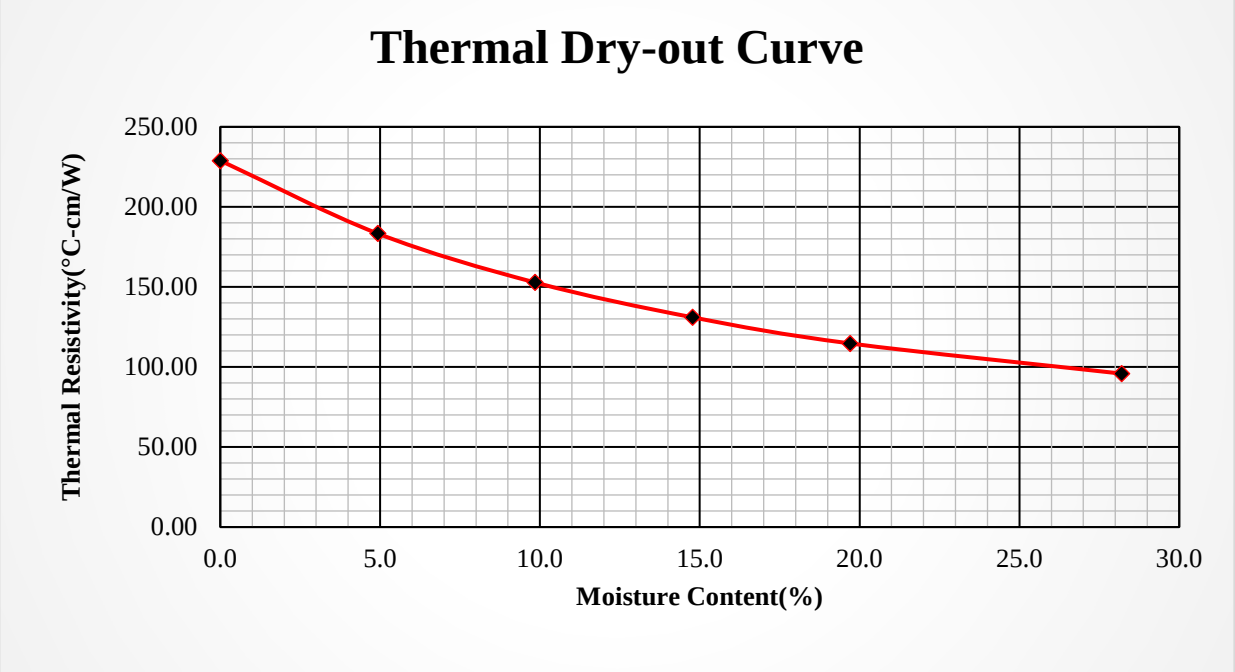
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-084, TRT, 2'-5'

Description: Gray fat clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 90.1 PCF |
| In-Situ Moisture: | 28.2 % | Optimum Moisture: | 19.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-089, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 93.1 PCF
In-Situ Moisture: 13.0 %
Optimum Moisture: 16.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4505 | 222.0 |
| 2 | ¼ OMC | 4.2 | 0.5743 | 174.1 |
| 3 | ½ OMC | 8.5 | 0.8222 | 121.6 |
| 4 | ¾ OMC | 12.7 | 0.9567 | 104.5 |
| 5 | OMC | 16.9 | 1.0610 | 94.3 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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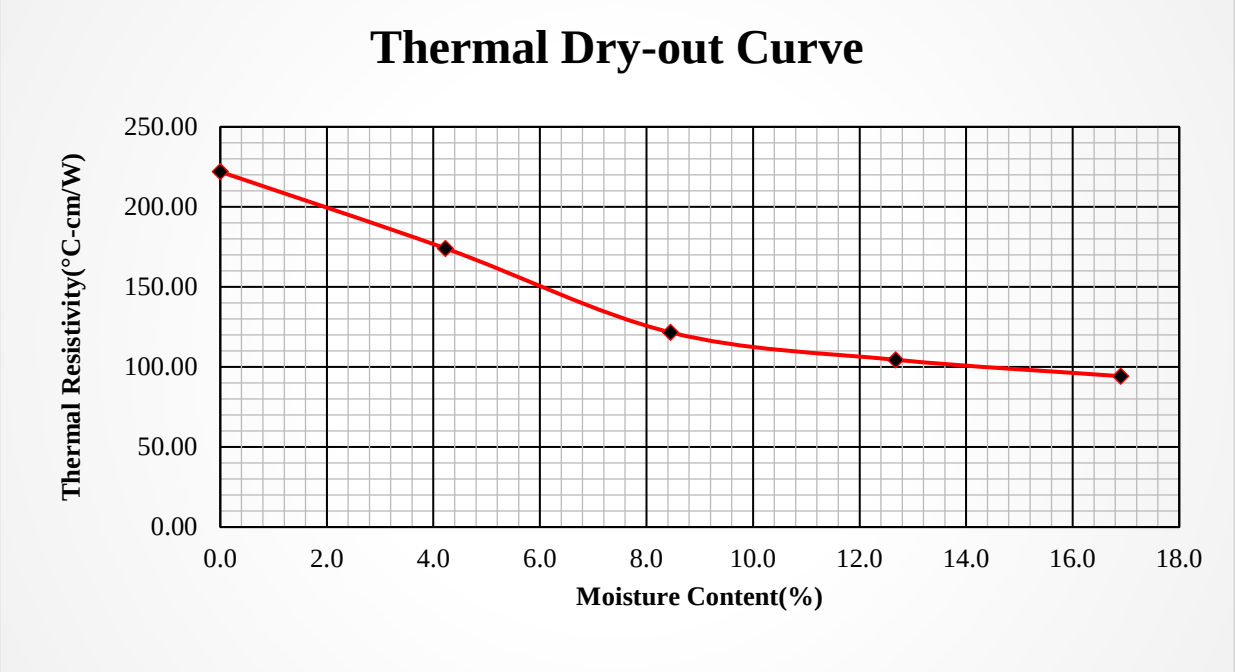
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-089, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 93.1 PCF |
| In-Situ Moisture: | 13.0 % | Optimum Moisture: | 16.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-090, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 91.1 PCF
In-Situ Moisture: 12.3 %
Optimum Moisture: 20.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4497 | 222.4 |
| 2 | ¼ OMC | 5.0 | 0.5958 | 167.8 |
| 3 | ½ OMC | 10.1 | 0.8133 | 123.0 |
| 4 | ¾ OMC | 15.1 | 0.9396 | 106.4 |
| 5 | OMC | 20.1 | 1.0543 | 94.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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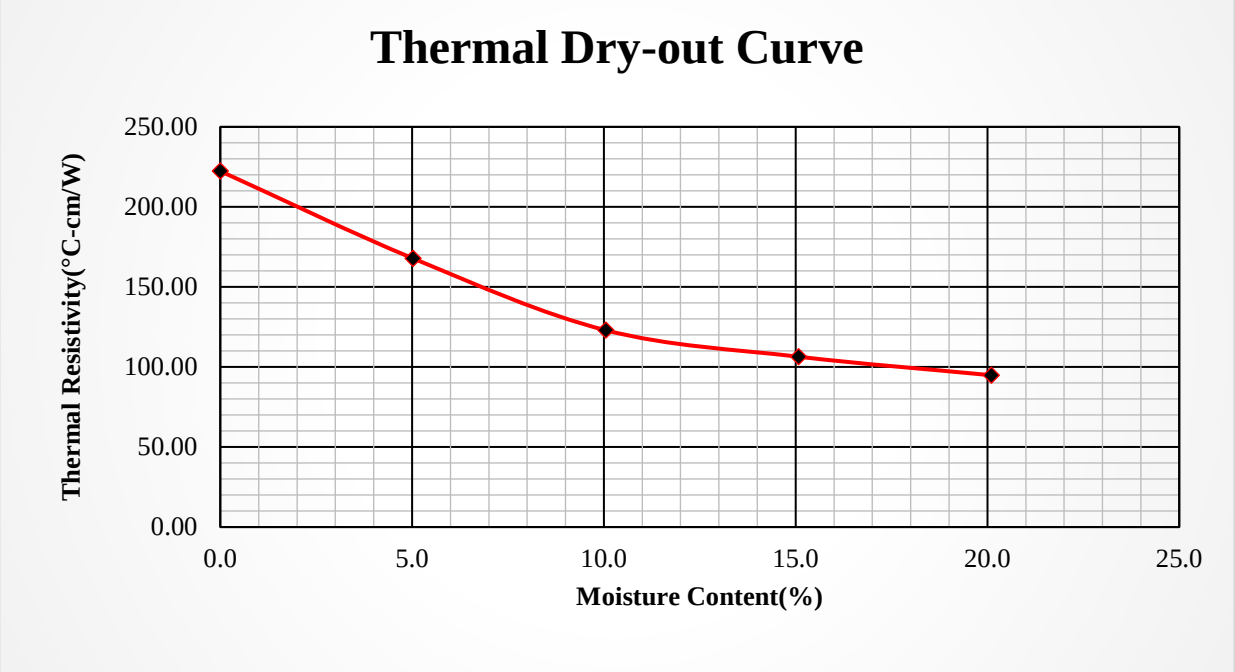
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-090, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 91.1 PCF |
| In-Situ Moisture: | 12.3 % | Optimum Moisture: | 20.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-095, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.6 PCF
In-Situ Moisture: 13.6 %
Optimum Moisture: 16.9 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4562 | 219.2 |
| 2 | ¼ OMC | 4.2 | 0.5890 | 169.8 |
| 3 | ½ OMC | 8.5 | 0.8028 | 124.6 |
| 4 | ¾ OMC | 12.7 | 0.9332 | 107.2 |
| 5 | OMC | 16.9 | 1.0471 | 95.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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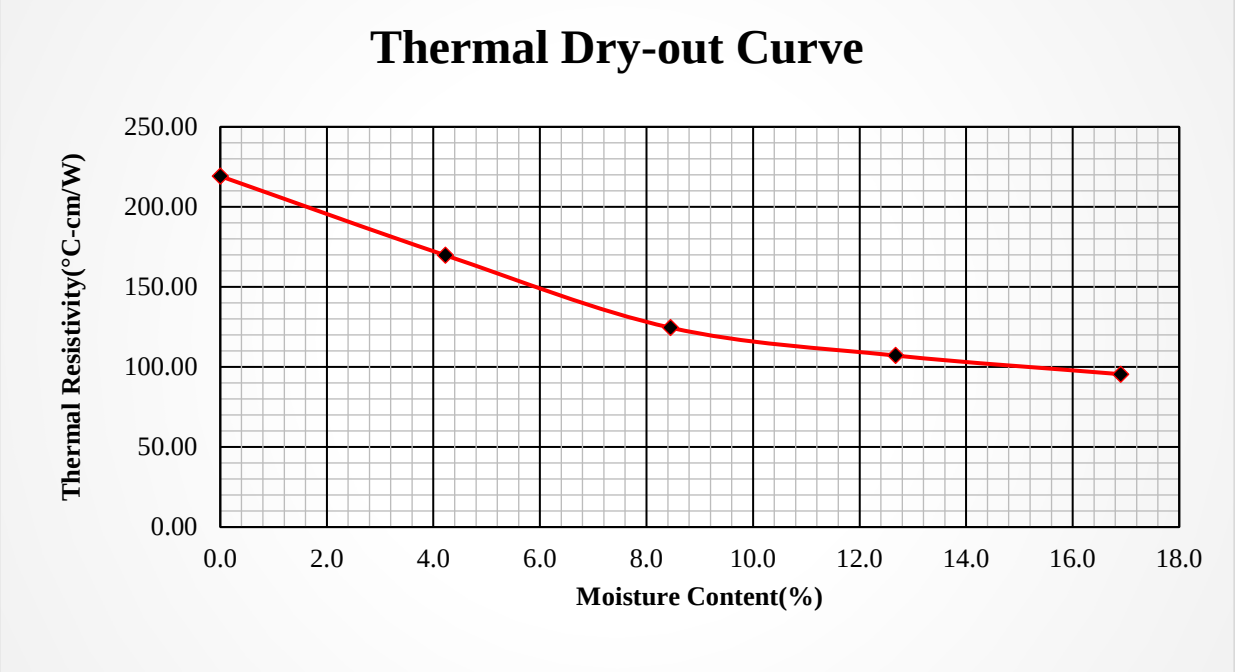
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-095, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.6 PCF |
| In-Situ Moisture: | 13.6 % | Optimum Moisture: | 16.9 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-097, TRT, 2'-5'
Description: Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.7 PCF
In-Situ Moisture: 20.4 %
Optimum Moisture: 16.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4441 | 225.2 |
| 2 | ¼ OMC | 4.0 | 0.5663 | 176.6 |
| 3 | ½ OMC | 8.1 | 0.7791 | 128.4 |
| 4 | ¾ OMC | 12.1 | 0.9091 | 110.0 |
| 5 | OMC | 16.1 | 1.0170 | 98.3 |
| 6 | In-Situ | 20.4 | 1.1188 | 89.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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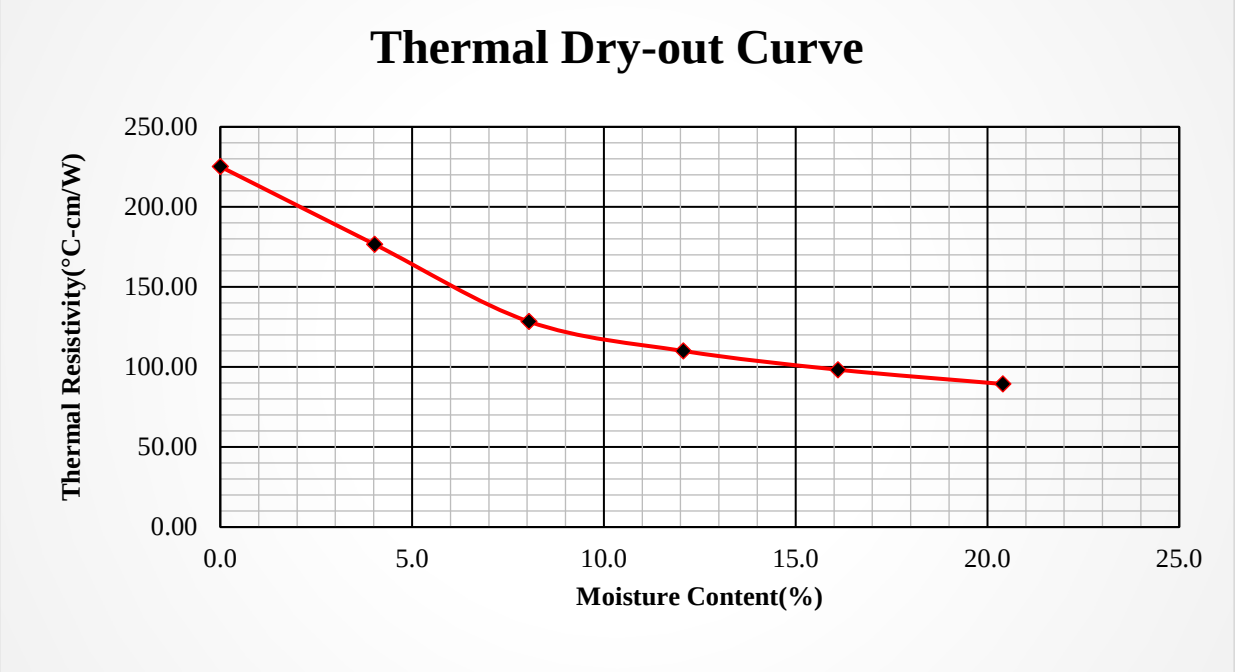
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-097, TRT, 2'-5'

Description: Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.7 PCF |
| In-Situ Moisture: | 20.4 % | Optimum Moisture: | 16.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-T-215
Project Name: Speedway, Sherman County, OR
Date: 11/10/2025

Sample ID: PV-100, TRT, 2'-5'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 94.2 PCF
In-Situ Moisture: 20.4 %
Optimum Moisture: 18.6 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4615 | 216.7 |
| 2 | ¼ OMC | 4.7 | 0.6010 | 166.4 |
| 3 | ½ OMC | 9.3 | 0.8185 | 122.2 |
| 4 | ¾ OMC | 14.0 | 0.9464 | 105.7 |
| 5 | OMC | 18.6 | 1.0604 | 94.3 |
| 6 | In-Situ | 20.4 | 1.0943 | 91.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: ES
Checked By: ANS

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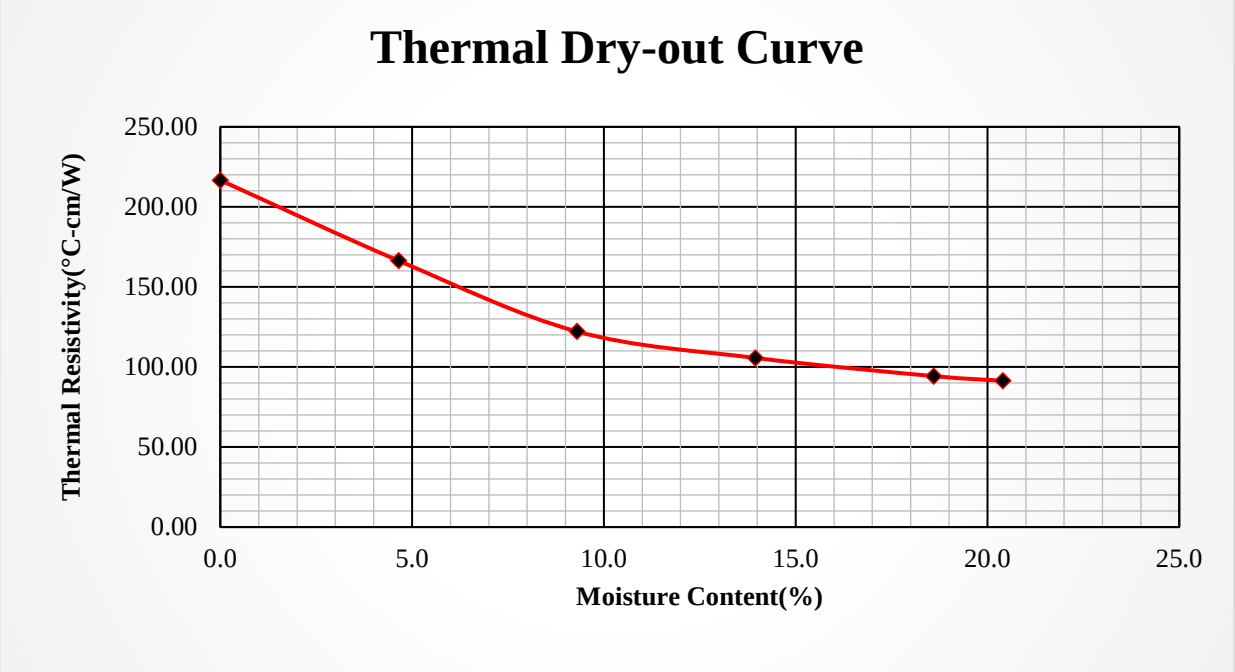
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-T-215 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/10/2025 |

Sample ID: PV-100, TRT, 2'-5'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 94.2 PCF |
| In-Situ Moisture: | 20.4 % | Optimum Moisture: | 18.6 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-105, TRT, 1'-2'
Description: Brown silty sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.0 PCF
In-Situ Moisture: 8.5 %
Optimum Moisture: 16.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4323 | 231.3 |
| 2 | ¼ OMC | 4.1 | 0.5605 | 178.4 |
| 3 | ½ OMC | 8.2 | 0.7856 | 127.3 |
| 4 | ¾ OMC | 12.3 | 0.9180 | 108.9 |
| 5 | OMC | 16.4 | 1.0284 | 97.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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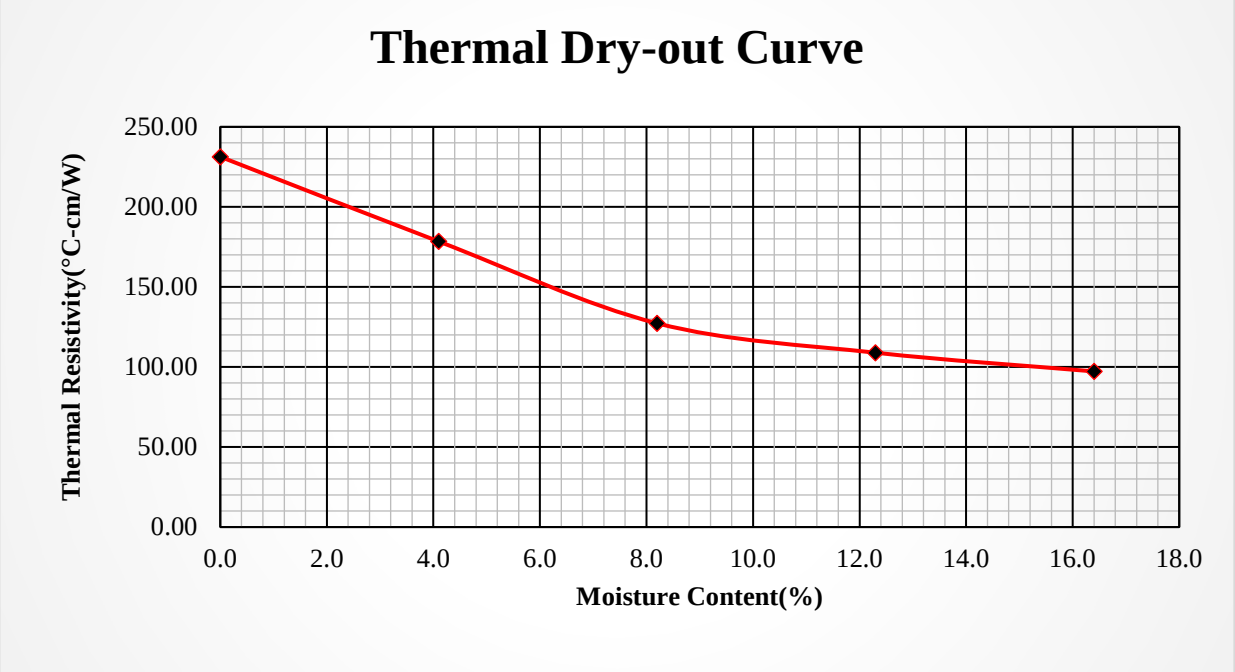
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-105, TRT, 1'-2'

Description: Brown silty sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.0 PCF |
| In-Situ Moisture: | 8.5 % | Optimum Moisture: | 16.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-109, TRT, 2'-5'
Description: Brown silty, clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 104.9 PCF
In-Situ Moisture: 16.0 %
Optimum Moisture: 12.0 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4506 | 221.9 |
| 2 | ¼ OMC | 3.0 | 0.5465 | 183.0 |
| 3 | ½ OMC | 6.0 | 0.7212 | 138.7 |
| 4 | ¾ OMC | 9.0 | 0.8643 | 115.7 |
| 5 | OMC | 12.0 | 0.9643 | 103.7 |
| 6 | In-Situ | 16.0 | 1.0561 | 94.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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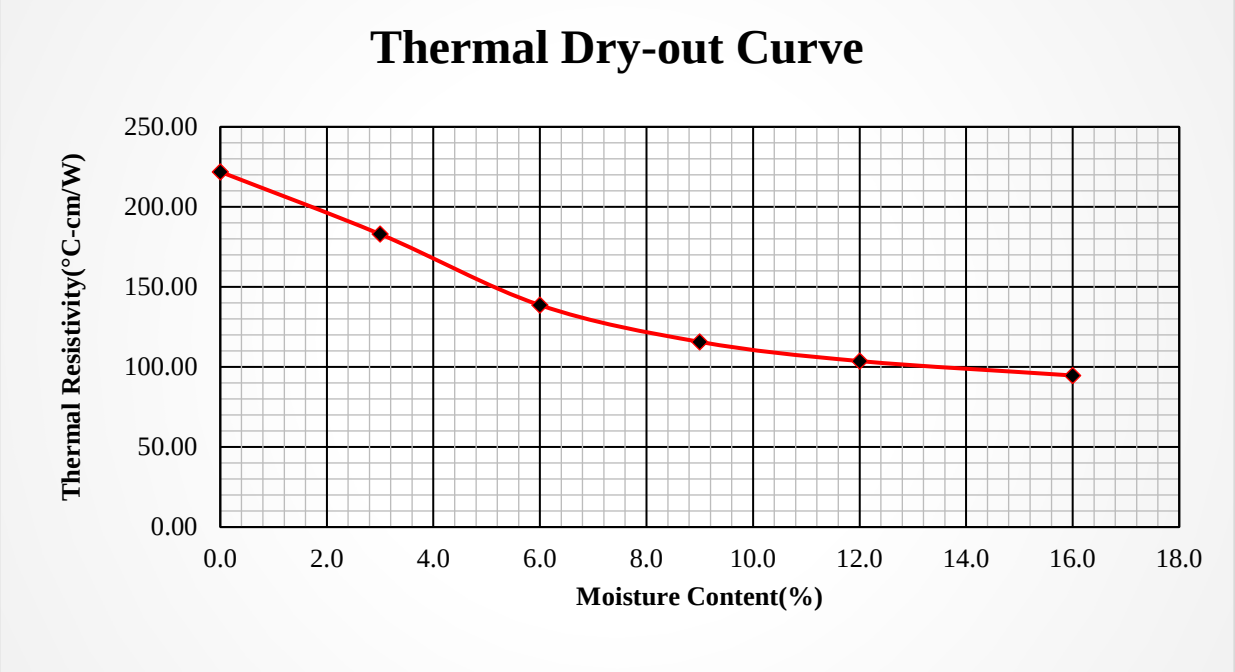
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-109, TRT, 2'-5'

Description: Brown silty, clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 104.9 PCF |
| In-Situ Moisture: | 16.0 % | Optimum Moisture: | 12.0 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-111, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.6 PCF
In-Situ Moisture: 9.1 %
Optimum Moisture: 17.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4269 | 234.2 |
| 2 | ¼ OMC | 4.3 | 0.5615 | 178.1 |
| 3 | ½ OMC | 8.6 | 0.7868 | 127.1 |
| 4 | ¾ OMC | 12.8 | 0.9184 | 108.9 |
| 5 | OMC | 17.1 | 1.0316 | 96.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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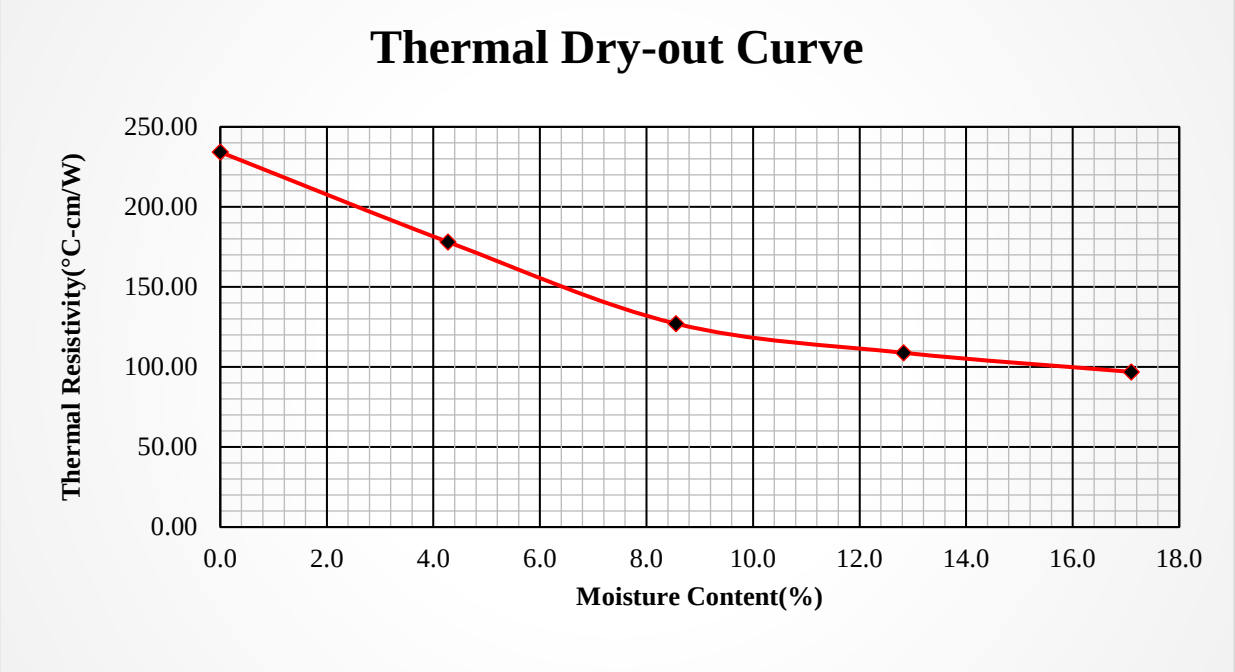
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-111, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.6 PCF |
| In-Situ Moisture: | 9.1 % | Optimum Moisture: | 17.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-114, TRT, 2'-5'
Description: Brown silty sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.0 PCF
In-Situ Moisture: 8.3 %
Optimum Moisture: 16.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4977 | 200.9 |
| 2 | ¼ OMC | 4.1 | 0.6275 | 159.4 |
| 3 | ½ OMC | 8.2 | 0.8774 | 114.0 |
| 4 | ¾ OMC | 12.3 | 1.0149 | 98.5 |
| 5 | OMC | 16.4 | 1.1241 | 89.0 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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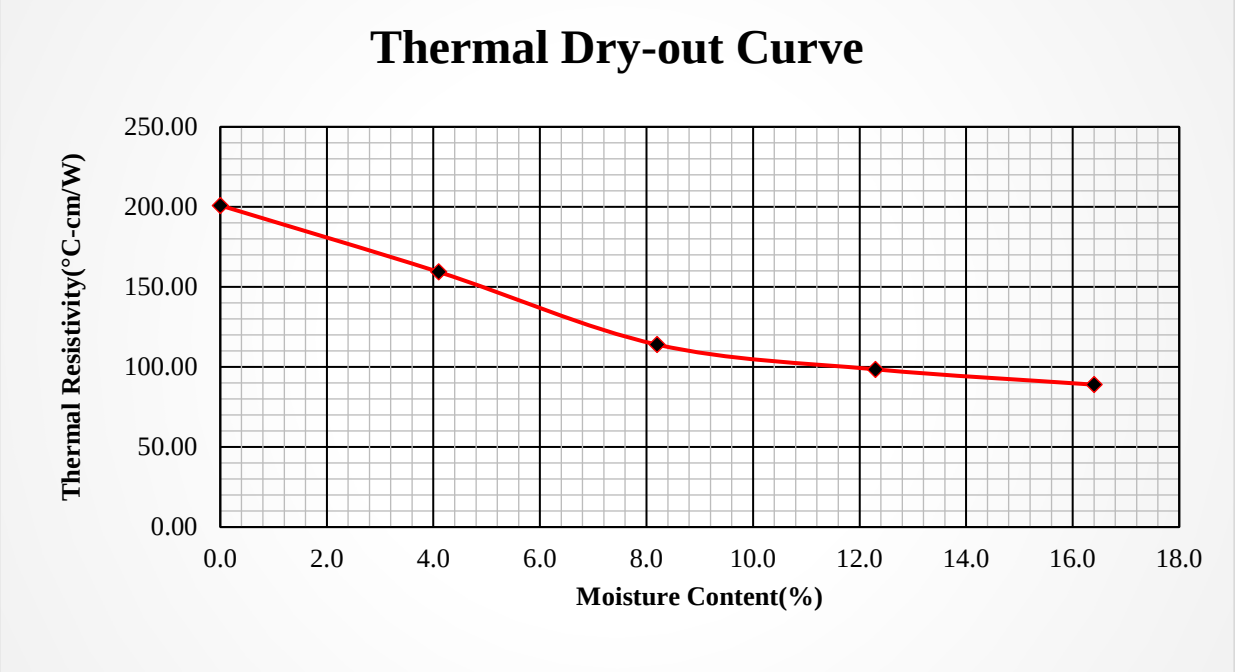
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-114, TRT, 2'-5'

Description: Brown silty sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.0 PCF |
| In-Situ Moisture: | 8.3 % | Optimum Moisture: | 16.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-597
Date: 10/23/2025

Sample ID: PV-119, TRT, 1'-2'
Description: Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
In-Situ Moisture: 6.4 %
Recompaction Dry Density: 99.3 PCF
Optimum Moisture: 14.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4349 | 229.9 |
| 2 | ¼ OMC | 3.5 | 0.5493 | 182.0 |
| 3 | ½ OMC | 7.1 | 0.8331 | 120.0 |
| 4 | ¾ OMC | 10.6 | 1.0020 | 99.8 |
| 5 | OMC | 14.1 | 1.1084 | 90.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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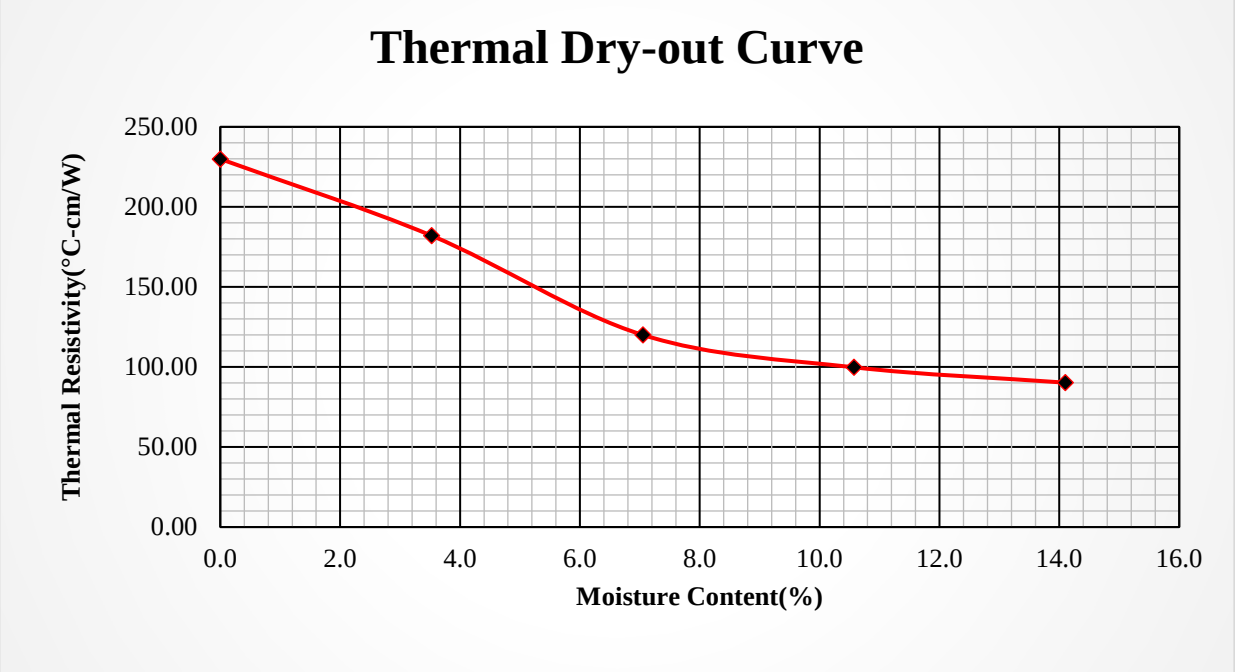
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-119, TRT, 1'-2'

Description: Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.3 PCF |
| In-Situ Moisture: | 6.4 % | Optimum Moisture: | 14.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-121, TRT, 2'-5'
Description: Brown clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 102.2 PCF
In-Situ Moisture: 6.9 %
Optimum Moisture: 15.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4409 | 226.8 |
| 2 | ¼ OMC | 3.8 | 0.5722 | 174.8 |
| 3 | ½ OMC | 7.7 | 0.8222 | 121.6 |
| 4 | ¾ OMC | 11.5 | 0.9650 | 103.6 |
| 5 | OMC | 15.3 | 1.0783 | 92.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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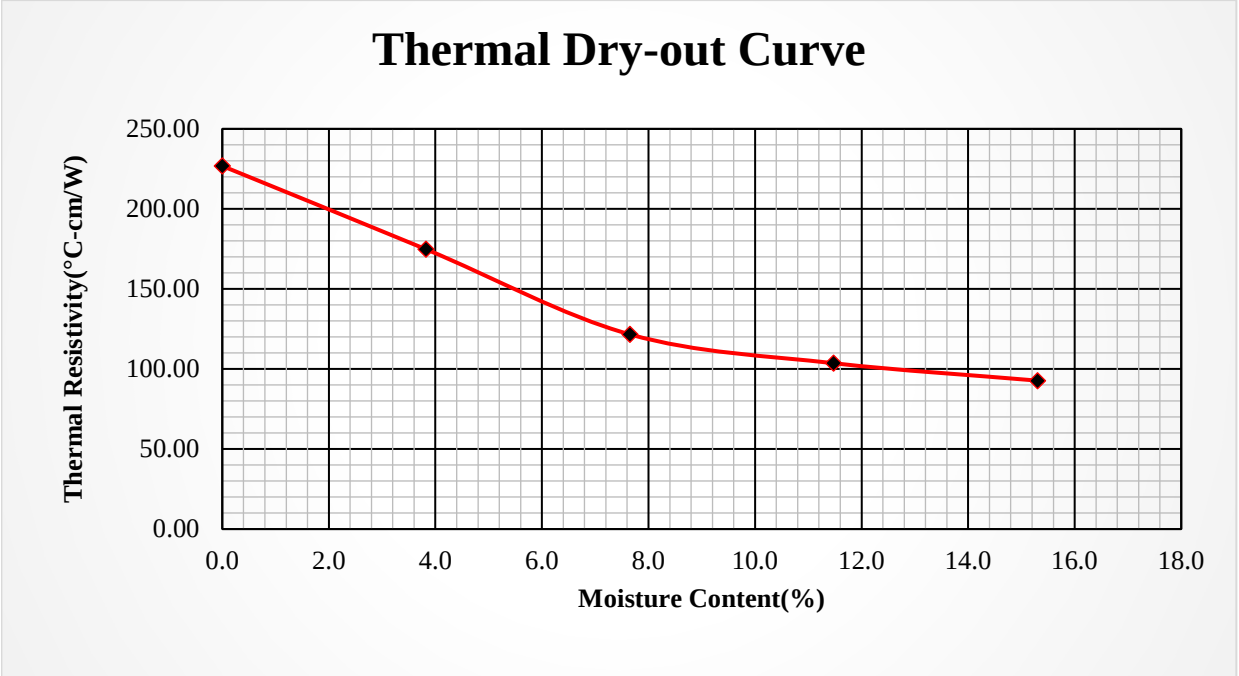
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-121, TRT, 2'-5'

Description: Brown clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 102.2 PCF |
| In-Situ Moisture: | 6.9 % | Optimum Moisture: | 15.3 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-123, TRT, 2'-5'
Description: Brown sandy silt

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 100.2 PCF
In-Situ Moisture: 7.6 %
Optimum Moisture: 13.0 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4491 | 222.7 |
| 2 | ¼ OMC | 3.3 | 0.5515 | 181.3 |
| 3 | ½ OMC | 6.5 | 0.8068 | 123.9 |
| 4 | ¾ OMC | 9.8 | 0.9856 | 101.5 |
| 5 | OMC | 13.0 | 1.0906 | 91.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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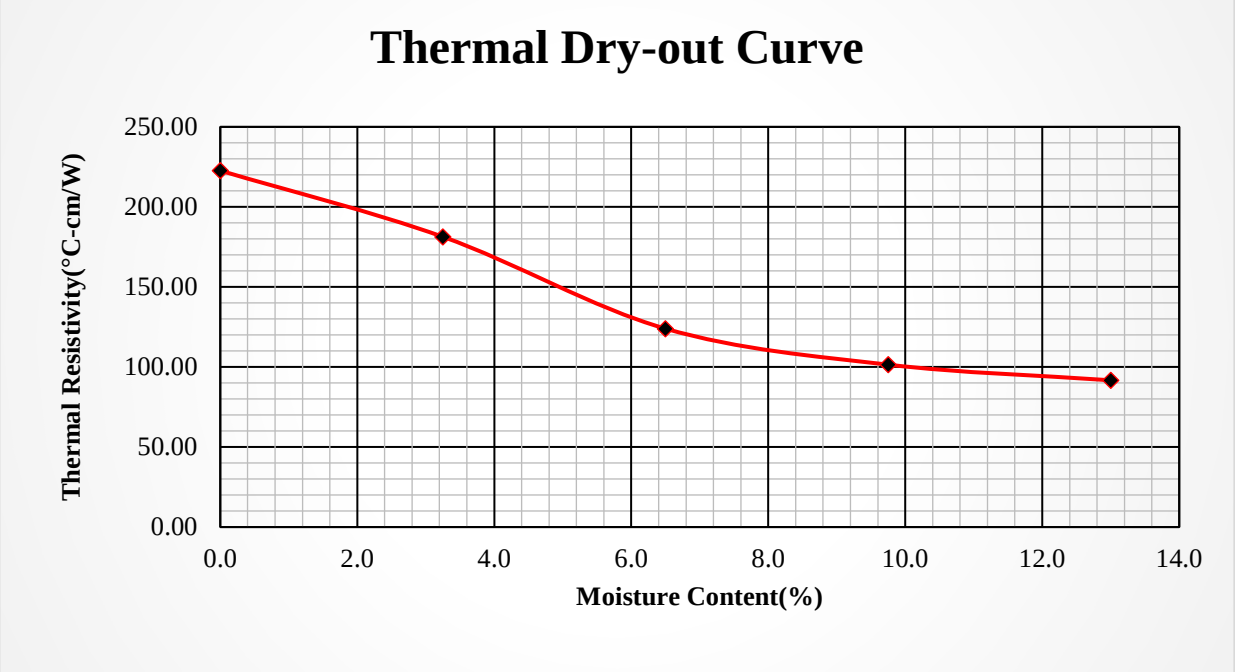
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-123, TRT, 2'-5'

Description: Brown sandy silt

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 100.2 PCF |
| In-Situ Moisture: | 7.6 % | Optimum Moisture: | 13.0 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-126, TRT, 1'-2'
Description: Brown sandy silt

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.9 PCF
In-Situ Moisture: 7.2 %
Optimum Moisture: 14.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5866 | 170.5 |
| 2 | ¼ OMC | 3.6 | 0.7061 | 141.6 |
| 3 | ½ OMC | 7.2 | 0.9919 | 100.8 |
| 4 | ¾ OMC | 10.8 | 1.1551 | 86.6 |
| 5 | OMC | 14.4 | 1.2629 | 79.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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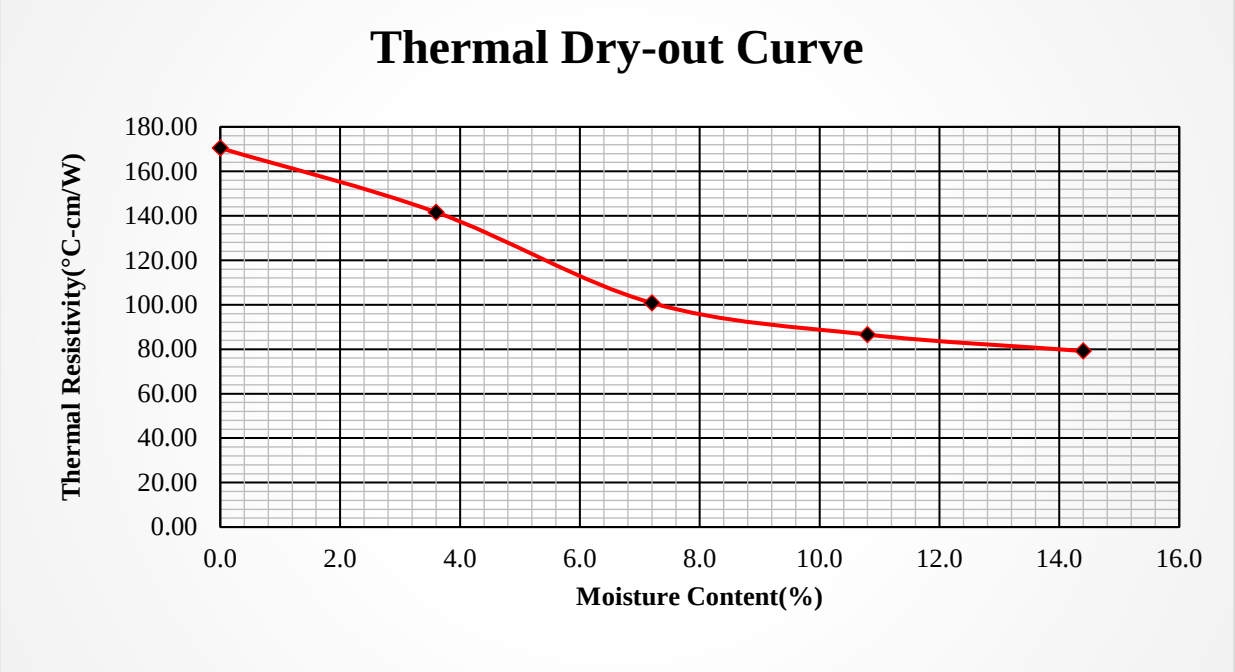
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-126, TRT, 1'-2'

Description: Brown sandy silt

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.9 PCF |
| In-Situ Moisture: | 7.2 % | Optimum Moisture: | 14.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-127, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.4 PCF
In-Situ Moisture: 15.2 %
Optimum Moisture: 16.0 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4473 | 223.6 |
| 2 | ¼ OMC | 4.0 | 0.5872 | 170.3 |
| 3 | ½ OMC | 8.0 | 0.8844 | 113.1 |
| 4 | ¾ OMC | 12.0 | 1.0346 | 96.7 |
| 5 | OMC | 16.0 | 1.1477 | 87.1 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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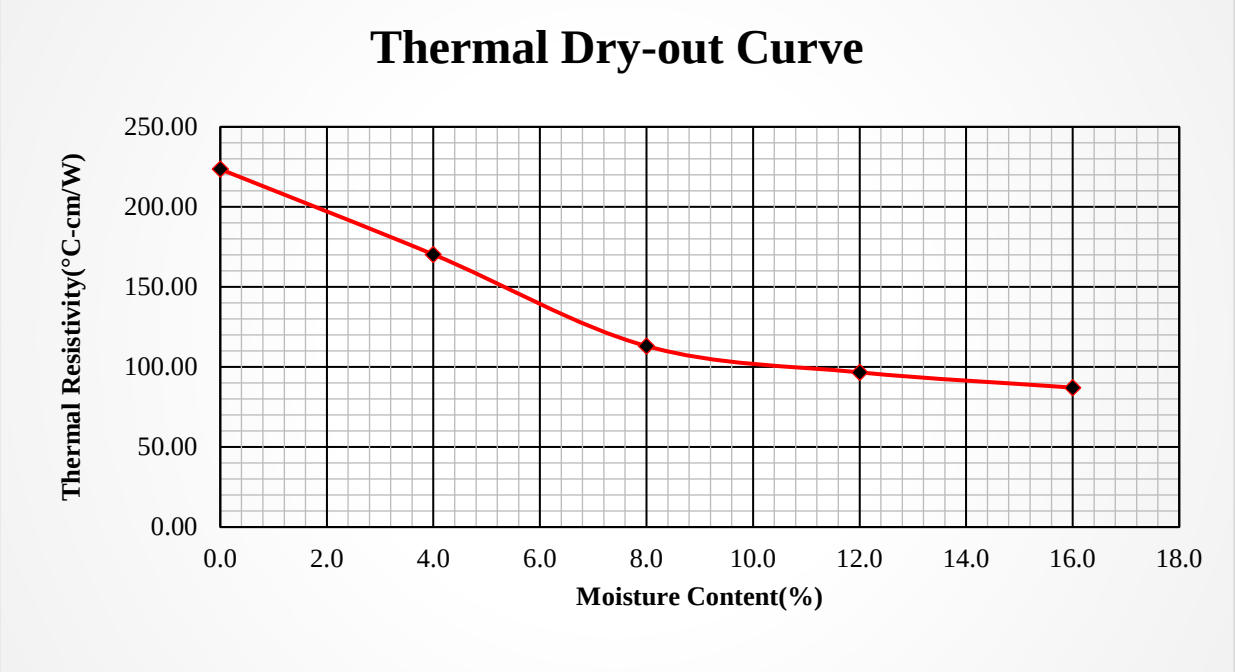
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-127, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.4 PCF |
| In-Situ Moisture: | 15.2 % | Optimum Moisture: | 16.0 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-132, TRT, 2'-5'
Description: Brown silty, clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 110.3 PCF
In-Situ Moisture: 5.4 %
Optimum Moisture: 11.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.6365 | 157.1 |
| 2 | ¼ OMC | 3.0 | 0.7507 | 133.2 |
| 3 | ½ OMC | 5.9 | 1.0481 | 95.4 |
| 4 | ¾ OMC | 8.9 | 1.2539 | 79.8 |
| 5 | OMC | 11.8 | 1.3713 | 72.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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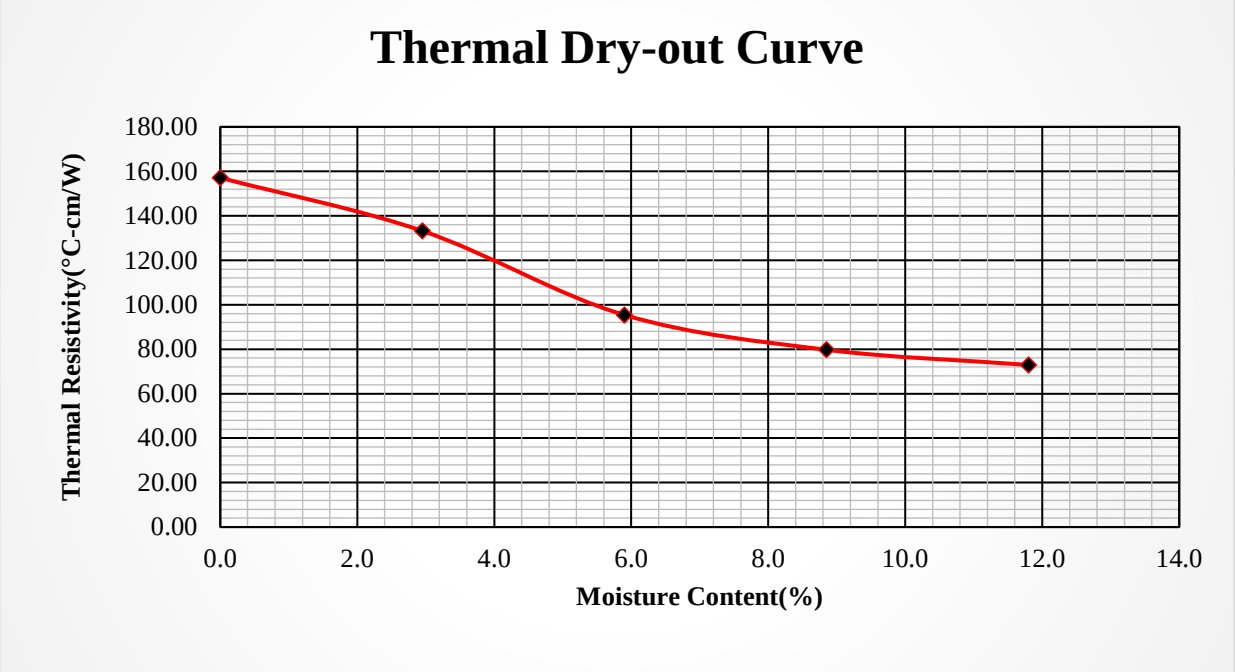
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-132, TRT, 2'-5'

Description: Brown silty, clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 110.3 PCF |
| In-Situ Moisture: | 5.4 % | Optimum Moisture: | 11.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-137, TRT, 2'-5'
Description: Brown silty sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.6 PCF
In-Situ Moisture: 7.4 %
Optimum Moisture: 12.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4391 | 227.7 |
| 2 | ¼ OMC | 3.1 | 0.5353 | 186.8 |
| 3 | ½ OMC | 6.2 | 0.7961 | 125.6 |
| 4 | ¾ OMC | 9.3 | 1.0003 | 100.0 |
| 5 | OMC | 12.4 | 1.1084 | 90.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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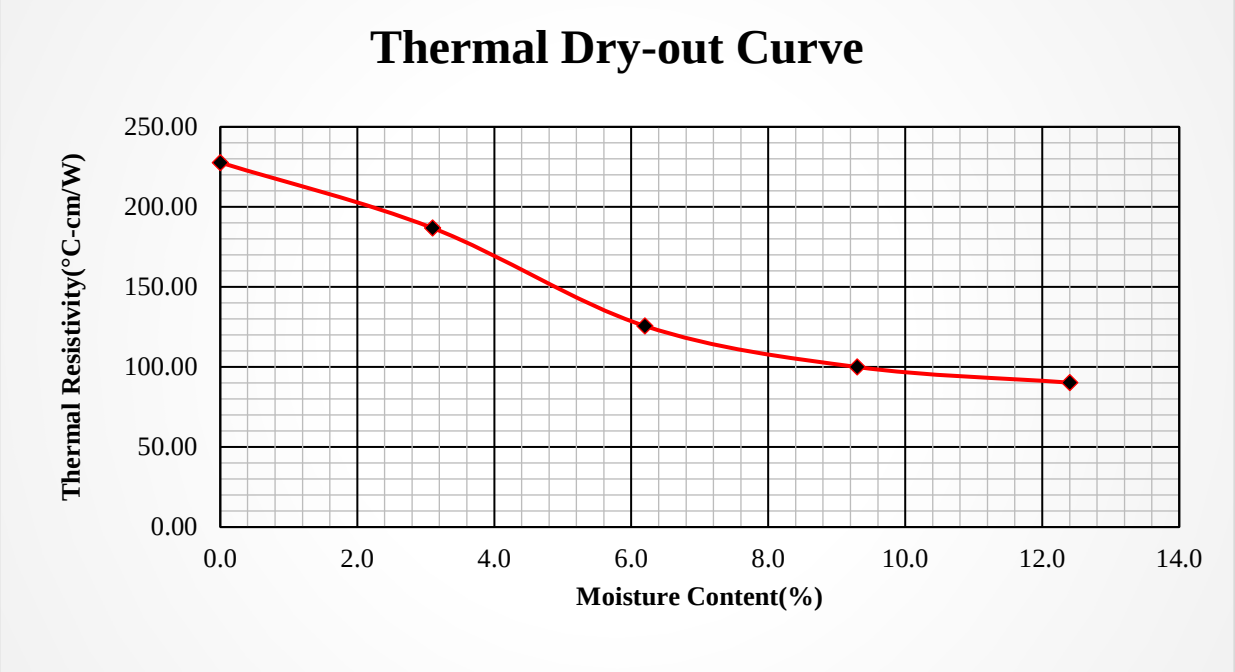
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-137, TRT, 2'-5'

Description: Brown silty sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.6 PCF |
| In-Situ Moisture: | 7.4 % | Optimum Moisture: | 12.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-142, TRT, 1'-2'
Description: Brown sandy silt with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 104.9 PCF
In-Situ Moisture: 6.7 %
Optimum Moisture: 13.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5529 | 180.9 |
| 2 | ¼ OMC | 3.3 | 0.6711 | 149.0 |
| 3 | ½ OMC | 6.6 | 0.9630 | 103.8 |
| 4 | ¾ OMC | 9.9 | 1.1416 | 87.6 |
| 5 | OMC | 13.2 | 1.2533 | 79.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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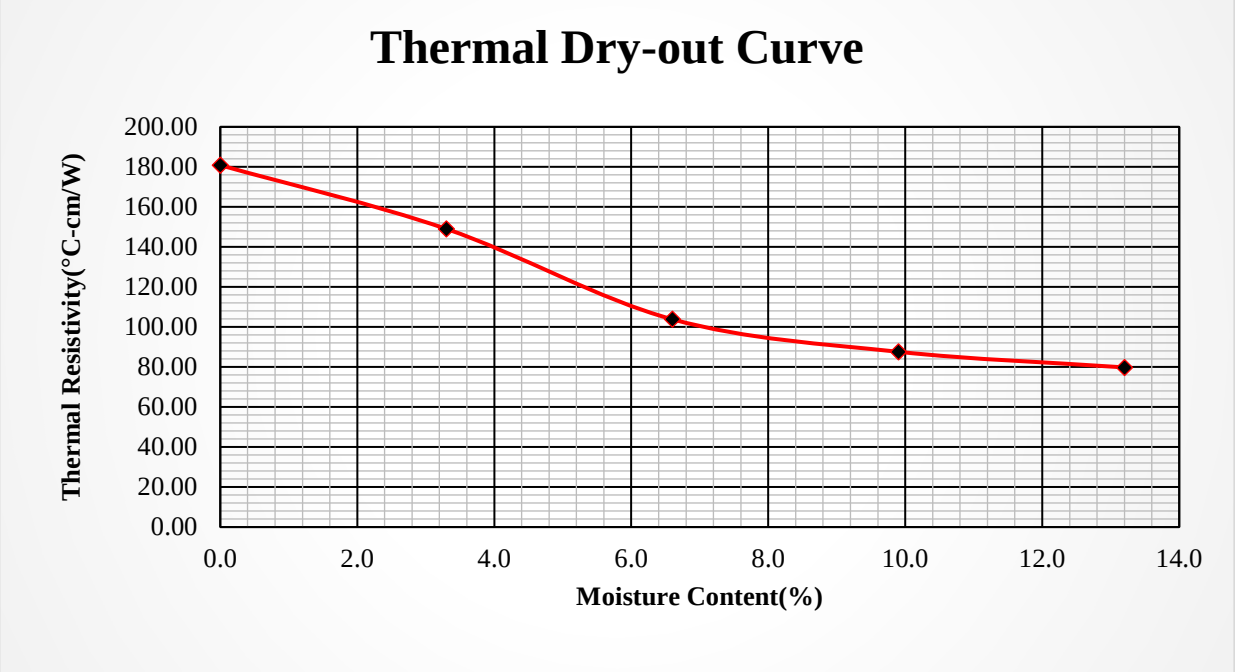
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-142, TRT, 1'-2'

Description: Brown sandy silt with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 104.9 PCF |
| In-Situ Moisture: | 6.7 % | Optimum Moisture: | 13.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-144, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 93.2 PCF
In-Situ Moisture: 15.8 %
Optimum Moisture: 19.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5285 | 189.2 |
| 2 | ¼ OMC | 4.8 | 0.6806 | 146.9 |
| 3 | ½ OMC | 9.6 | 0.9343 | 107.0 |
| 4 | ¾ OMC | 14.3 | 1.0669 | 93.7 |
| 5 | OMC | 19.1 | 1.1820 | 84.6 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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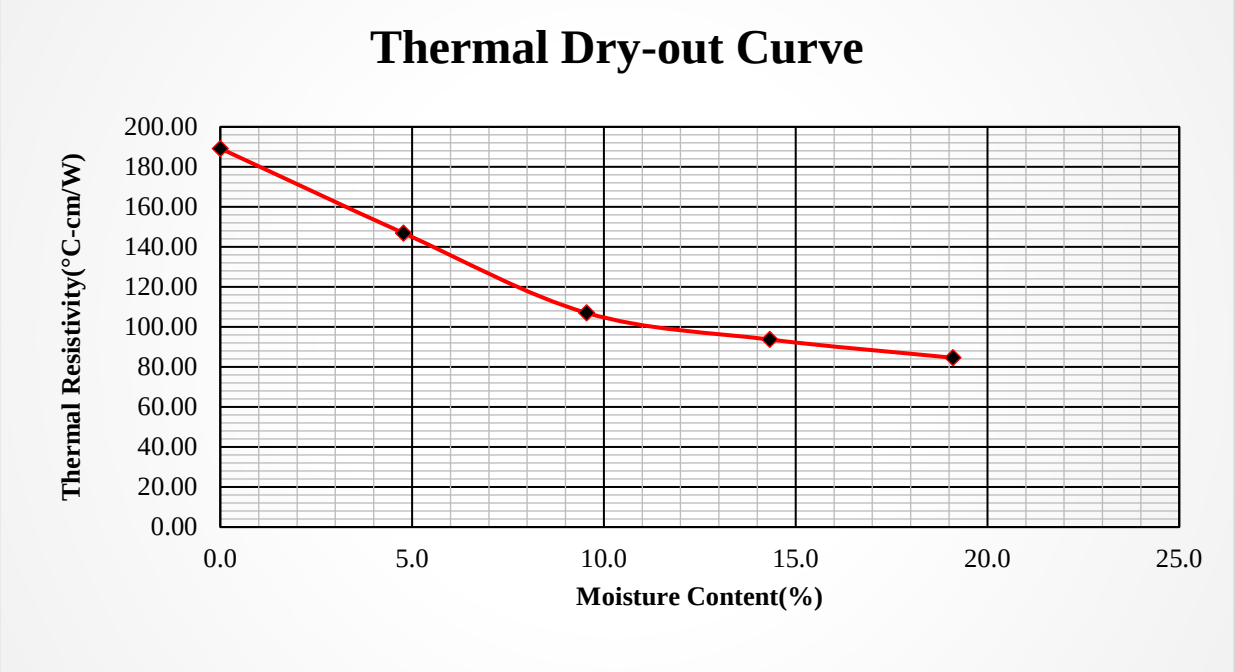
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-144, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 93.2 PCF |
| In-Situ Moisture: | 15.8 % | Optimum Moisture: | 19.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-597
Project Name: Speedway, Sherman County, OR
Date: 10/23/2025

Sample ID: PV-145, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 98.6 PCF
In-Situ Moisture: 12.1 %
Optimum Moisture: 17.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4471 | 223.7 |
| 2 | ¼ OMC | 4.4 | 0.6046 | 165.4 |
| 3 | ½ OMC | 8.8 | 0.8923 | 112.1 |
| 4 | ¾ OMC | 13.1 | 1.0354 | 96.6 |
| 5 | OMC | 17.5 | 1.1545 | 86.6 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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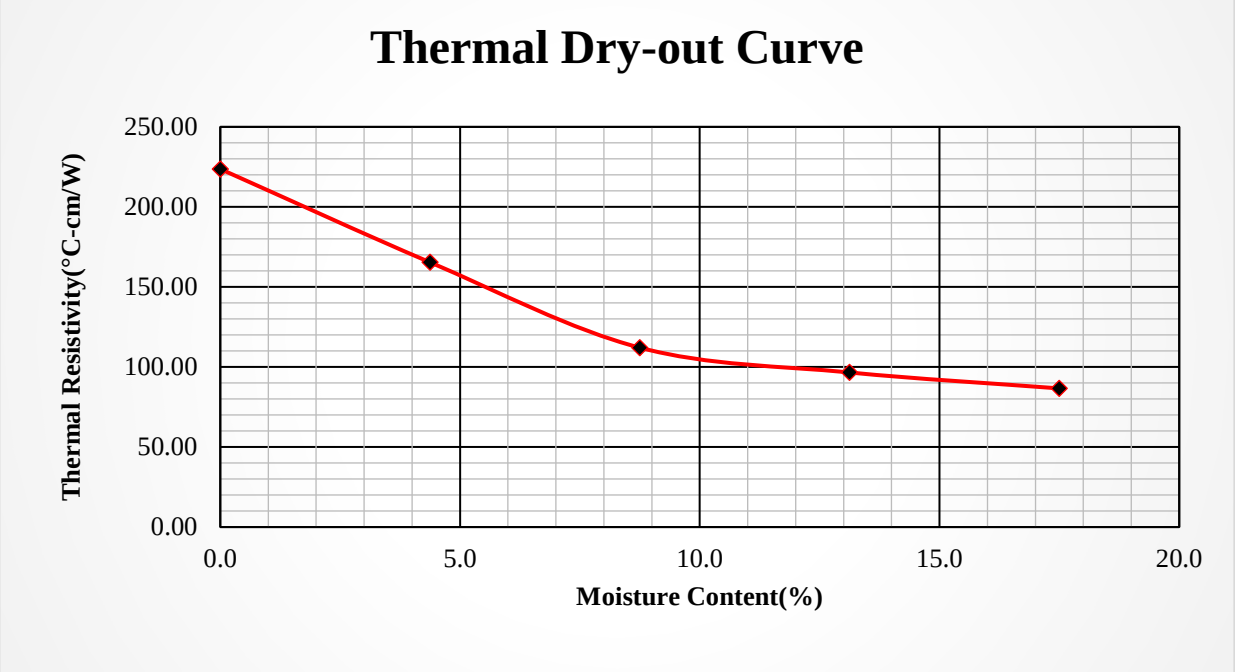
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-597 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/23/2025 |

Sample ID: PV-145, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 98.6 PCF |
| In-Situ Moisture: | 12.1 % | Optimum Moisture: | 17.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-151, TRT, 1'-2'
Description: Brown gravelly lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 95.4 PCF
In-Situ Moisture: 8.9 %
Optimum Moisture: 17.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5685 | 175.9 |
| 2 | ¼ OMC | 4.5 | 0.6870 | 145.6 |
| 3 | ½ OMC | 8.9 | 0.8351 | 119.7 |
| 4 | ¾ OMC | 13.4 | 0.9515 | 105.1 |
| 5 | OMC | 17.8 | 1.0622 | 94.1 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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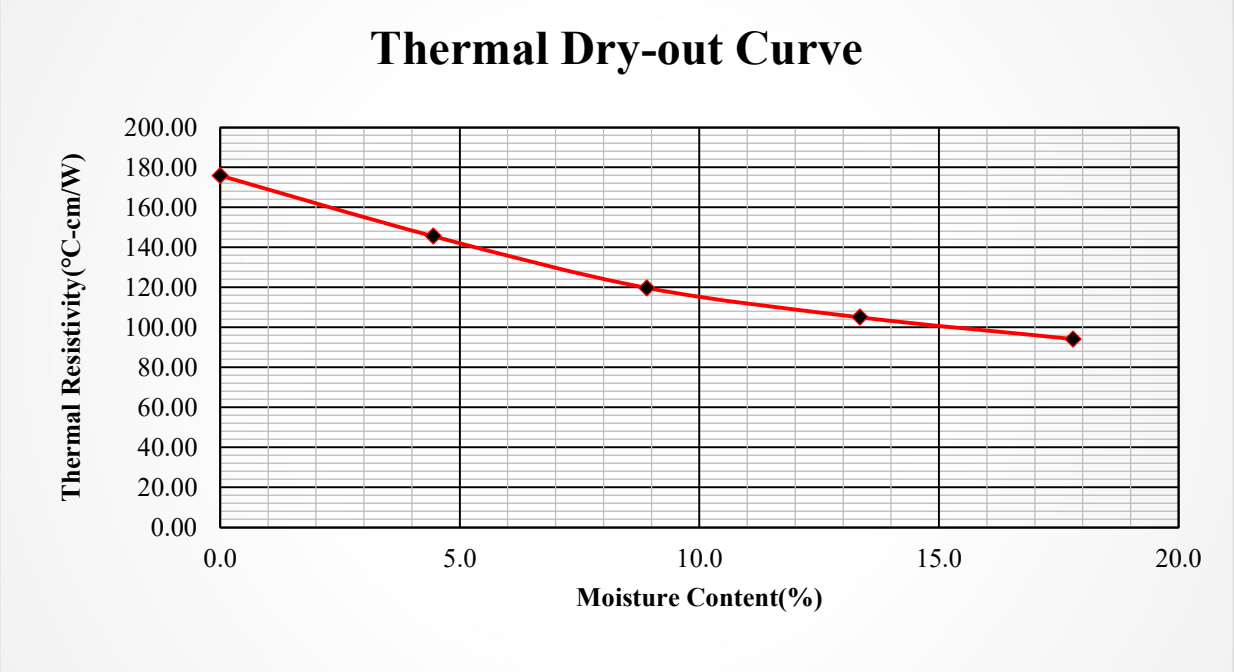
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-151, TRT, 1'-2'

Description: Brown gravelly lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 95.4 PCF |
| In-Situ Moisture: | 8.9 % | Optimum Moisture: | 17.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-154, TRT, 2'-5'
Description: Brown sandy lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 92.6 PCF
In-Situ Moisture: 8.1 %
Optimum Moisture: 17.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4522 | 221.1 |
| 2 | ¼ OMC | 4.5 | 0.5856 | 170.8 |
| 3 | ½ OMC | 8.9 | 0.8399 | 119.1 |
| 4 | ¾ OMC | 13.4 | 0.9727 | 102.8 |
| 5 | OMC | 17.8 | 1.0802 | 92.6 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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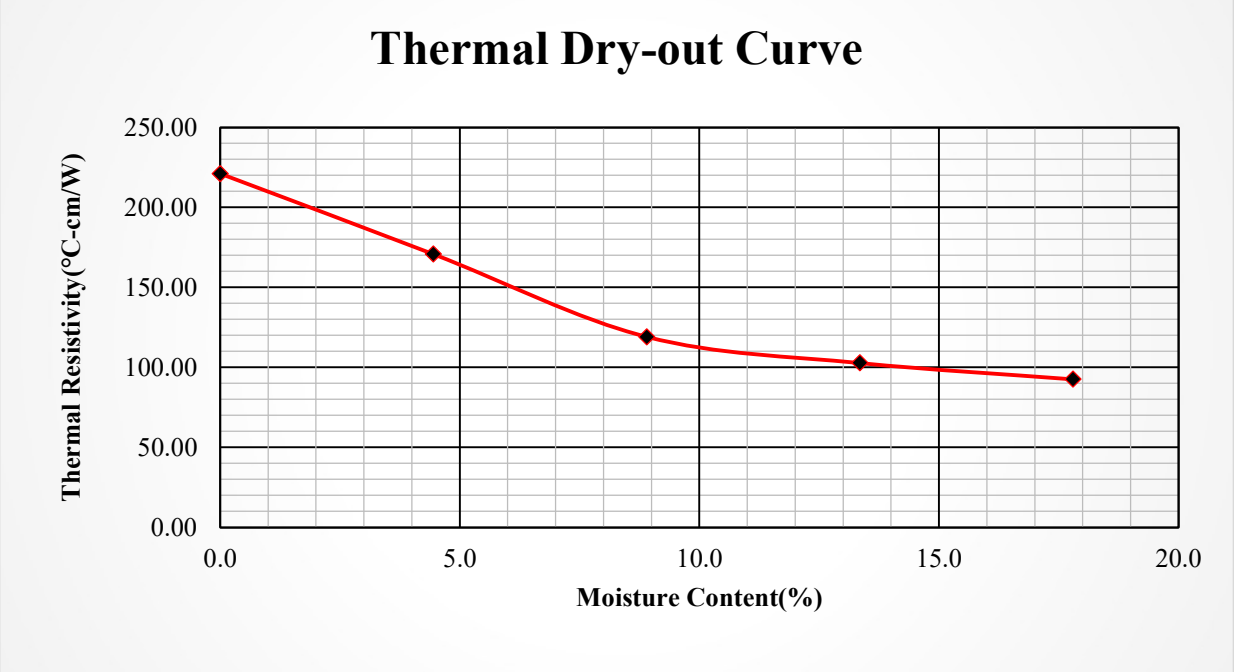
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-154, TRT, 2'-5'

Description: Brown sandy lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 92.6 PCF |
| In-Situ Moisture: | 8.1 % | Optimum Moisture: | 17.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-653
Project Name: Speedway, Sherman County, OR
Date: 11/18/2025

Sample ID: PV-158, TRT, 2'-5'
Description: Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 102.1 PCF
In-Situ Moisture: 5.8 %
Optimum Moisture: 13.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4551 | 219.7 |
| 2 | ¼ OMC | 3.4 | 0.6000 | 166.7 |
| 3 | ½ OMC | 6.8 | 0.9454 | 105.8 |
| 4 | ¾ OMC | 10.1 | 1.0900 | 91.7 |
| 5 | OMC | 13.5 | 1.1920 | 83.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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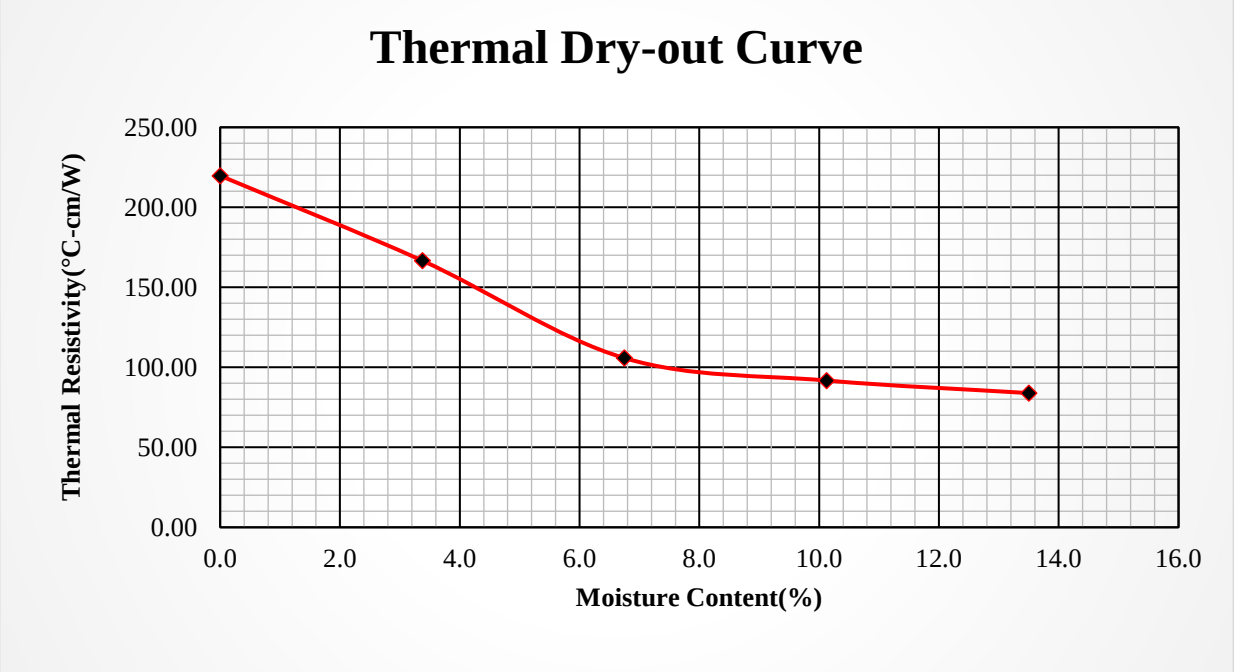
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-653 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/18/2025 |

Sample ID: PV-158, TRT, 2'-5'

Description: Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 102.1 PCF |
| In-Situ Moisture: | 5.8 % | Optimum Moisture: | 13.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-653
Project Name: Speedway, Sherman County, OR
Date: 11/18/2025

Sample ID: PV-160, TRT, 2'-5'
Description: Brown clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 88.2 PCF
In-Situ Moisture: 10.3 %
Optimum Moisture: 18.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4782 | 209.1 |
| 2 | ¼ OMC | 4.6 | 0.6368 | 157.0 |
| 3 | ½ OMC | 9.1 | 0.8938 | 111.9 |
| 4 | ¾ OMC | 13.7 | 1.0071 | 99.3 |
| 5 | OMC | 18.2 | 1.1053 | 90.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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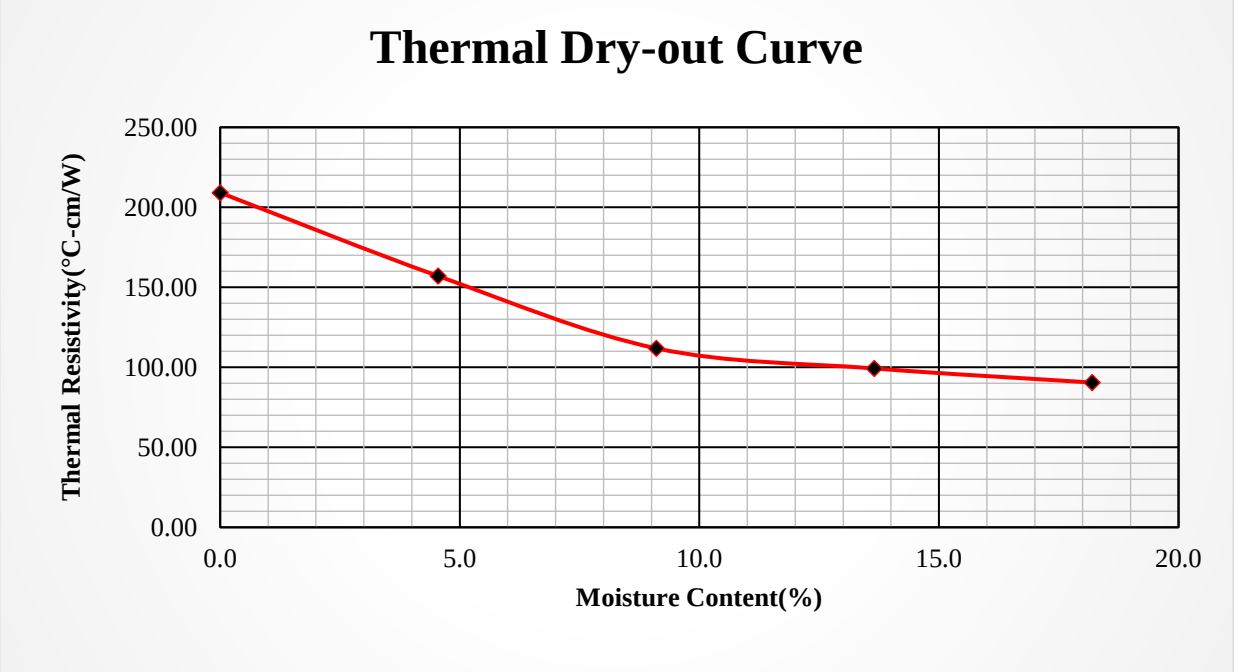
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-653 |
| Project Name: | Speedway, Sherman County, OR | Date: | 11/18/2025 |

Sample ID: PV-160, TRT, 2'-5'

Description: Brown clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 88.2 PCF |
| In-Situ Moisture: | 10.3 % | Optimum Moisture: | 18.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-164, TRT, 2'-5'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 89.7 PCF
In-Situ Moisture: 10.1 %
Optimum Moisture: 19.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5216 | 191.7 |
| 2 | ¼ OMC | 4.9 | 0.6581 | 152.0 |
| 3 | ½ OMC | 9.7 | 0.8851 | 113.0 |
| 4 | ¾ OMC | 14.6 | 1.0098 | 99.0 |
| 5 | OMC | 19.4 | 1.1182 | 89.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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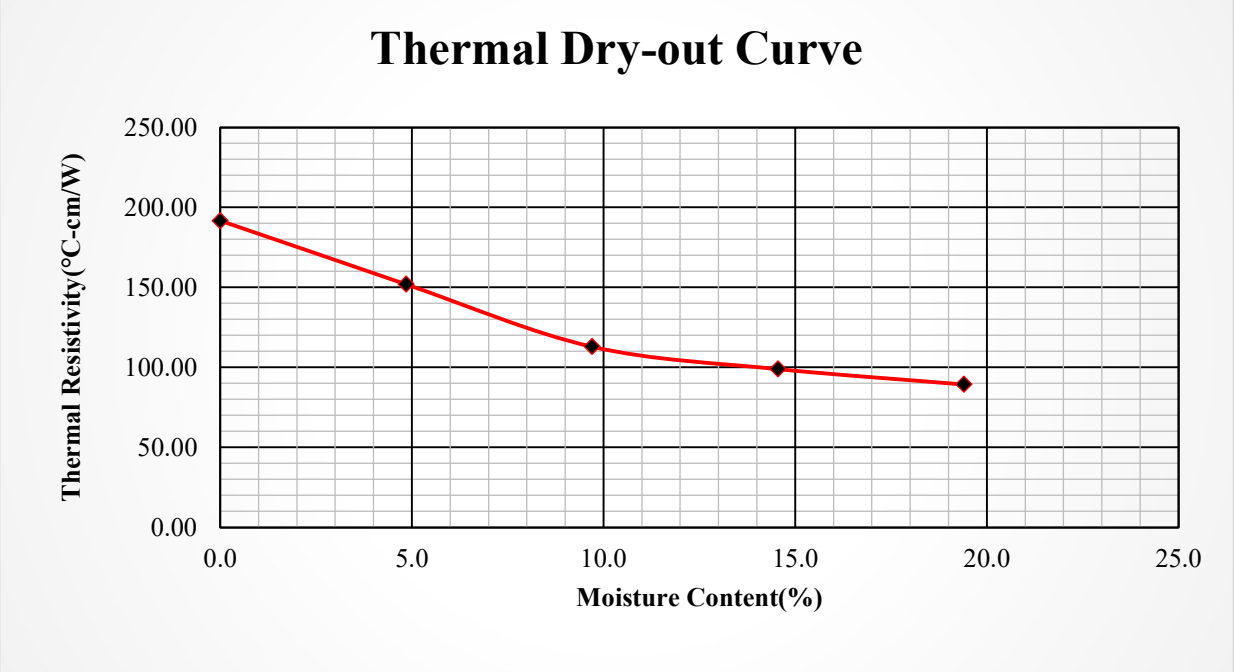
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-164, TRT, 2'-5'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 89.7 PCF |
| In-Situ Moisture: | 10.1 % | Optimum Moisture: | 19.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-169, TRT, 2'-5'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 91.4 PCF
In-Situ Moisture: 6.8 %
Optimum Moisture: 20.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5104 | 195.9 |
| 2 | ¼ OMC | 5.1 | 0.6635 | 150.7 |
| 3 | ½ OMC | 10.3 | 0.8845 | 113.1 |
| 4 | ¾ OMC | 15.4 | 1.0129 | 98.7 |
| 5 | OMC | 20.5 | 1.1306 | 88.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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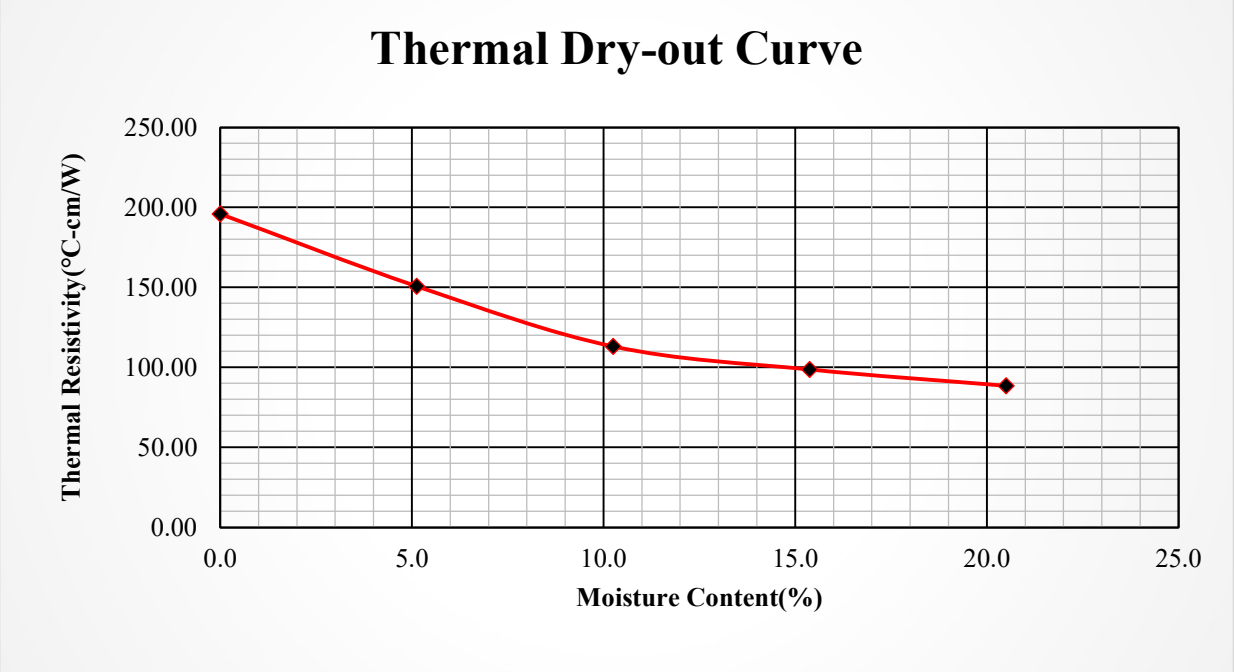
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-169, TRT, 2'-5'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 91.4 PCF |
| In-Situ Moisture: | 6.8 % | Optimum Moisture: | 20.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-172, TRT, 2'-5'
Description: Pale Brown silty clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 94.5 PCF
In-Situ Moisture: 8.3 %
Optimum Moisture: 17.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4556 | 219.5 |
| 2 | ¼ OMC | 4.5 | 0.5925 | 168.8 |
| 3 | ½ OMC | 8.9 | 0.8336 | 120.0 |
| 4 | ¾ OMC | 13.4 | 0.9653 | 103.6 |
| 5 | OMC | 17.8 | 1.0762 | 92.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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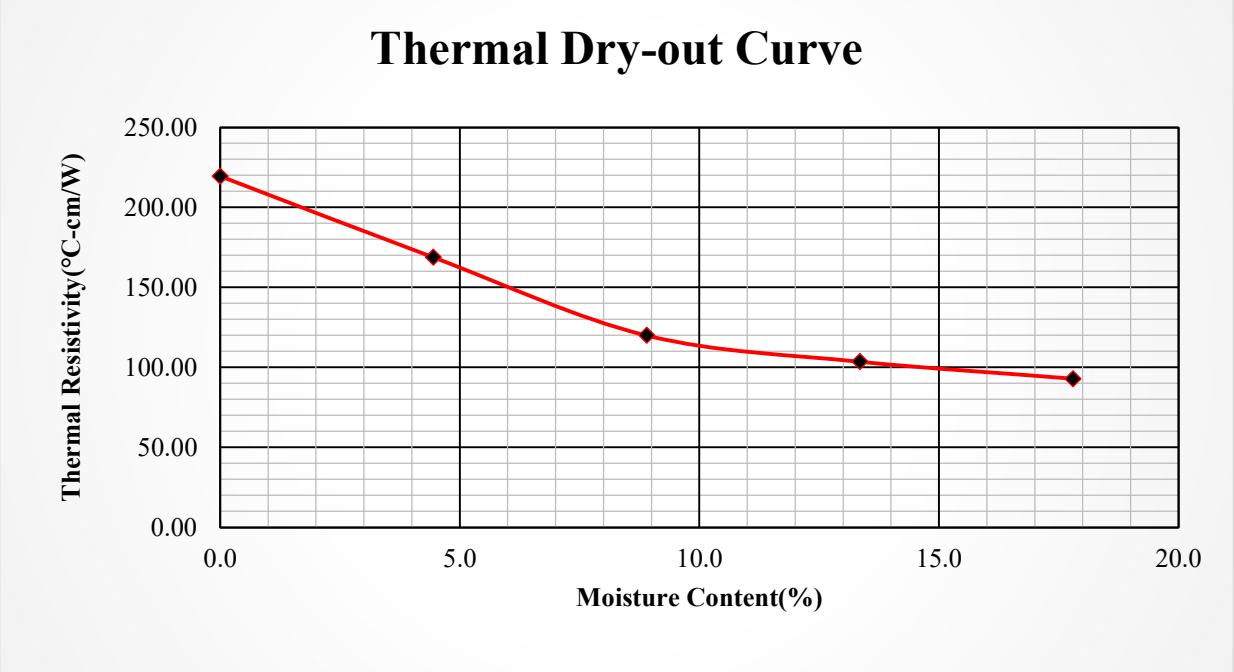
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-172, TRT, 2'-5'

Description: Pale Brown silty clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 94.5 PCF |
| In-Situ Moisture: | 8.3 % | Optimum Moisture: | 17.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-178, TRT, 2'-5'
Description: Pale Brown silty, clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 96.1 PCF
In-Situ Moisture: 7.0 %
Optimum Moisture: 16.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5517 | 181.3 |
| 2 | ¼ OMC | 4.2 | 0.6778 | 147.5 |
| 3 | ½ OMC | 8.4 | 0.9020 | 110.9 |
| 4 | ¾ OMC | 12.5 | 1.0327 | 96.8 |
| 5 | OMC | 16.7 | 1.1409 | 87.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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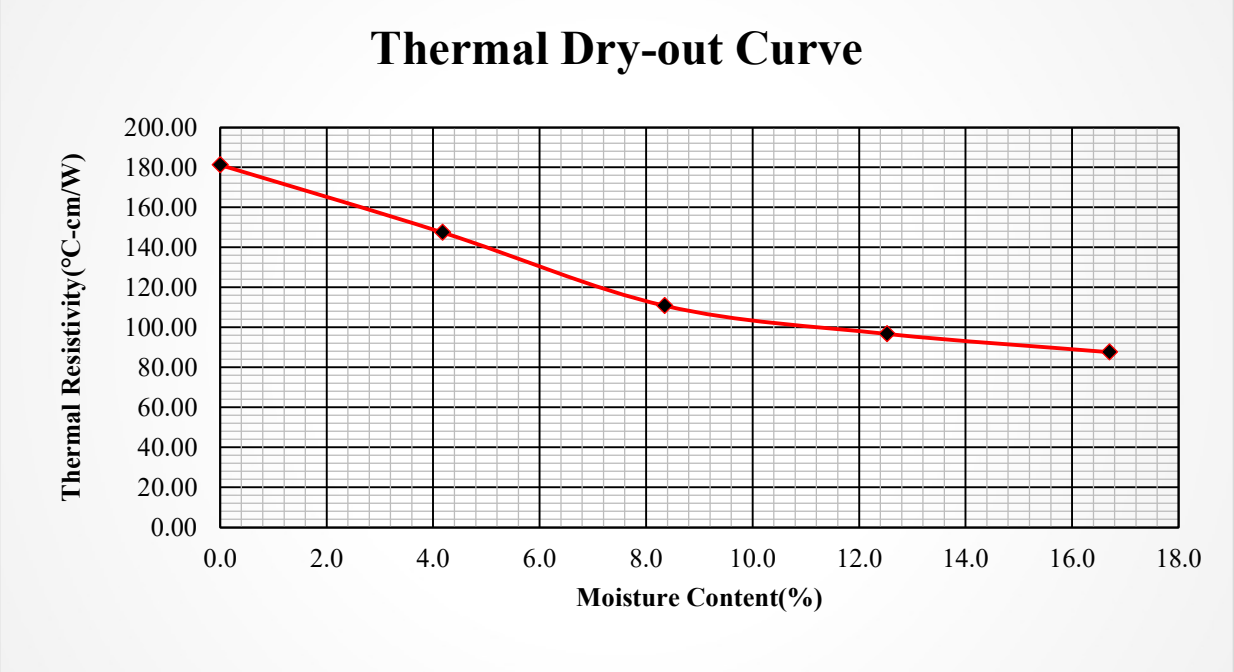
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-178, TRT, 2'-5'

Description: Pale Brown silty, clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 96.1 PCF |
| In-Situ Moisture: | 7.0 % | Optimum Moisture: | 16.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-179, TRT, 2'-5'
Description: Brown sandy lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 96.4 PCF
In-Situ Moisture: 6.8 %
Optimum Moisture: 19.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4459 | 224.3 |
| 2 | ¼ OMC | 4.8 | 0.6125 | 163.3 |
| 3 | ½ OMC | 9.6 | 0.8707 | 114.9 |
| 4 | ¾ OMC | 14.4 | 1.0084 | 99.2 |
| 5 | OMC | 19.2 | 1.1314 | 88.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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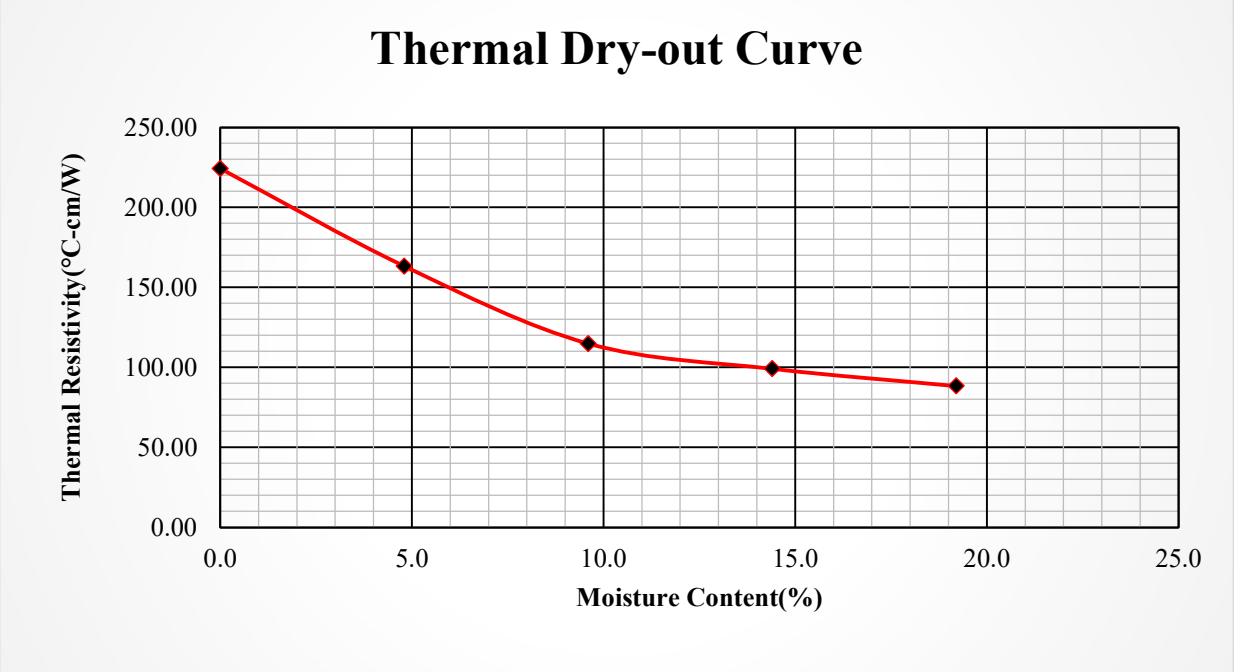
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-179, TRT, 2'-5'

Description: Brown sandy lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 96.4 PCF |
| In-Situ Moisture: | 6.8 % | Optimum Moisture: | 19.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-181, TRT, 2'-5'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 92.4 PCF
In-Situ Moisture: 6.5 %
Optimum Moisture: 18.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4838 | 206.7 |
| 2 | ¼ OMC | 4.7 | 0.6237 | 160.3 |
| 3 | ½ OMC | 9.4 | 0.8606 | 116.2 |
| 4 | ¾ OMC | 14.0 | 0.9894 | 101.1 |
| 5 | OMC | 18.7 | 1.1005 | 90.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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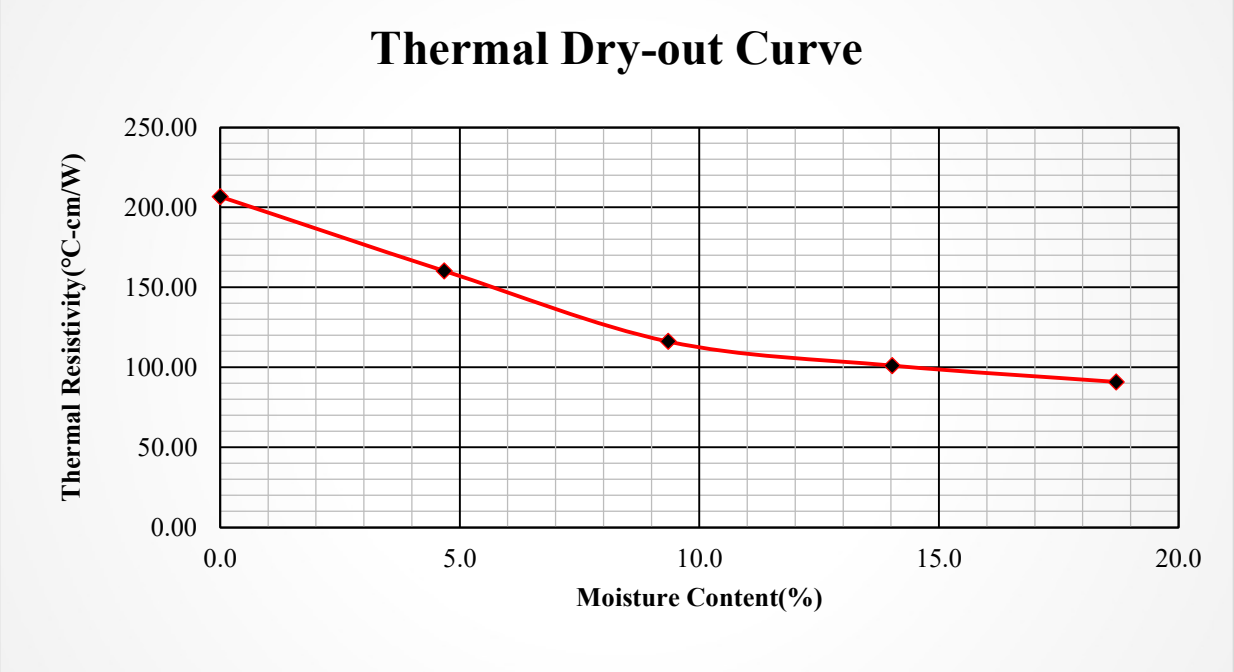
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-181, TRT, 2'-5'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 92.4 PCF |
| In-Situ Moisture: | 6.5 % | Optimum Moisture: | 18.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
Project Name: Speedway, Sherman County, OR
LAB IRN: 25-N-598
Date: 10/28/2025

Sample ID: PV-183, TRT, 2'-5'
Description: Brown lean clay

Specimen type: Reconstituted (90% D698)
In-Situ Moisture: 6.9 %
Recompaction Dry Density: 92.3 PCF
Optimum Moisture: 18.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5061 | 197.6 |
| 2 | ¼ OMC | 4.6 | 0.6454 | 154.9 |
| 3 | ½ OMC | 9.2 | 0.9018 | 110.9 |
| 4 | ¾ OMC | 13.7 | 1.0340 | 96.7 |
| 5 | OMC | 18.3 | 1.1433 | 87.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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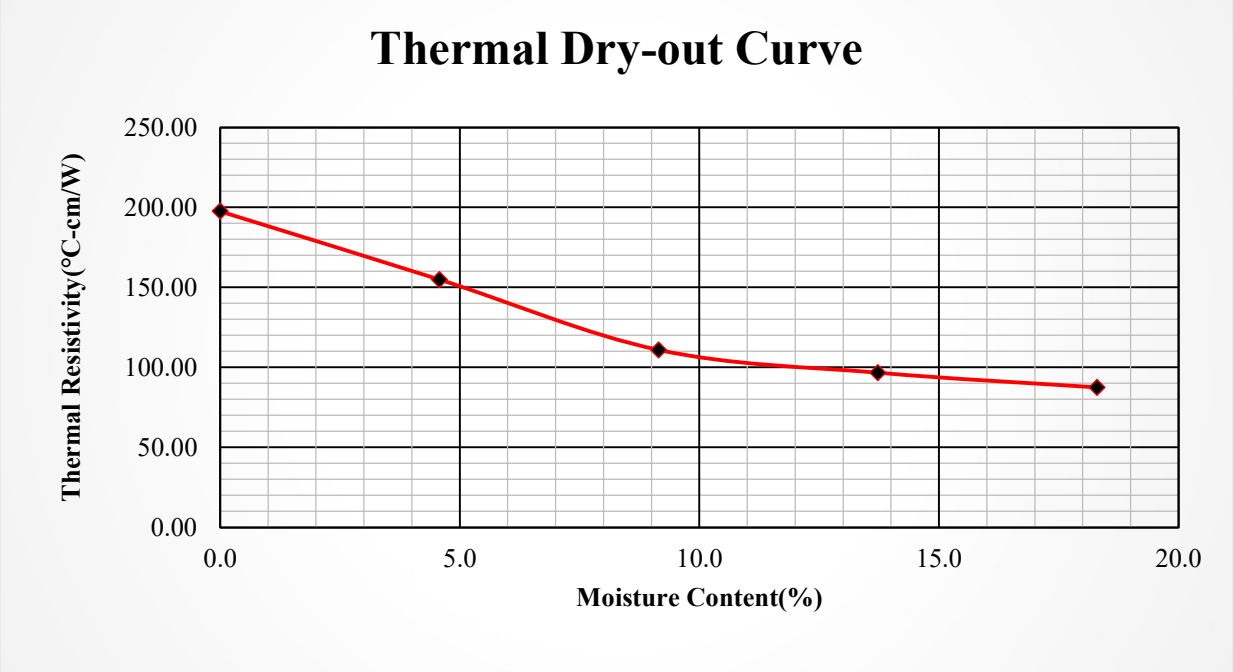
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-183, TRT, 2'-5'

Description: Brown lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 92.3 PCF |
| In-Situ Moisture: | 6.9 % | Optimum Moisture: | 18.3 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-188, TRT, 2'-5'
Description: Pale Brown sandy silty clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 93.2 PCF
In-Situ Moisture: 7.4 %
Optimum Moisture: 18.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4851 | 206.1 |
| 2 | ¼ OMC | 4.7 | 0.6381 | 156.7 |
| 3 | ½ OMC | 9.4 | 0.9172 | 109.0 |
| 4 | ¾ OMC | 14.0 | 1.0534 | 94.9 |
| 5 | OMC | 18.7 | 1.1669 | 85.7 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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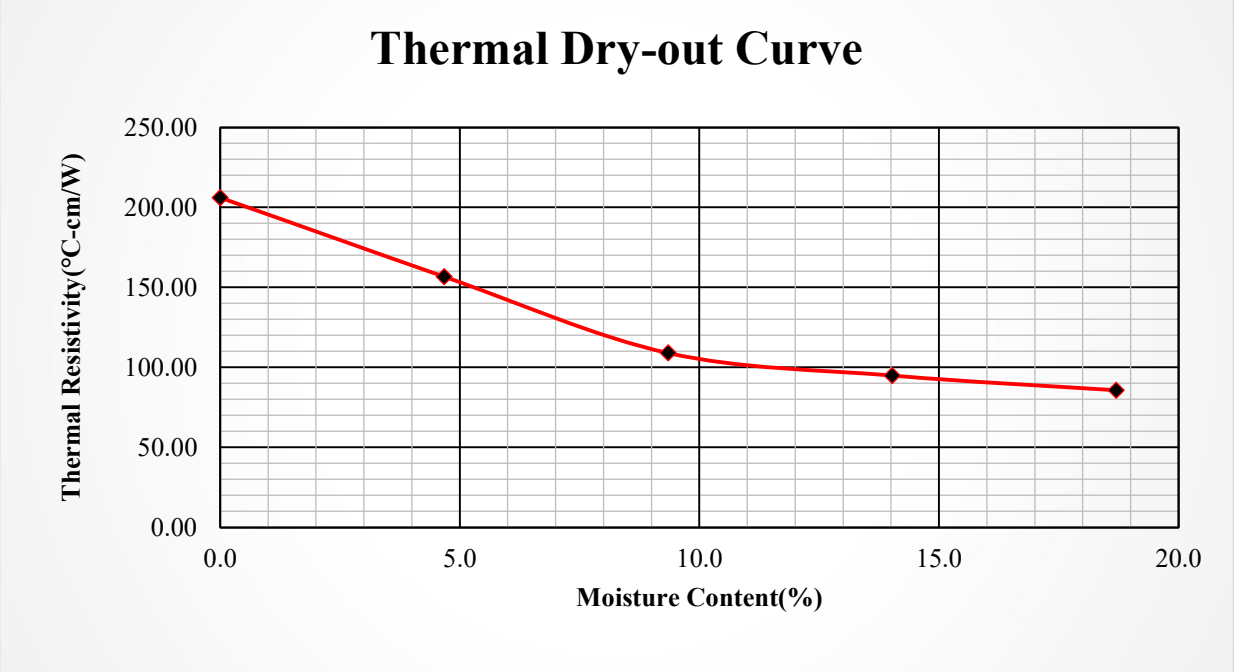
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-188, TRT, 2'-5'

Description: Pale Brown sandy silty clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 93.2 PCF |
| In-Situ Moisture: | 7.4 % | Optimum Moisture: | 18.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-189, TRT, 2'-5'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 92.3 PCF
In-Situ Moisture: 6.8 %
Optimum Moisture: 18.1 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5654 | 176.9 |
| 2 | ¼ OMC | 4.5 | 0.6902 | 144.9 |
| 3 | ½ OMC | 9.1 | 0.8898 | 112.4 |
| 4 | ¾ OMC | 13.6 | 1.0119 | 98.8 |
| 5 | OMC | 18.1 | 1.1188 | 89.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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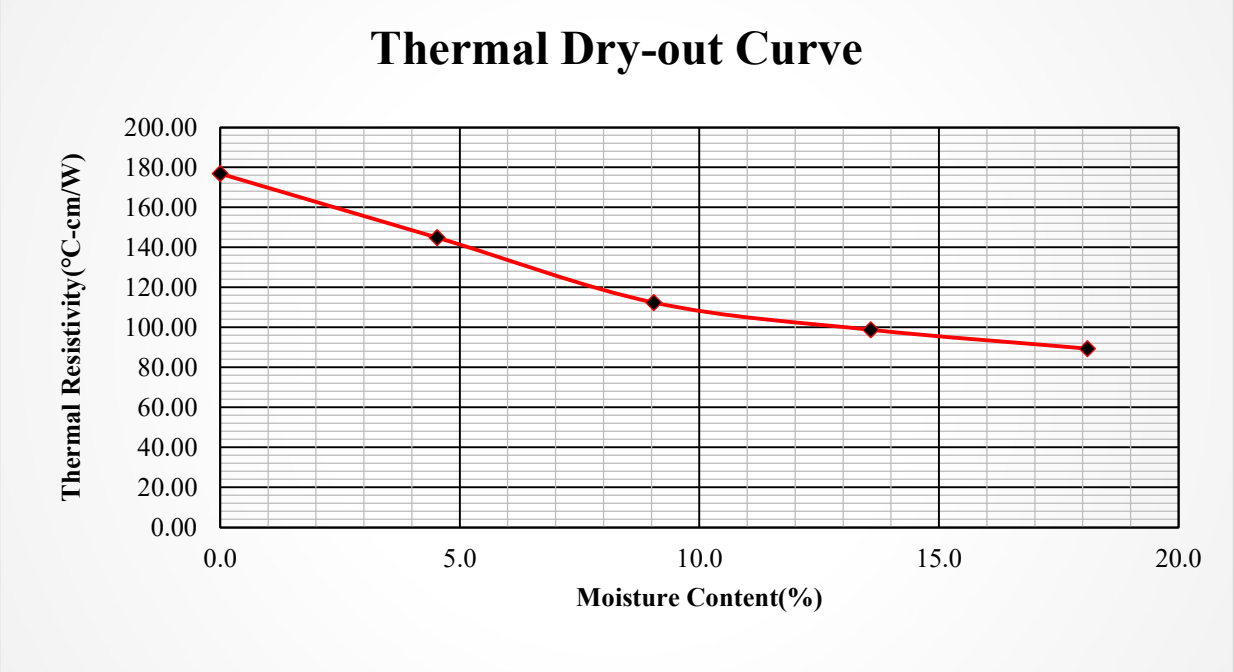
**Thermal Dryout Curve (ASTM D5334)**

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-189, TRT, 2'-5'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 92.3 PCF |
| In-Situ Moisture: | 6.8 % | Optimum Moisture: | 18.1 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-193, TRT, 2'-5'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 90.9 PCF
In-Situ Moisture: 17.7 %
Optimum Moisture: 20.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5596 | 178.7 |
| 2 | ¼ OMC | 5.2 | 0.6913 | 144.7 |
| 3 | ½ OMC | 10.4 | 0.8512 | 117.5 |
| 4 | ¾ OMC | 15.5 | 0.9722 | 102.9 |
| 5 | OMC | 20.7 | 1.0888 | 91.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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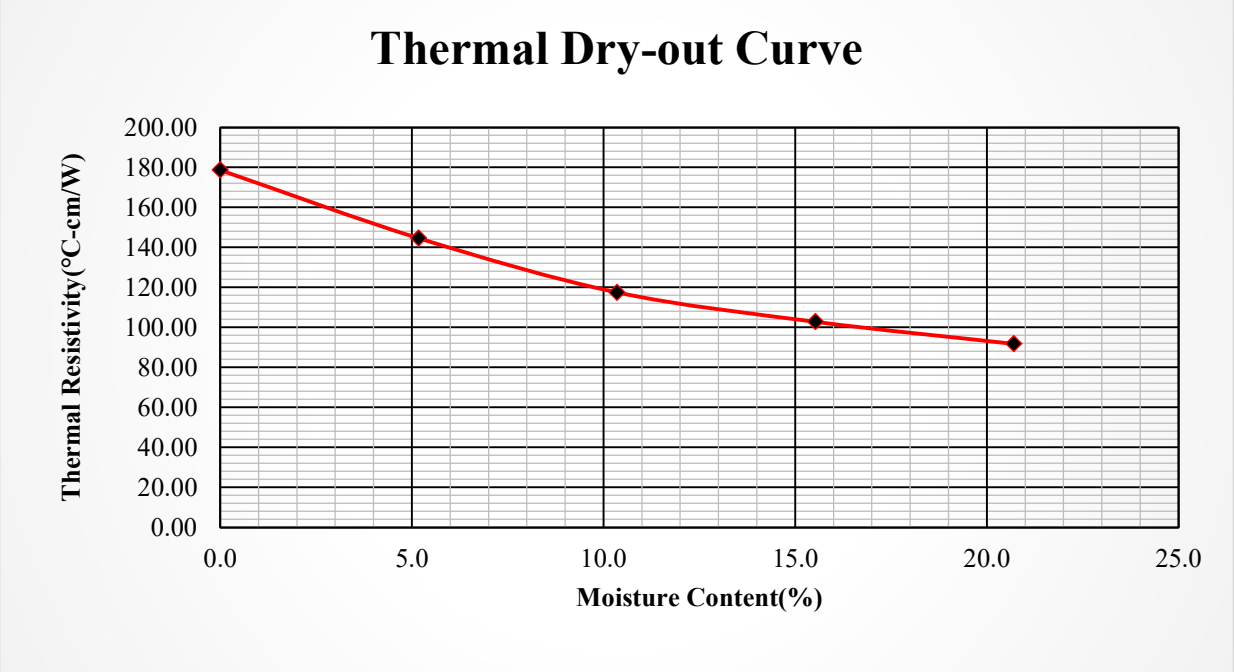
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-193, TRT, 2'-5'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 90.9 PCF |
| In-Situ Moisture: | 17.7 % | Optimum Moisture: | 20.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-195, TRT, 2'-5'
Description: Brown sandy lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 94.7 PCF
In-Situ Moisture: 7.8 %
Optimum Moisture: 16.5 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4568 | 218.9 |
| 2 | ¼ OMC | 4.1 | 0.5897 | 169.6 |
| 3 | ½ OMC | 8.3 | 0.8926 | 112.0 |
| 4 | ¾ OMC | 12.4 | 1.0424 | 95.9 |
| 5 | OMC | 16.5 | 1.1498 | 87.0 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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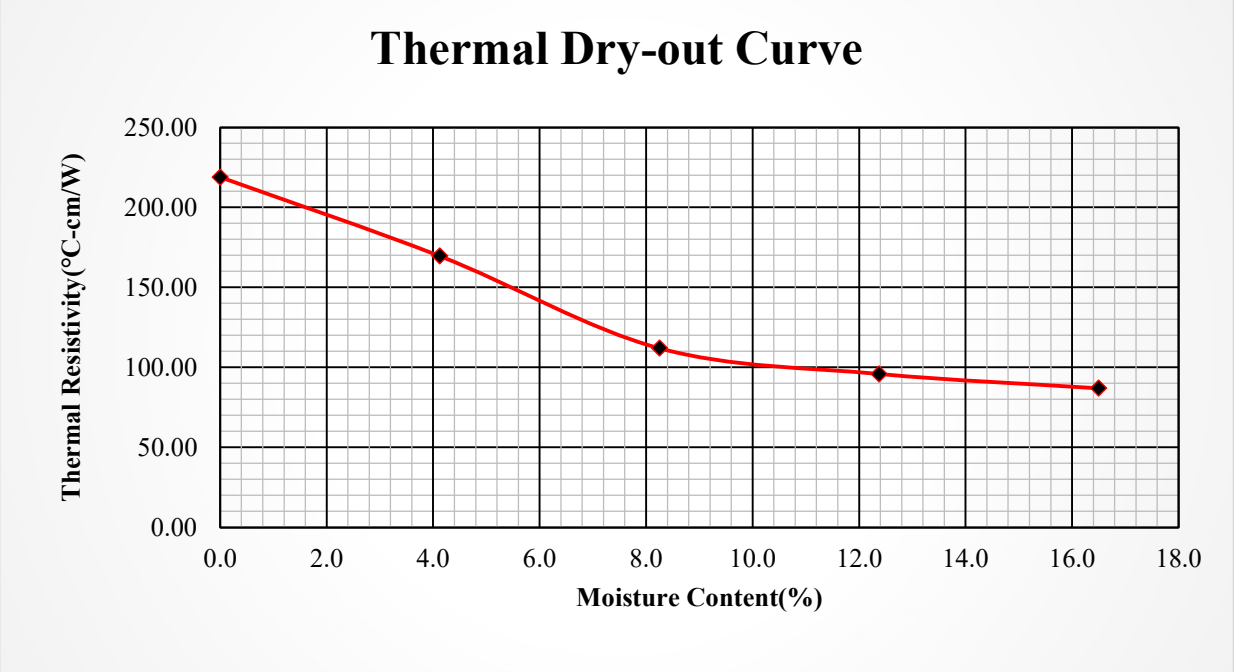
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-195, TRT, 2'-5'

Description: Brown sandy lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 94.7 PCF |
| In-Situ Moisture: | 7.8 % | Optimum Moisture: | 16.5 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-198, TRT, 2'-5'
Description: Brown sandy lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 94.6 PCF
In-Situ Moisture: 18.6 %
Optimum Moisture: 19.4 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4696 | 212.9 |
| 2 | ¼ OMC | 4.9 | 0.6352 | 157.4 |
| 3 | ½ OMC | 9.7 | 0.9027 | 110.8 |
| 4 | ¾ OMC | 14.6 | 1.0393 | 96.2 |
| 5 | OMC | 19.4 | 1.1593 | 86.3 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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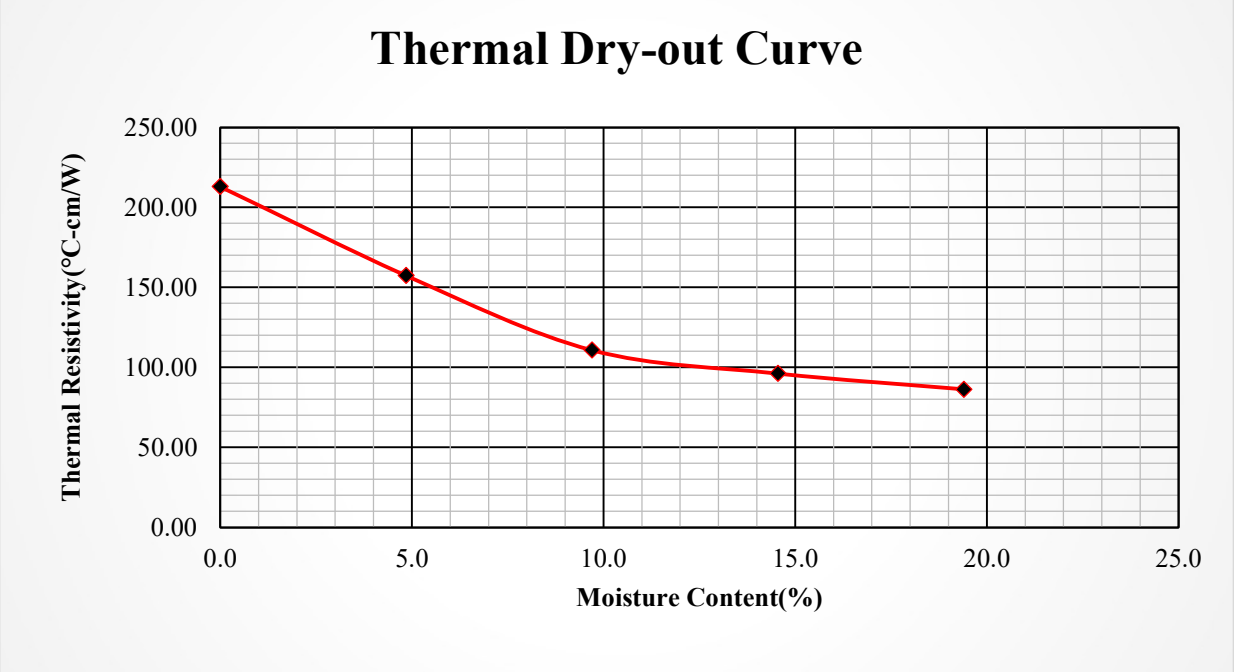
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-198, TRT, 2'-5'

Description: Brown sandy lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 94.6 PCF |
| In-Situ Moisture: | 18.6 % | Optimum Moisture: | 19.4 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-204, TRT, 2'-5'
Description: Brown clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 101.9 PCF
In-Situ Moisture: 14.1 %
Optimum Moisture: 16.6 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4880 | 204.9 |
| 2 | ¼ OMC | 4.2 | 0.6379 | 156.8 |
| 3 | ½ OMC | 8.3 | 0.9026 | 110.8 |
| 4 | ¾ OMC | 12.5 | 1.0452 | 95.7 |
| 5 | OMC | 16.6 | 1.1655 | 85.8 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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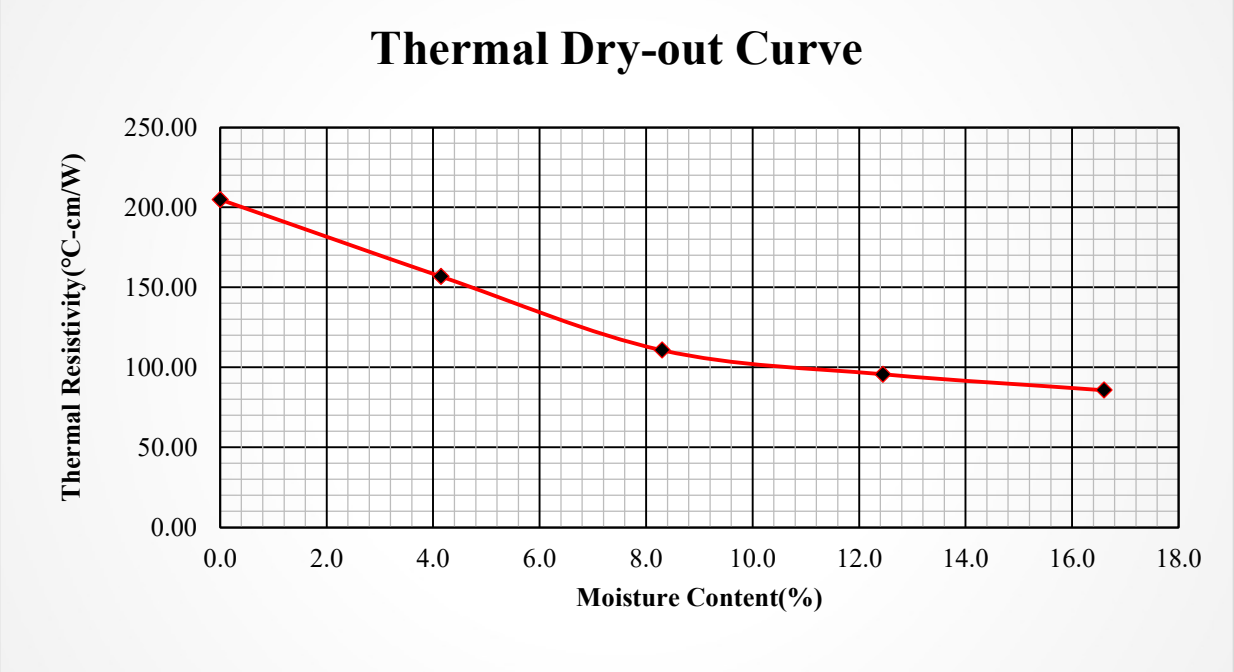
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-204, TRT, 2'-5'

Description: Brown clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 101.9 PCF |
| In-Situ Moisture: | 14.1 % | Optimum Moisture: | 16.6 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-207, TRT, 2'-5'
Description: Dark Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 92.8 PCF
In-Situ Moisture: 16.8 %
Optimum Moisture: 19.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4245 | 235.6 |
| 2 | ¼ OMC | 5.0 | 0.5853 | 170.9 |
| 3 | ½ OMC | 9.9 | 0.8414 | 118.8 |
| 4 | ¾ OMC | 14.9 | 0.9746 | 102.6 |
| 5 | OMC | 19.8 | 1.0924 | 91.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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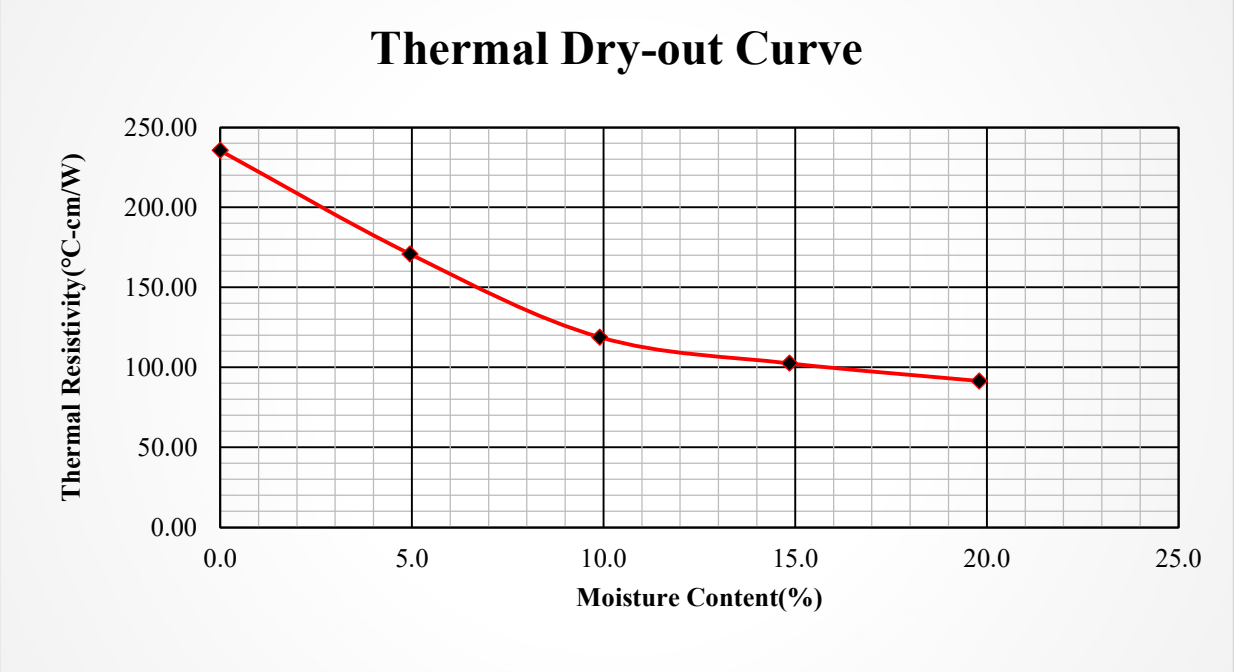
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-207, TRT, 2'-5'

Description: Dark Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 92.8 PCF |
| In-Situ Moisture: | 16.8 % | Optimum Moisture: | 19.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-210, TRT, 2'-5'
Description: Brown silty, clayey sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.1 PCF
In-Situ Moisture: 15.9 %
Optimum Moisture: 16.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5537 | 180.6 |
| 2 | ¼ OMC | 4.2 | 0.7167 | 139.5 |
| 3 | ½ OMC | 8.4 | 1.0821 | 92.4 |
| 4 | ¾ OMC | 12.5 | 1.2419 | 80.5 |
| 5 | OMC | 16.7 | 1.3597 | 73.5 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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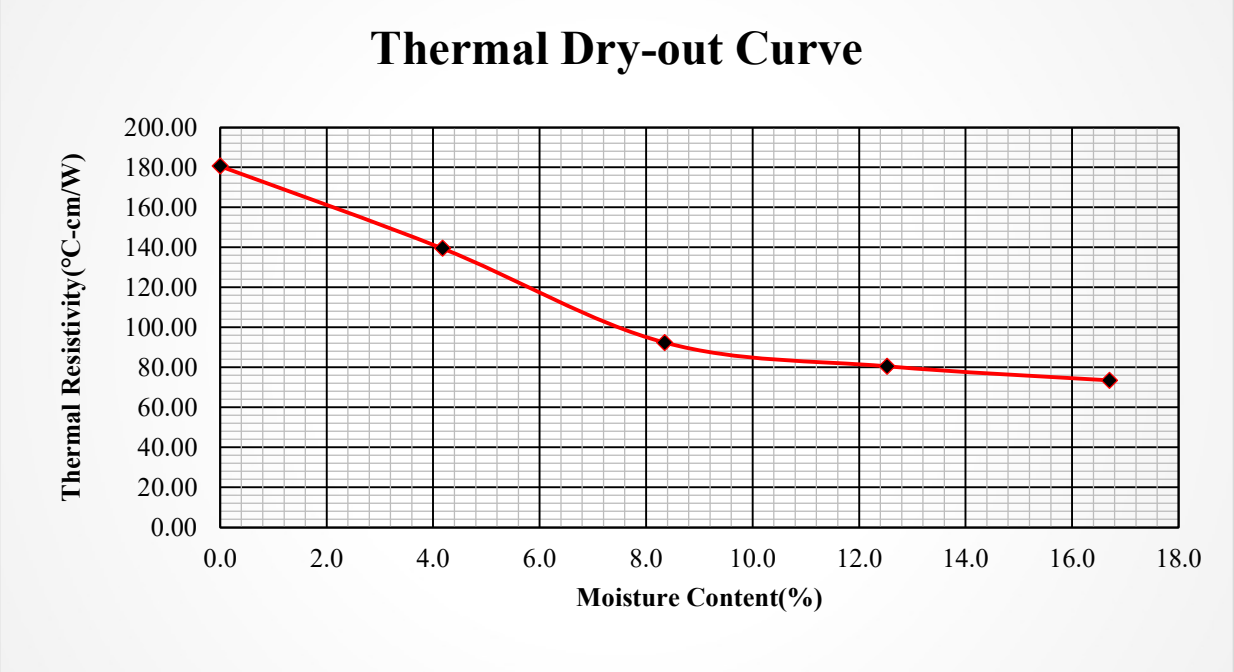
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-210, TRT, 2'-5'

Description: Brown silty, clayey sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.1 PCF |
| In-Situ Moisture: | 15.9 % | Optimum Moisture: | 16.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-598
Project Name: Speedway, Sherman County, OR
Date: 10/28/2025

Sample ID: PV-212, TRT, 1'-2'
Description: Dark Brown gravelly lean clay

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 102.2 PCF
In-Situ Moisture: 10.9 %
Optimum Moisture: 14.7 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5177 | 193.2 |
| 2 | ¼ OMC | 3.7 | 0.6495 | 154.0 |
| 3 | ½ OMC | 7.4 | 0.9537 | 104.9 |
| 4 | ¾ OMC | 11.0 | 1.1157 | 89.6 |
| 5 | OMC | 14.7 | 1.2284 | 81.4 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: DS
Checked By: ANS

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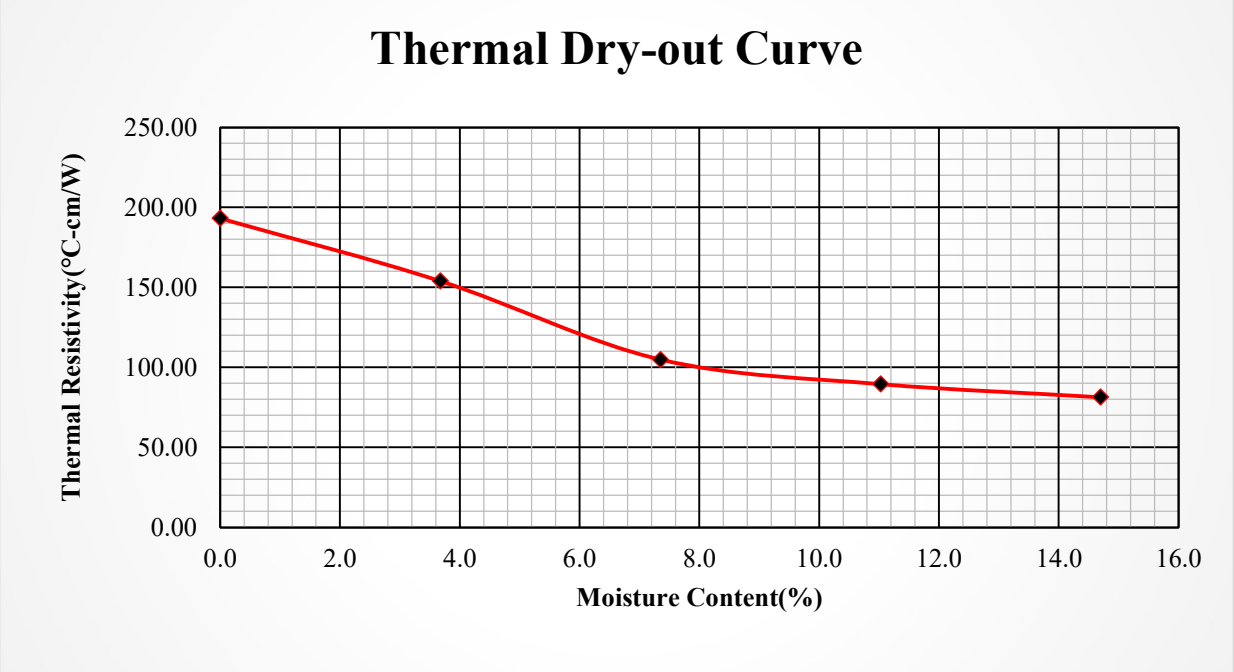
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-598 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/28/2025 |

Sample ID: PV-212, TRT, 1'-2'

Description: Dark Brown gravelly lean clay

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 102.2 PCF |
| In-Situ Moisture: | 10.9 % | Optimum Moisture: | 14.7 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: PV-214, TRT, 1'-2'
Description: Brown clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 106.3 PCF
In-Situ Moisture: 9.7 %
Optimum Moisture: 12.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5589 | 178.9 |
| 2 | ¼ OMC | 3.1 | 0.6876 | 145.4 |
| 3 | ½ OMC | 6.2 | 0.9974 | 100.3 |
| 4 | ¾ OMC | 9.2 | 1.1446 | 87.4 |
| 5 | OMC | 12.3 | 1.2464 | 80.2 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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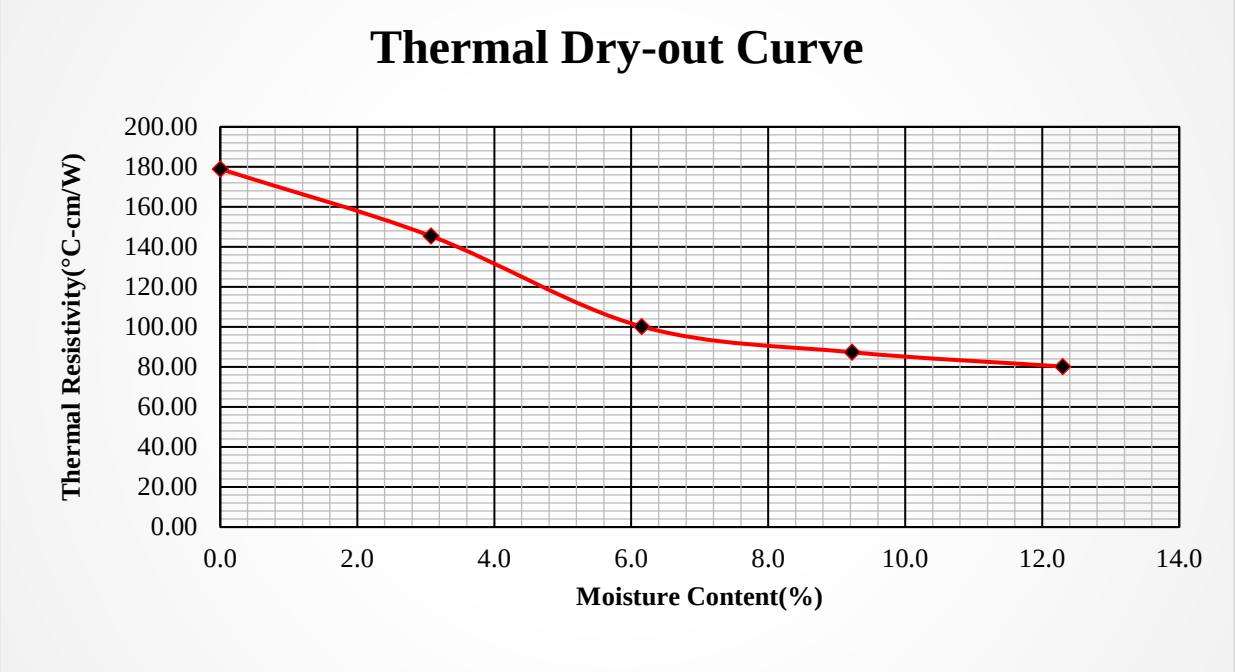
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: PV-214, TRT, 1'-2'

Description: Brown clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 106.3 PCF |
| In-Situ Moisture: | 9.7 % | Optimum Moisture: | 12.3 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: PV-217, TRT, 1'-3'
Description: Brown clayey sand with gravel

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 107.0 PCF
In-Situ Moisture: 11.7 %
Optimum Moisture: 13.2 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5876 | 170.2 |
| 2 | ¼ OMC | 3.3 | 0.7671 | 130.4 |
| 3 | ½ OMC | 6.6 | 1.2186 | 82.1 |
| 4 | ¾ OMC | 9.9 | 1.3810 | 72.4 |
| 5 | OMC | 13.2 | 1.4938 | 66.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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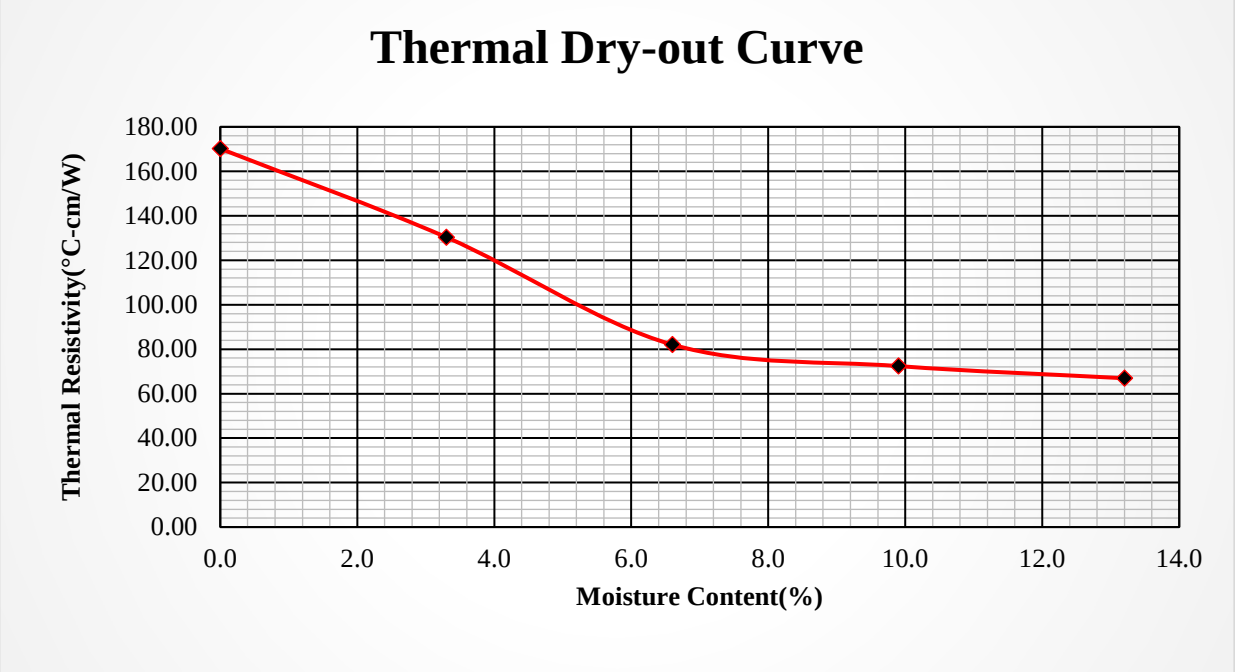
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: PV-217, TRT, 1'-3'

Description: Brown clayey sand with gravel

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 107.0 PCF |
| In-Situ Moisture: | 11.7 % | Optimum Moisture: | 13.2 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: PV-223, TRT, 1'-2'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 100.7 PCF
In-Situ Moisture: 13.4 %
Optimum Moisture: 15.0 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.4962 | 201.5 |
| 2 | ¼ OMC | 3.8 | 0.6165 | 162.2 |
| 3 | ½ OMC | 7.5 | 0.8408 | 118.9 |
| 4 | ¾ OMC | 11.3 | 0.9782 | 102.2 |
| 5 | OMC | 15.0 | 1.0864 | 92.0 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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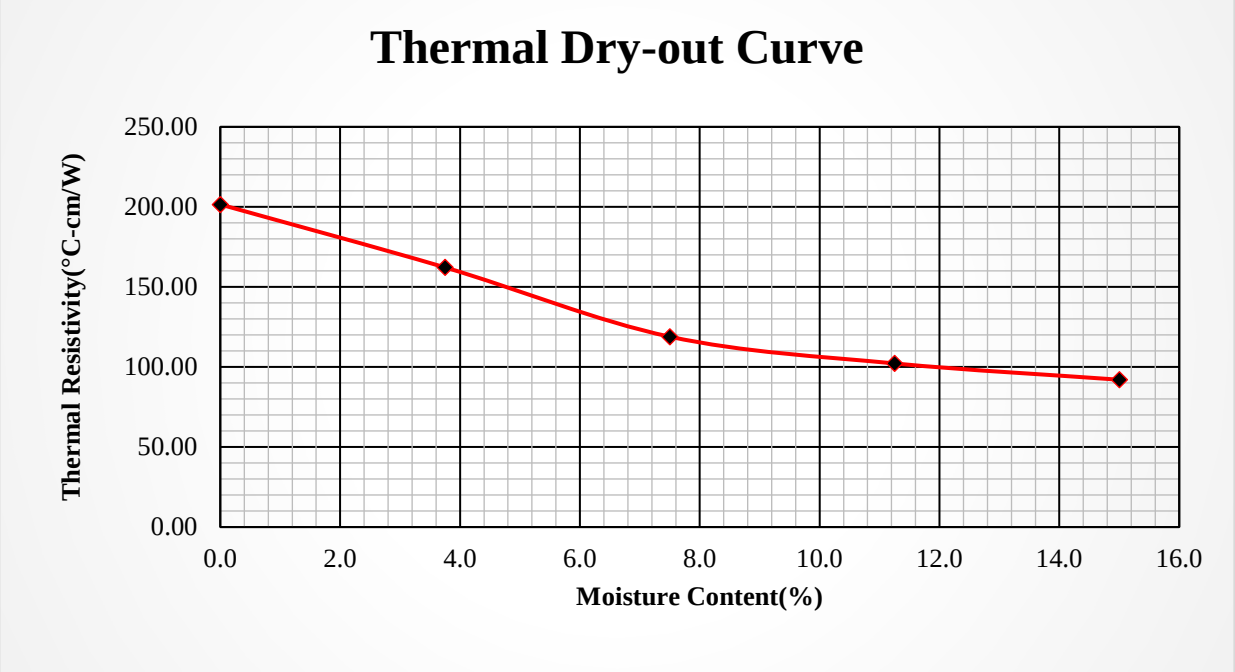
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: PV-223, TRT, 1'-2'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 100.7 PCF |
| In-Situ Moisture: | 13.4 % | Optimum Moisture: | 15.0 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: PV-226, TRT, 1'-2'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 99.6 PCF
In-Situ Moisture: 6.3 %
Optimum Moisture: 16.8 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5484 | 182.3 |
| 2 | ¼ OMC | 4.2 | 0.7249 | 138.0 |
| 3 | ½ OMC | 8.4 | 1.1344 | 88.2 |
| 4 | ¾ OMC | 12.6 | 1.3017 | 76.8 |
| 5 | OMC | 16.8 | 1.4220 | 70.3 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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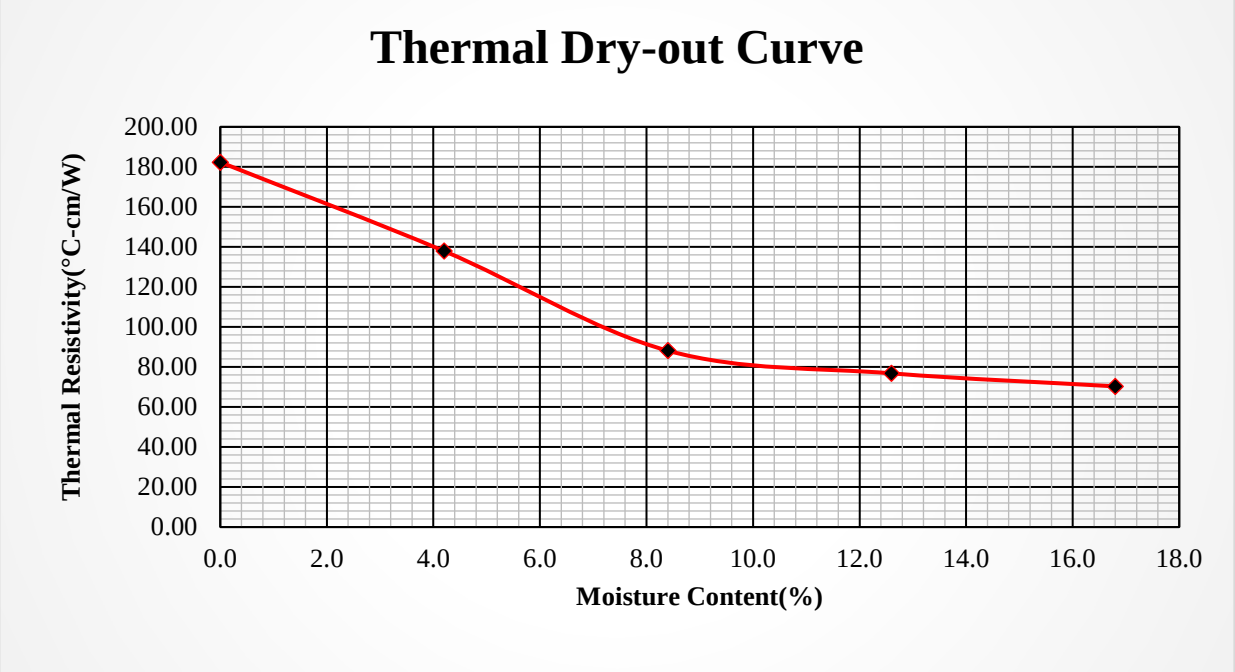
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: PV-226, TRT, 1'-2'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 99.6 PCF |
| In-Situ Moisture: | 6.3 % | Optimum Moisture: | 16.8 % |



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## Determination of Thermal Conductivity of Soil and Rock by Thermal Needle Probe (ASTM D5334)

Client Name: Tetra Tech
LAB IRN: 25-N-599
Project Name: Speedway, Sherman County, OR
Date: 10/29/2025

Sample ID: PV-230, TRT, 1'-2'
Description: Brown lean clay with sand

Specimen type: Reconstituted (90% D698)
Recompaction Dry Density: 97.3 PCF
In-Situ Moisture: 17.3 %
Optimum Moisture: 18.3 %

| S.No. | Moisture (%) | | Thermal Conductivity (W/m-K) | Thermal Resistivity (°C-cm/W) |
|---|---|---|---|---|
| 1 | Dry | 0.0 | 0.5039 | 198.5 |
| 2 | ¼ OMC | 4.6 | 0.6785 | 147.4 |
| 3 | ½ OMC | 9.2 | 1.0003 | 100.0 |
| 4 | ¾ OMC | 13.7 | 1.1467 | 87.2 |
| 5 | OMC | 18.3 | 1.2679 | 78.9 |

Remarks:

1. Needle size: 1.9 mm diameter × 100 mm length
2. Thermal grease used: High-density polysynthetics silver thermal compound
3. Tested under controlled room temperature conditions (20°C to 22°C).

Tested By: RS
Checked By: ANS

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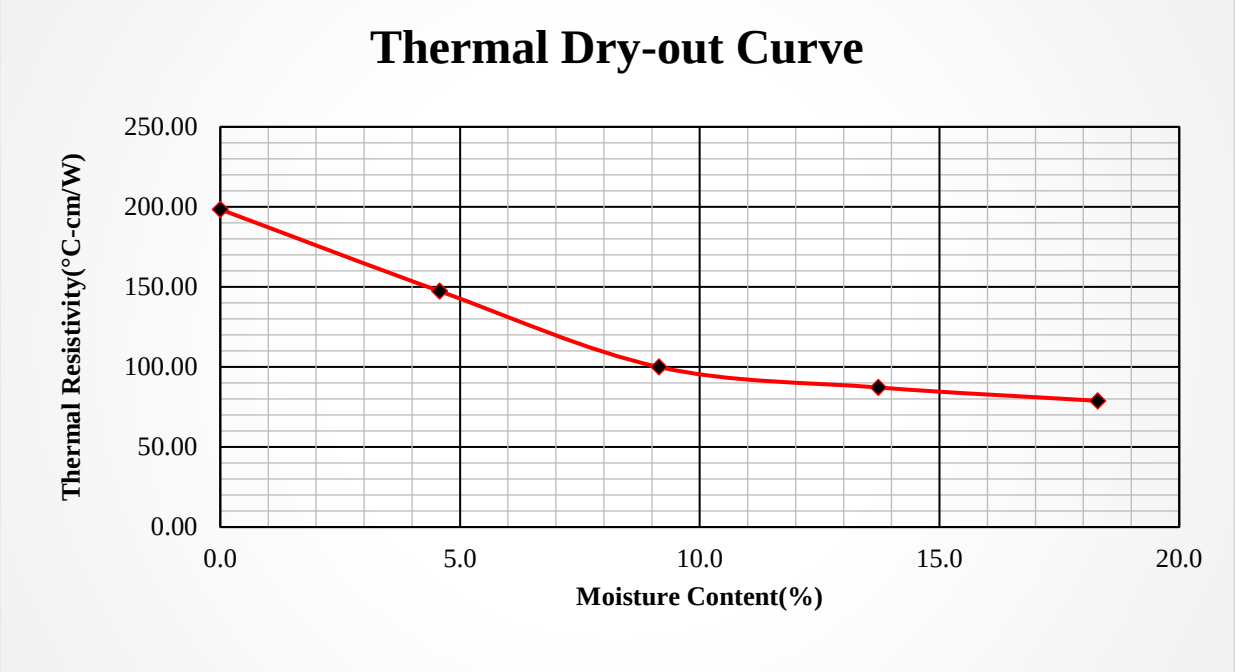
## Thermal Dryout Curve (ASTM D5334)

| | | | |
|---|---|---|---|
| Client Name: | Tetra Tech | LAB IRN: | 25-N-599 |
| Project Name: | Speedway, Sherman County, OR | Date: | 10/29/2025 |

Sample ID: PV-230, TRT, 1'-2'

Description: Brown lean clay with sand

| | | | |
|---|---|---|---|
| Specimen type: | Reconstituted (90% D698) | Recompaction Dry Density: | 97.3 PCF |
| In-Situ Moisture: | 17.3 % | Optimum Moisture: | 18.3 % |



# ROCK STRENGTH

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## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
LAB IRN: 25-N-583
Project Name: Speedway, Sherman County, OR
Date: 10/14/2025

| Sample ID | SB-01, R-3 | SB-02, R-2 | WTG-01, R-4 | WTG-02, R-5 | WTG-03, R-3 |
|---|---|---|---|---|---|
| Depth | 19.3-20.0' | 12.6'-13.0' | 23.8'-24.5' | 22.5'-23.0' | 12.5'-12.9' |
| Wet soil + Tare (g) | 269.7 | 279.7 | 255.6 | 263.8 | 293.5 |
| Dry soil + Tare (g) | 269.1 | 278.7 | 253.6 | 261.5 | 292.6 |
| Wt. of Tare (g) | 12.7 | 12.1 | 12.6 | 12.5 | 12.1 |
| Moisture Content | **0.2%** | **0.4%** | **0.8%** | **0.9%** | **0.3%** |

| Sample ID | WTG-04, R-6 | WTG-05, R-4 | WTG-06, R-3 | WTG-07, R-6 | WTG-08, R-7 |
|---|---|---|---|---|---|
| Depth | 30.2'-30.6' | 15.0'-15.6' | 12.7'-13.0' | 27.2'-27.7' | 30.0'-30.7' |
| Wet soil + Tare (g) | 274.6 | 253.8 | 270.7 | 218.0 | 258.5 |
| Dry soil + Tare (g) | 274.1 | 253.1 | 270.2 | 217.2 | 257.8 |
| Wt. of Tare (g) | 12.4 | 12.7 | 12.2 | 12.6 | 13.0 |
| Moisture Content | **0.2%** | **0.3%** | **0.2%** | **0.4%** | **0.3%** |

Tested By: MG
Checked By: ANS

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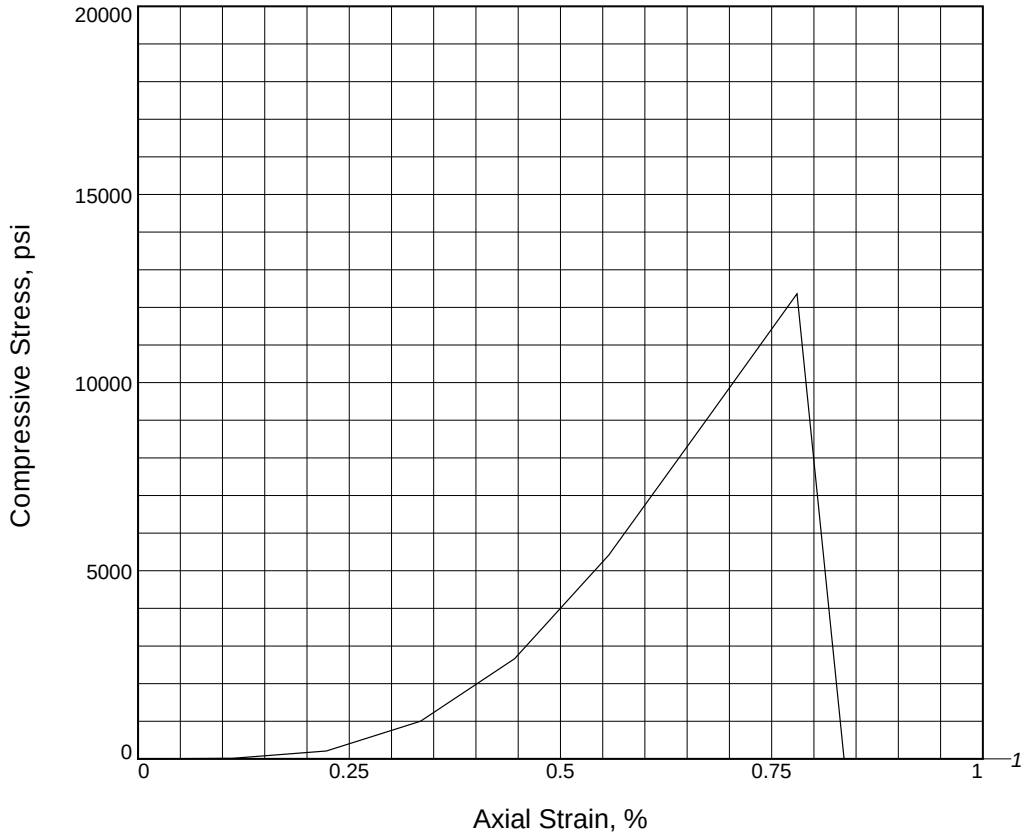
## Laboratory Determination of Water (Moisture) Content of Soil and Rock (ASTM D2216)

Client Name: Tetra Tech
LAB IRN: 25-N-707
Project Name: Speedway, Sherman County, OR
Date: 11/21/2025

| Sample ID | WTG-01, R-7 | WTG-02, R-7 | WTG-03, R-4 |
|---|---|---|---|
| Depth | 35.5'-36' | 31.4'-31.9' | 15.8'-16.2' |
| Wet soil + Tare (g) | 205.2 | 277.7 | 204.6 |
| Dry soil + Tare (g) | 204.6 | 277.1 | 203.8 |
| Wt. of Tare (g) | 12.7 | 12.6 | 12.3 |
| Moisture Content | **0.3%** | **0.2%** | **0.4%** |

Tested By: MG
Checked By: ANS

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 12360.91 | | | |
| Undrained shear strength, psi | 6180.46 | | | |
| Failure strain, % | 0.8 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 3.1 | | | |
| Wet density, pcf | 165.1 | | | |
| Dry density, pcf | 160.2 | | | |
| Saturation, % | 93.9 | | | |
| Void ratio | 0.0914 | | | |
| Specimen diameter, in. | 1.99 | | | |
| Specimen height, in. | 4.49 | | | |
| Height/diameter ratio | 2.26 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

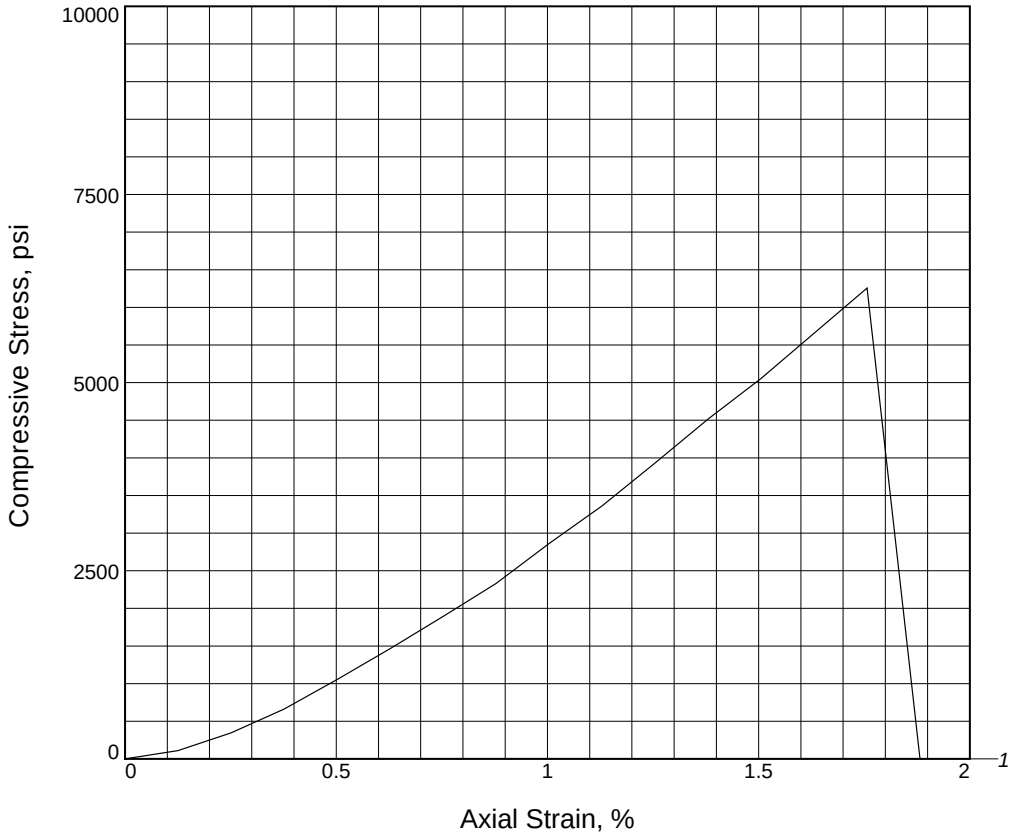
**Sample Number:** SB-01, R-3 **Depth:** 19.3'-20.0'

ANS

**Tested By:** MG **Checked By:** MF

25-N-583
SB-01
R-3
19.3'-20'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 6257.09 | | | |
| Undrained shear strength, psi | 3128.55 | | | |
| Failure strain, % | 1.8 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 3.2 | | | |
| Wet density, pcf | 165.0 | | | |
| Dry density, pcf | 160.0 | | | |
| Saturation, % | 95.7 | | | |
| Void ratio | 0.0928 | | | |
| Specimen diameter, in. | 1.98 | | | |
| Specimen height, in. | 3.98 | | | |
| Height/diameter ratio | 2.01 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

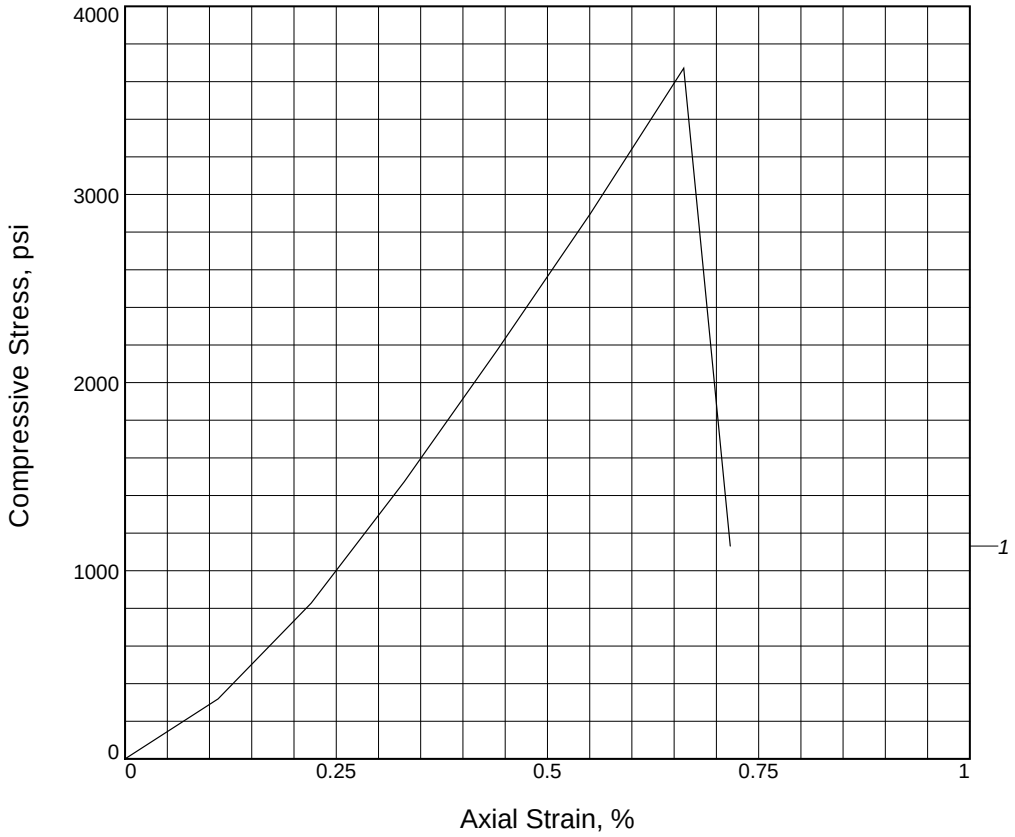
**Sample Number:** SB-02, R-2 **Depth:** 12.6'-13.0'

ANS

**Tested By:** MG **Checked By:** MF

25-N-583
SB-02
R-2
12.6'-13.0'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 3671.59 | | | |
| Undrained shear strength, psi | 1835.80 | | | |
| Failure strain, % | 0.7 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 4.3 | | | |
| Wet density, pcf | 127.6 | | | |
| Dry density, pcf | 122.3 | | | |
| Saturation, % | 30.7 | | | |
| Void ratio | 0.3779 | | | |
| Specimen diameter, in. | 1.97 | | | |
| Specimen height, in. | 4.54 | | | |
| Height/diameter ratio | 2.31 | | | |

**Description:** Dark Gray/Brown Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.7 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

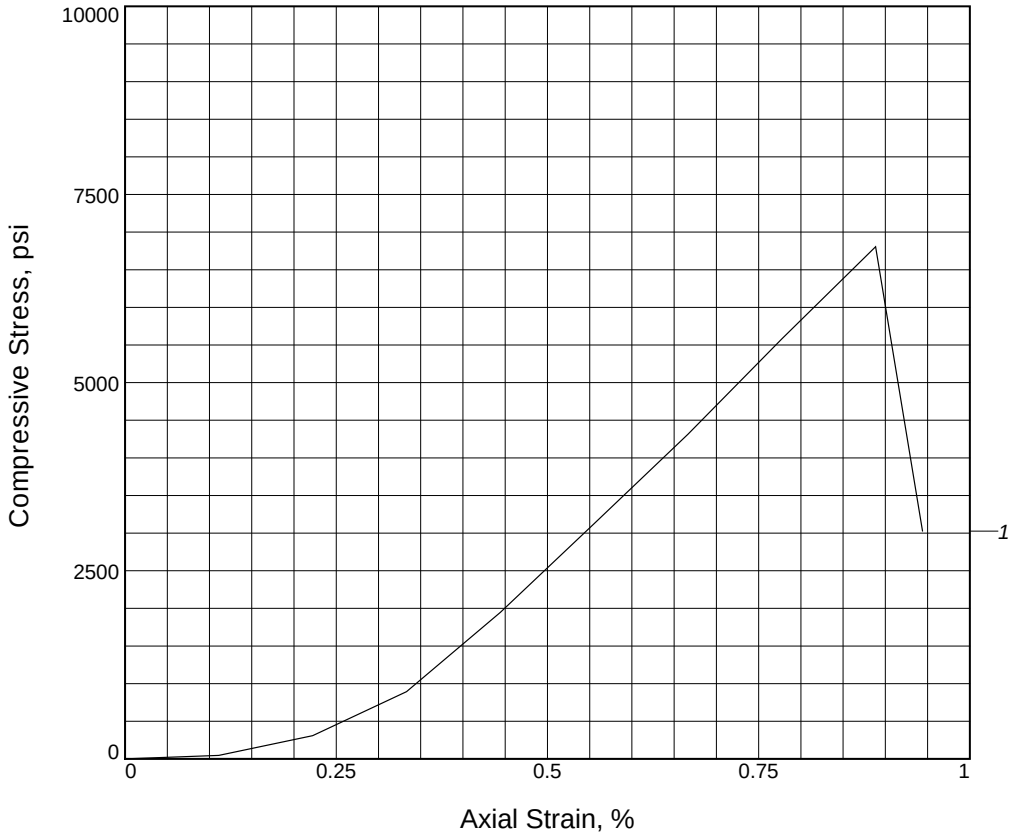
**Sample Number:** WTG-01, R-4 **Depth:** 23.8'-24.5'

ANS

**Tested By:** MG **Checked By:** MF

25-N-583
WTG-01
R-4
23.8'-24.5'
UC Rock

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 6806.42 | | | |
| Undrained shear strength, psi | 3403.21 | | | |
| Failure strain, % | 0.9 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 0.3 | | | |
| Wet density, pcf | 155.1 | | | |
| Dry density, pcf | 154.6 | | | |
| Saturation, % | 6.5 | | | |
| Void ratio | 0.1305 | | | |
| Specimen diameter, in. | 1.98 | | | |
| Specimen height, in. | 4.50 | | | |
| Height/diameter ratio | 2.28 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-707

**Date Sampled:** 11/21/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** Tetra Tech

**Project:** Speedway, Sherman County, OR

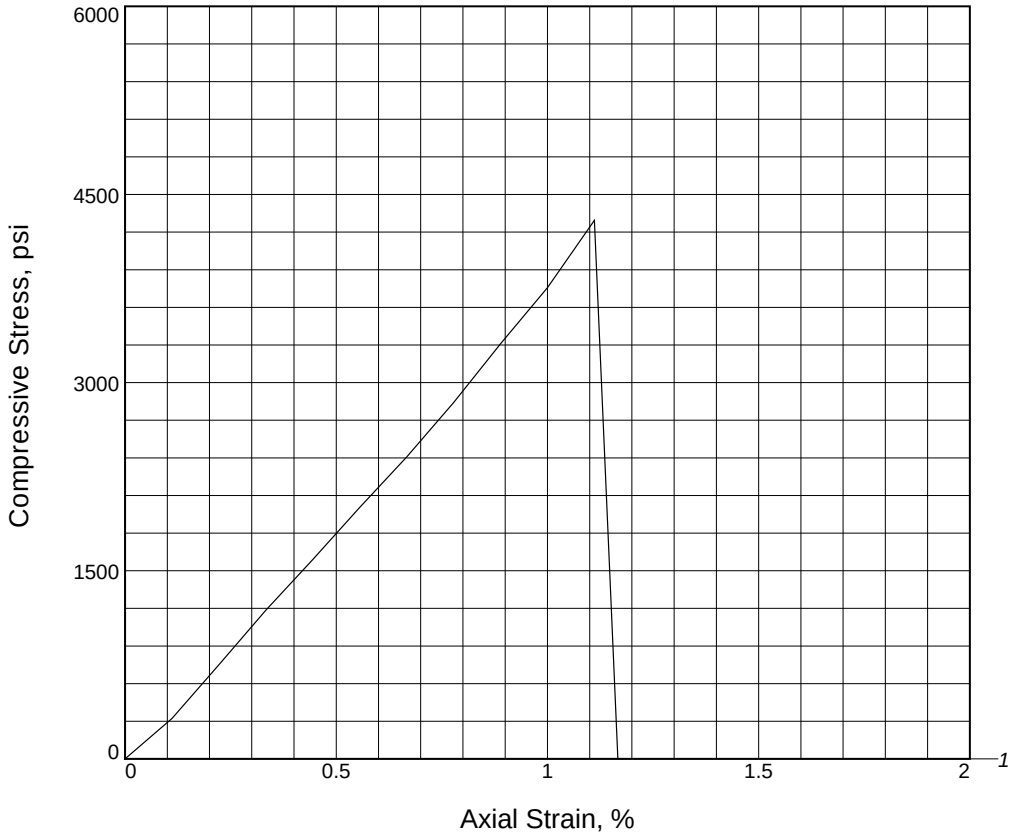
**Sample Number:** WTG-01, R-7 **Depth:** 35.5'-36'

UNCONFINED COMPRESSION TEST
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

**Tested By:** MG **Checked By:** ANS

25-N-707
WTG-01
R-7
35.5-36
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 4294.12 | | | |
| Undrained shear strength, psi | 2147.06 | | | |
| Failure strain, % | 1.1 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 6.1 | | | |
| Wet density, pcf | 153.2 | | | |
| Dry density, pcf | 144.4 | | | |
| Saturation, % | 98.6 | | | |
| Void ratio | 0.1676 | | | |
| Specimen diameter, in. | 1.98 | | | |
| Specimen height, in. | 4.50 | | | |
| Height/diameter ratio | 2.28 | | | |

**Description:** Gray/Reddish Brown Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.7 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

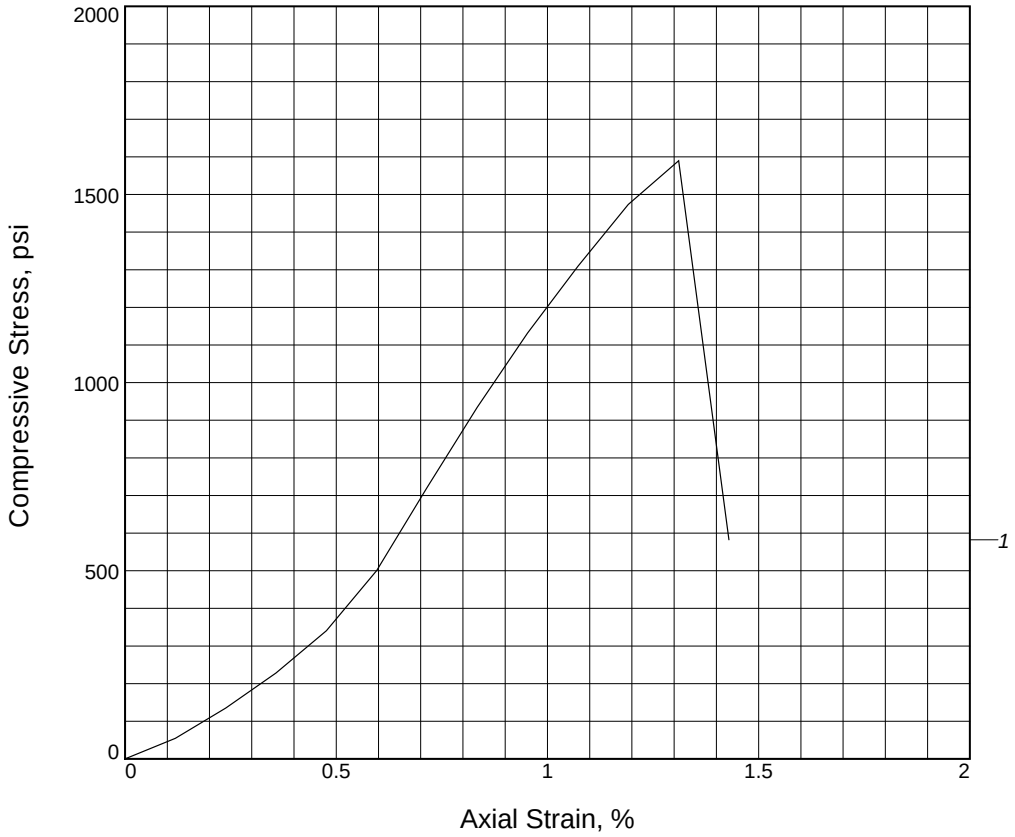
**Sample Number:** WTG-02, S-5 **Depth:** 22.5'-23.0'

ANS

**Tested By:** MG **Checked By:** MF

25-N-583
WTG-02
R-5
22.5'-23.0'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 1589.73 | | | |
| Undrained shear strength, psi | 794.86 | | | |
| Failure strain, % | 1.3 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 0.2 | | | |
| Wet density, pcf | 154.9 | | | |
| Dry density, pcf | 154.6 | | | |
| Saturation, % | 4.3 | | | |
| Void ratio | 0.1307 | | | |
| Specimen diameter, in. | 1.99 | | | |
| Specimen height, in. | 4.20 | | | |
| Height/diameter ratio | 2.11 | | | |

**Description:** Grayish Brown Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-707

**Date Sampled:** 11/21/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

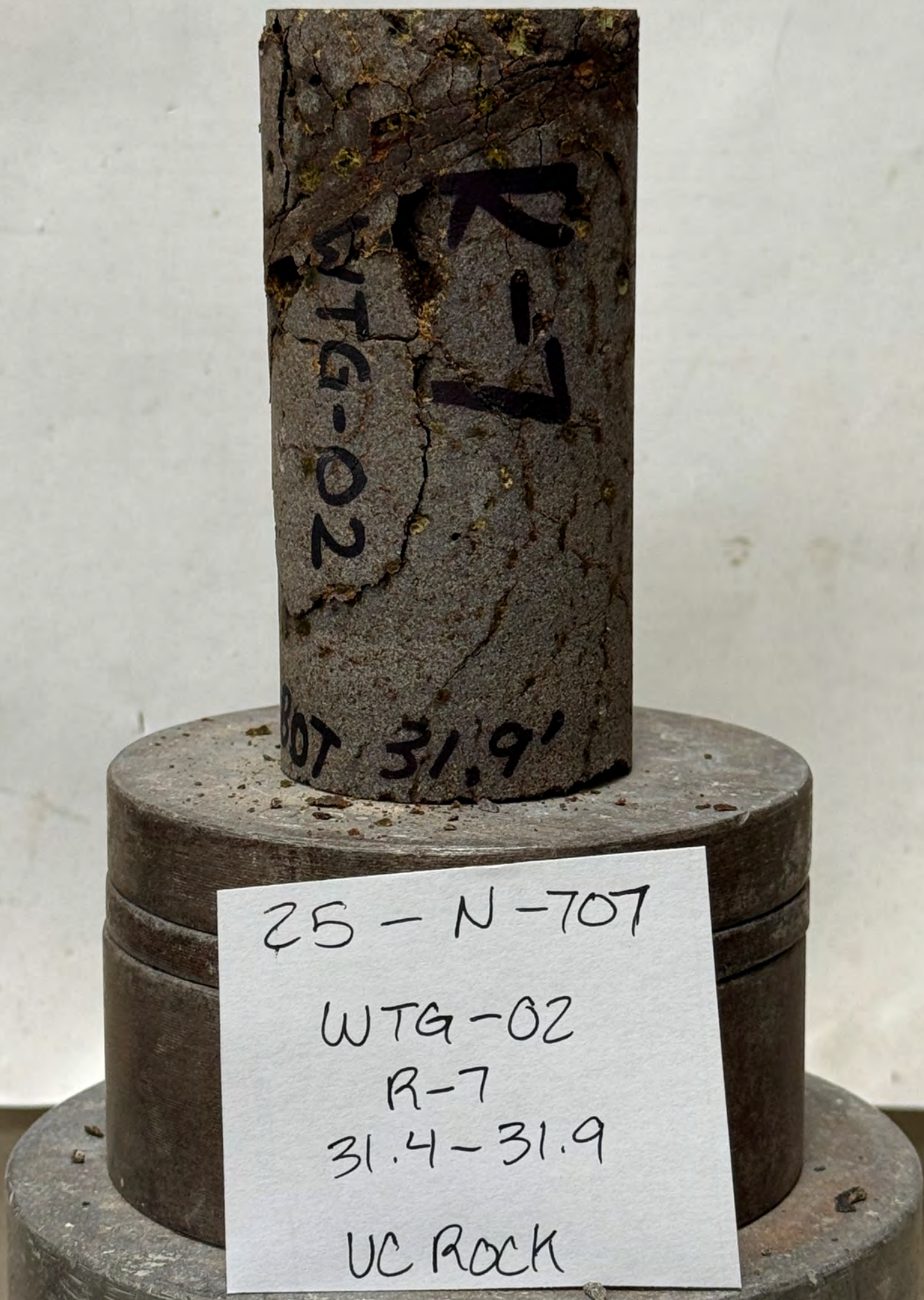
**Client:** Tetra Tech

**Project:** Speedway, Sherman County, OR

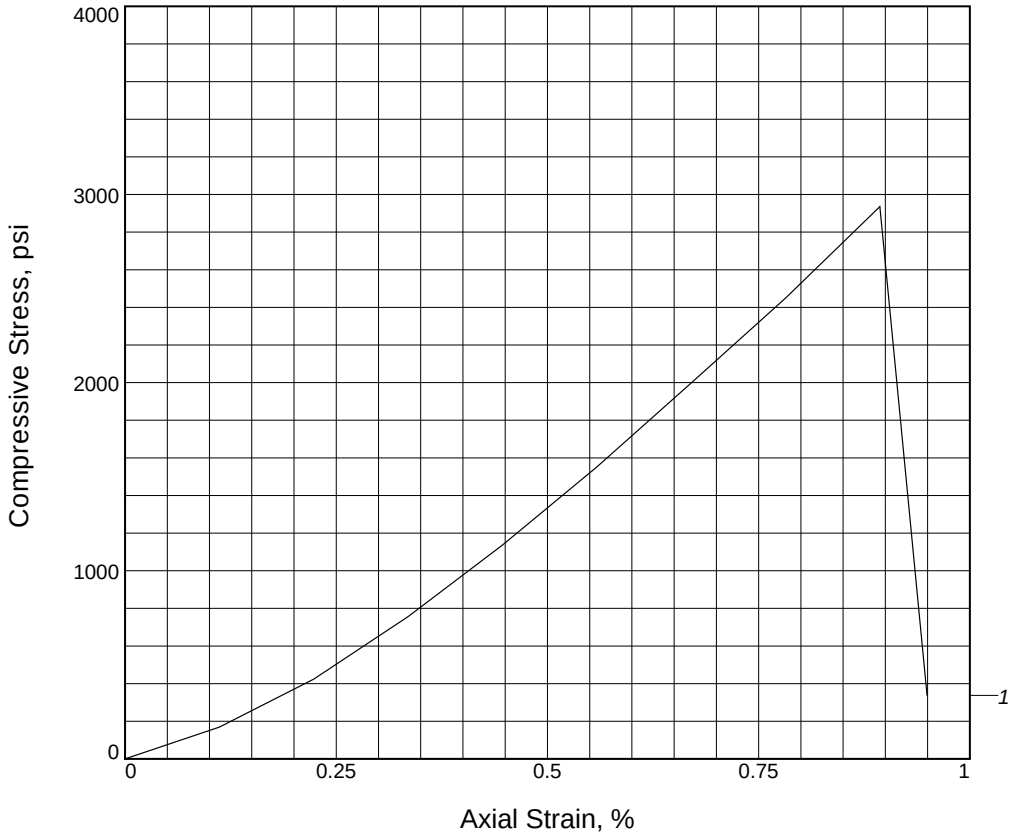
**Sample Number:** WTG-02, R-7 **Depth:** 31.4'-31.9'

UNCONFINED COMPRESSION TEST
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

**Tested By:** MG **Checked By:** ANS


WTG-02 R-7
BOT 31.9'
25-N-707
WTG-02
R-7
31.4-31.9
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 2935.71 | | | |
| Undrained shear strength, psi | 1467.86 | | | |
| Failure strain, % | 0.9 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 13.9 | | | |
| Wet density, pcf | 115.6 | | | |
| Dry density, pcf | 101.4 | | | |
| Saturation, % | 56.9 | | | |
| Void ratio | 0.6617 | | | |
| Specimen diameter, in. | 1.98 | | | |
| Specimen height, in. | 4.48 | | | |
| Height/diameter ratio | 2.26 | | | |

**Description:** Dark Brown Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.7 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/15/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

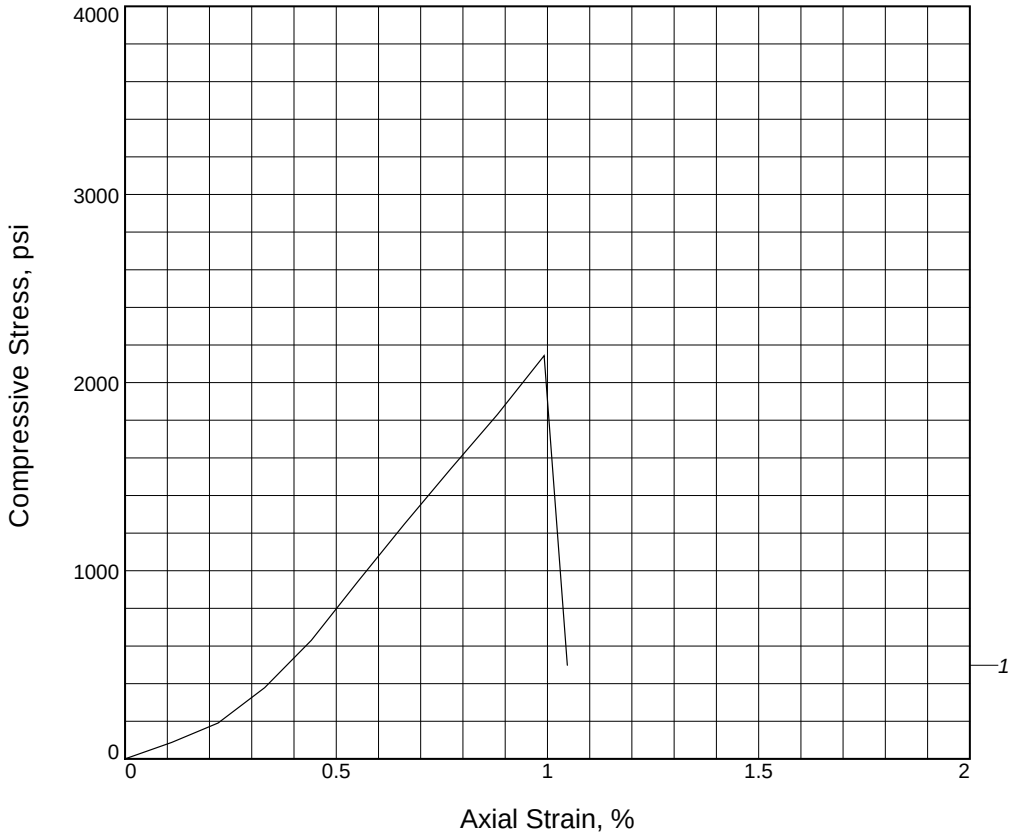
**Sample Number:** WTG-03, R-3 **Depth:** 12.5'-12.9'

ANS

**Tested By:** MG **Checked By:** MF

25-N-583
WTG-03
R-3
12.5'-12.9'
UC Rock

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 2143.66 | | | |
| Undrained shear strength, psi | 1071.83 | | | |
| Failure strain, % | 1.0 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 0.4 | | | |
| Wet density, pcf | 137.6 | | | |
| Dry density, pcf | 137.0 | | | |
| Saturation, % | 4.7 | | | |
| Void ratio | 0.2300 | | | |
| Specimen diameter, in. | 1.98 | | | |
| Specimen height, in. | 4.54 | | | |
| Height/diameter ratio | 2.29 | | | |

**Description:** Dark Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.7 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-707

**Date Sampled:** 11/21/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

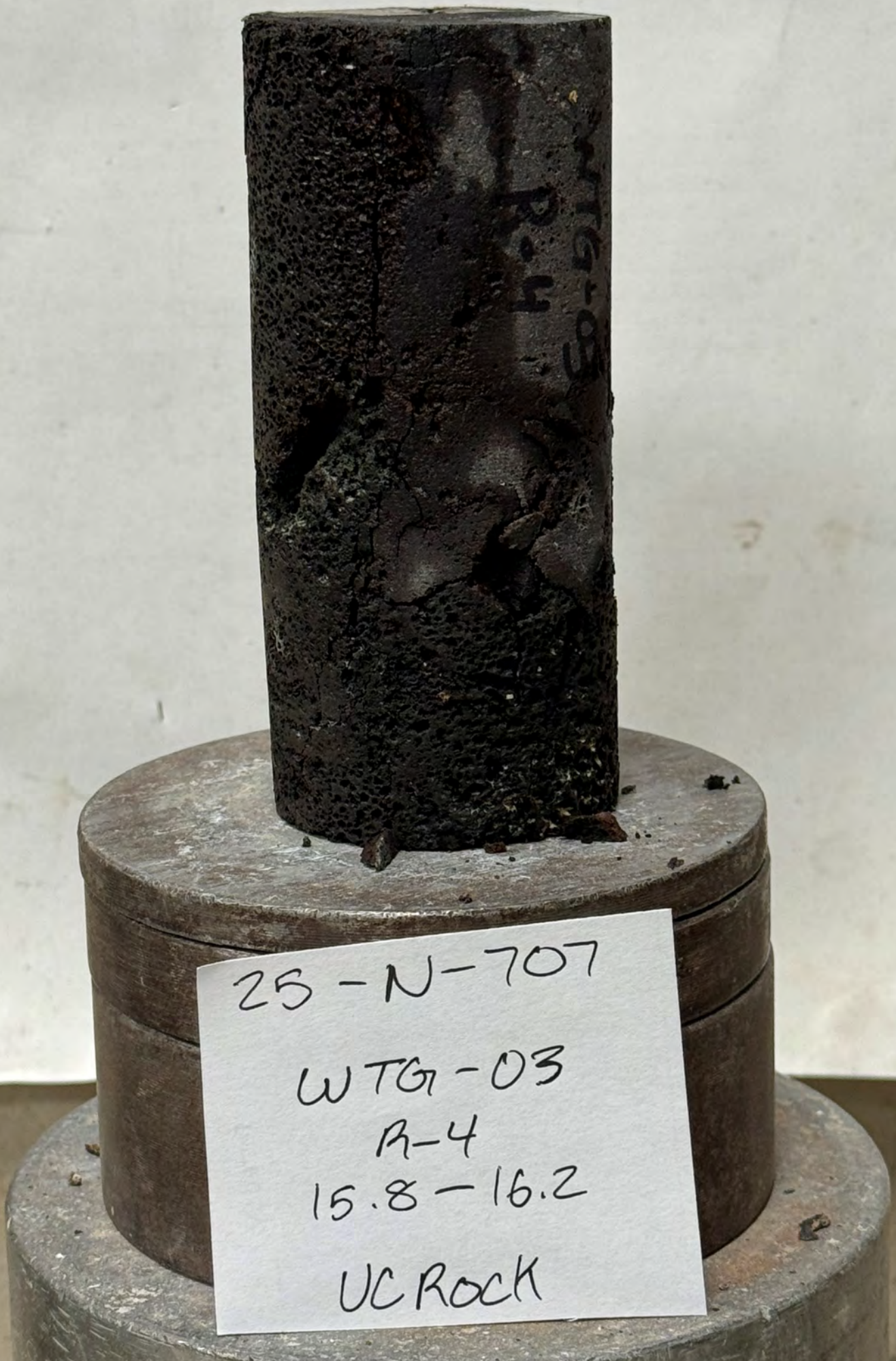
**Client:** Tetra Tech

**Project:** Speedway, Sherman County, OR

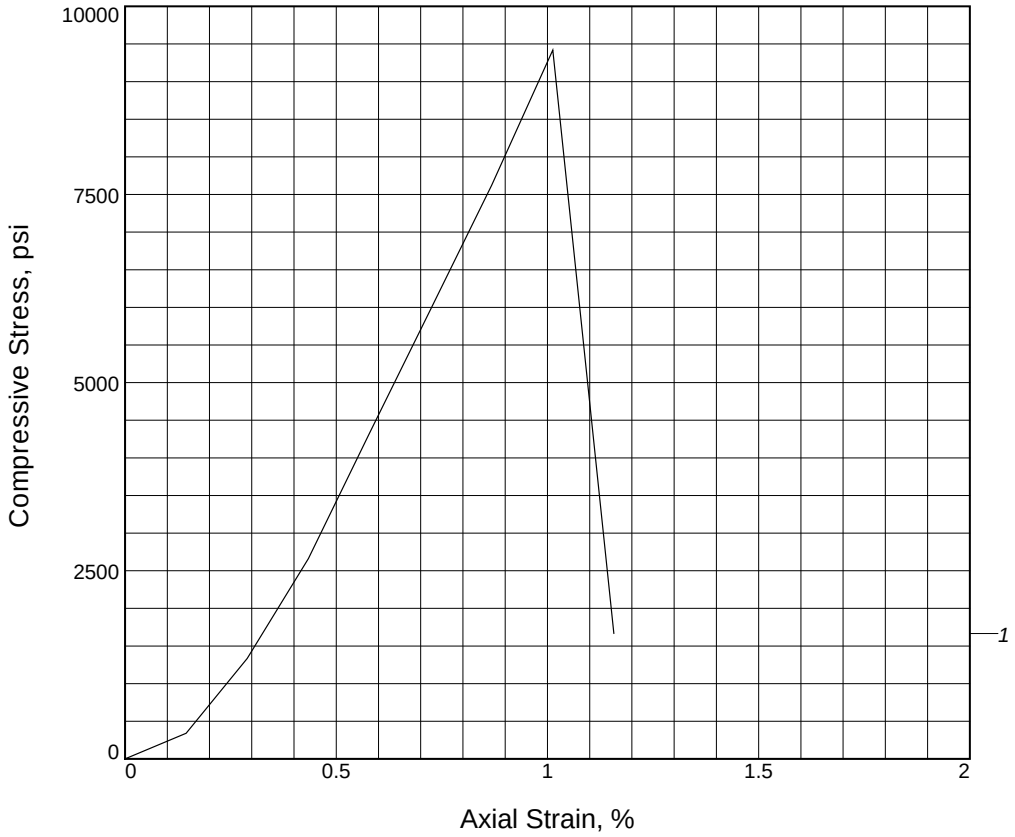
**Sample Number:** WTG-03, R-4 **Depth:** 15.8'-16.2'

UNCONFINED COMPRESSION TEST
ANS CONSULTANTS, INC.
South Plainfield, New Jersey

**Tested By:** MG **Checked By:** ANS


25-N-707
WTG-03
R-4
15.8-16.2
UC Rock

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 9418.90 | | | |
| Undrained shear strength, psi | 4709.45 | | | |
| Failure strain, % | 1.0 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 4.2 | | | |
| Wet density, pcf | 159.5 | | | |
| Dry density, pcf | 153.1 | | | |
| Saturation, % | 82.6 | | | |
| Void ratio | 0.1419 | | | |
| Specimen diameter, in. | 1.99 | | | |
| Specimen height, in. | 3.46 | | | |
| Height/diameter ratio | 1.74 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated
H/D Ratio < 2.0

**Figure** _____

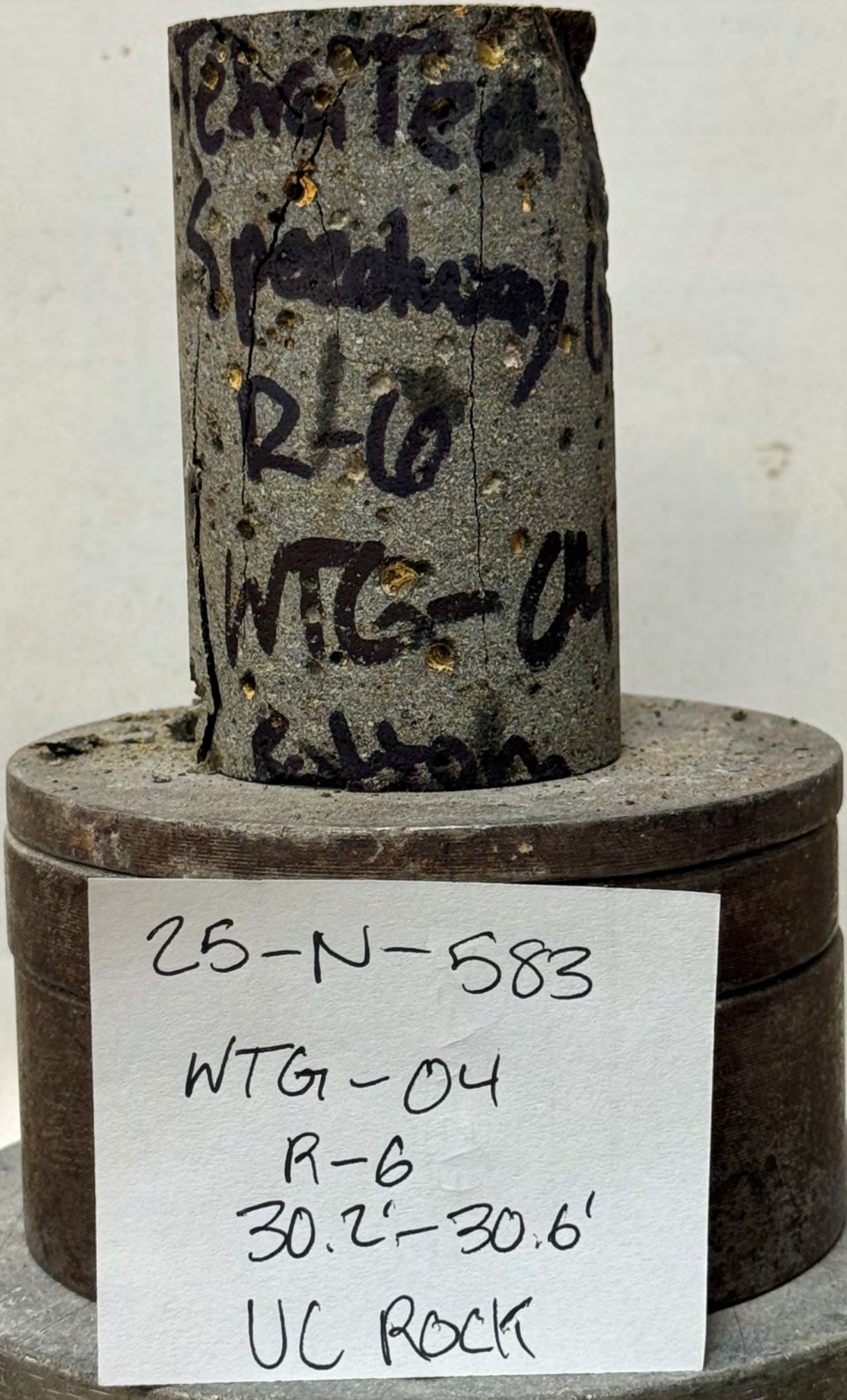
**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

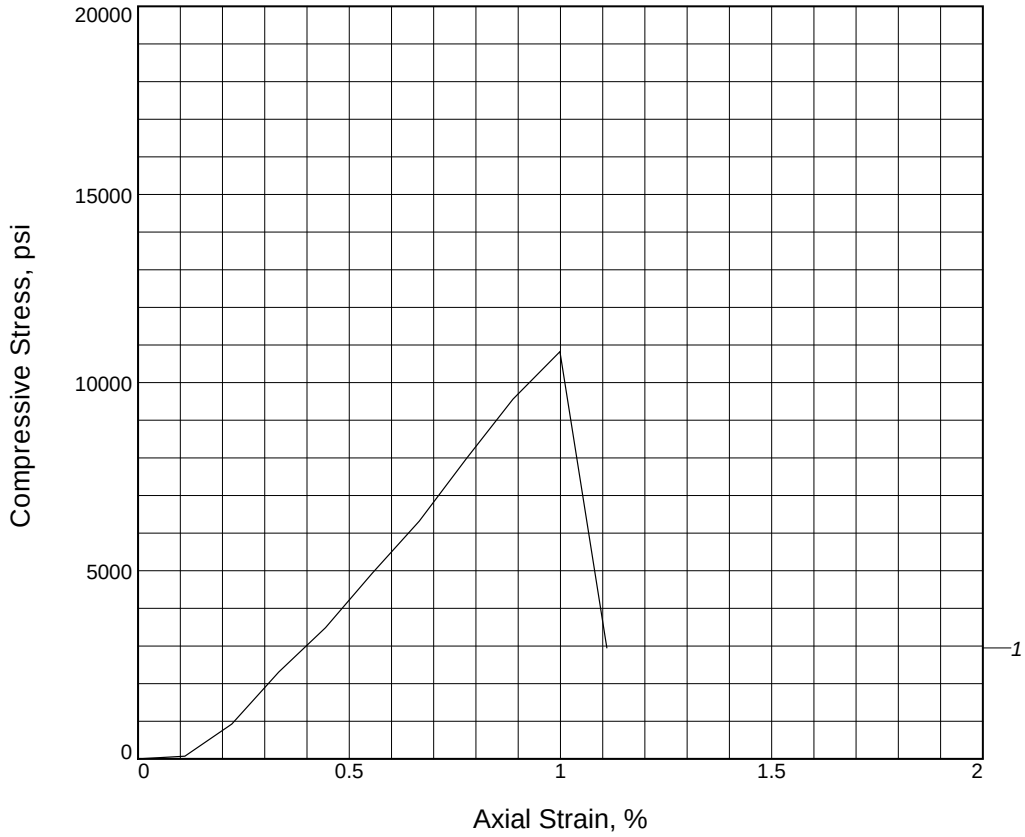
**Sample Number:** WTG-04, R-6 **Depth:** 30.2'-30.6'

ANS

**Tested By:** MG **Checked By:** MF


25-N-583
WTG-04
R-6
30.2'-30.6'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 10822.40 | | | |
| Undrained shear strength, psi | 5411.20 | | | |
| Failure strain, % | 1.0 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 1.2 | | | |
| Wet density, pcf | 167.6 | | | |
| Dry density, pcf | 165.6 | | | |
| Saturation, % | 60.9 | | | |
| Void ratio | 0.0555 | | | |
| Specimen diameter, in. | 1.99 | | | |
| Specimen height, in. | 4.51 | | | |
| Height/diameter ratio | 2.26 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

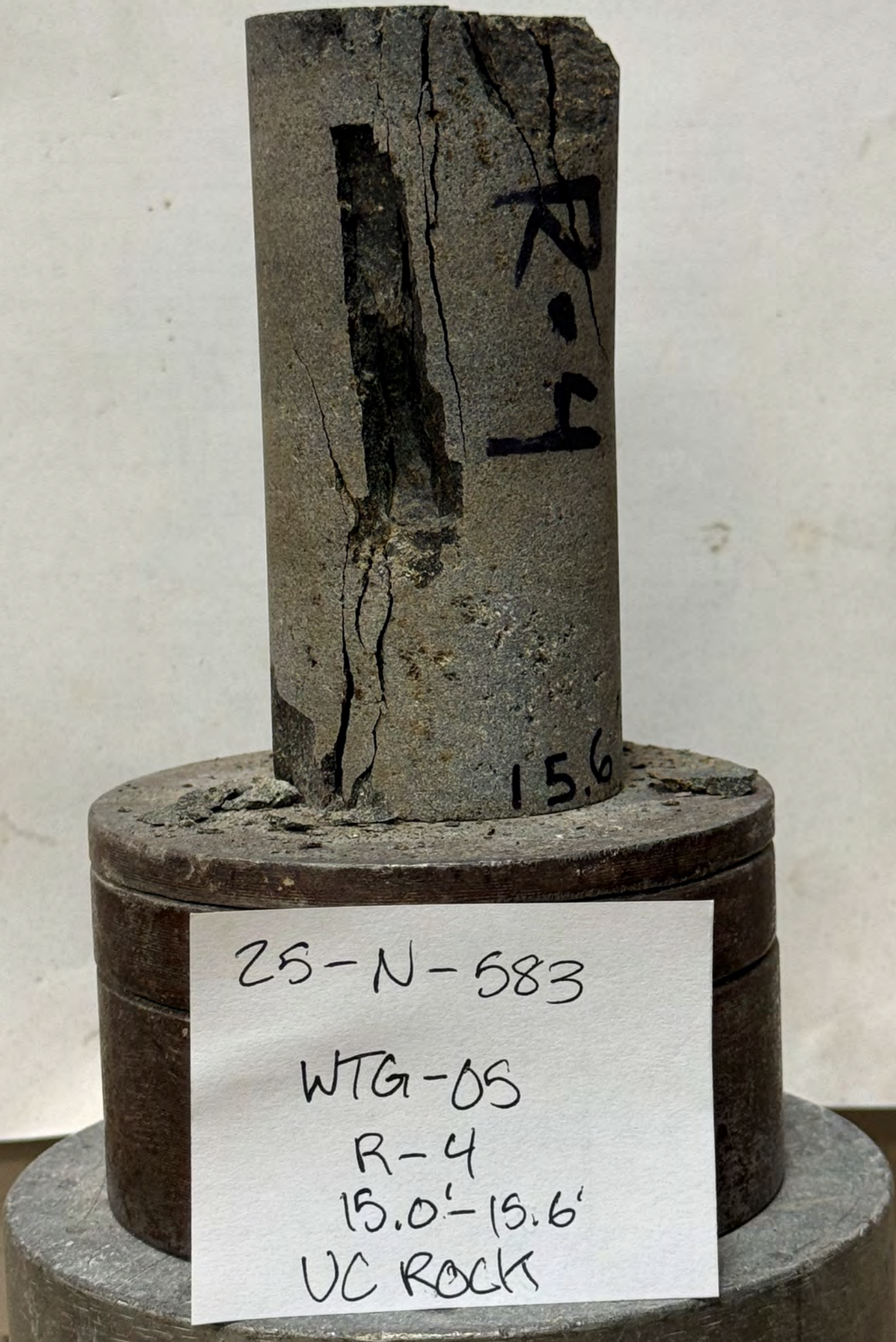
**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

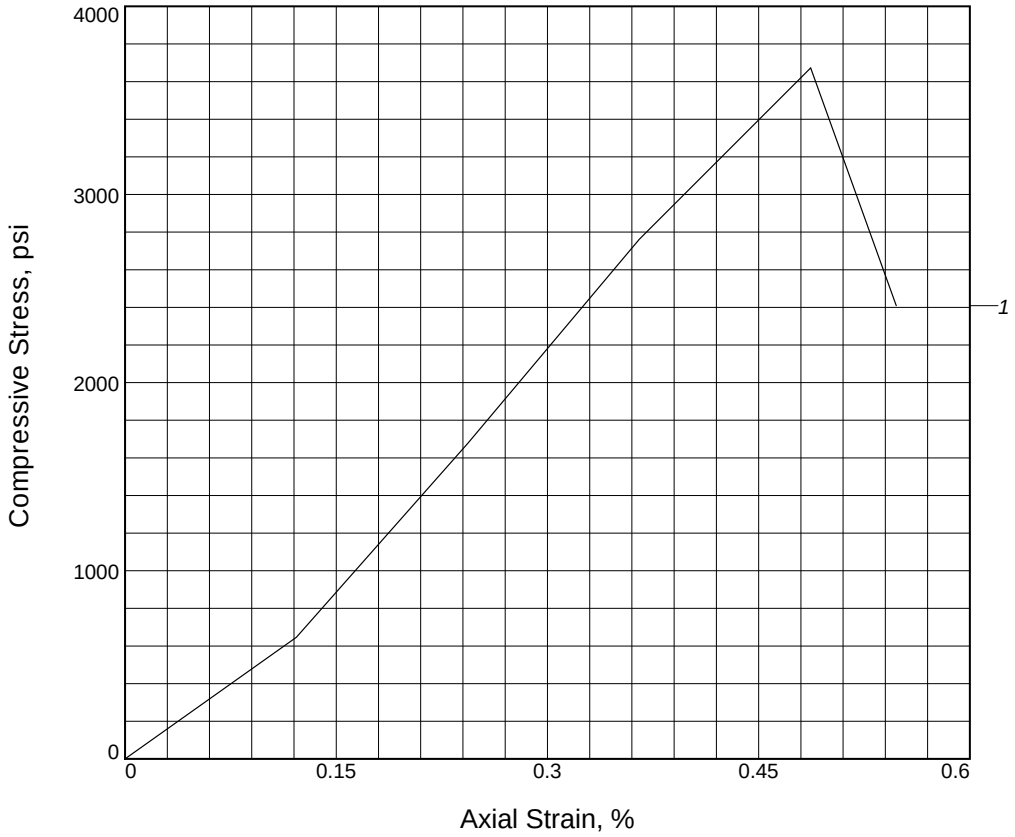
**Sample Number:** WTG-05, R-4 **Depth:** 15.0'-15.6'

ANS

**Tested By:** MG **Checked By:** MF


25-N-583
WTG-05
R-4
15.0'-15.6'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 3672.91 | | | |
| Undrained shear strength, psi | 1836.46 | | | |
| Failure strain, % | 0.5 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 1.1 | | | |
| Wet density, pcf | 165.4 | | | |
| Dry density, pcf | 163.6 | | | |
| Saturation, % | 43.3 | | | |
| Void ratio | 0.0682 | | | |
| Specimen diameter, in. | 1.99 | | | |
| Specimen height, in. | 4.11 | | | |
| Height/diameter ratio | 2.06 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

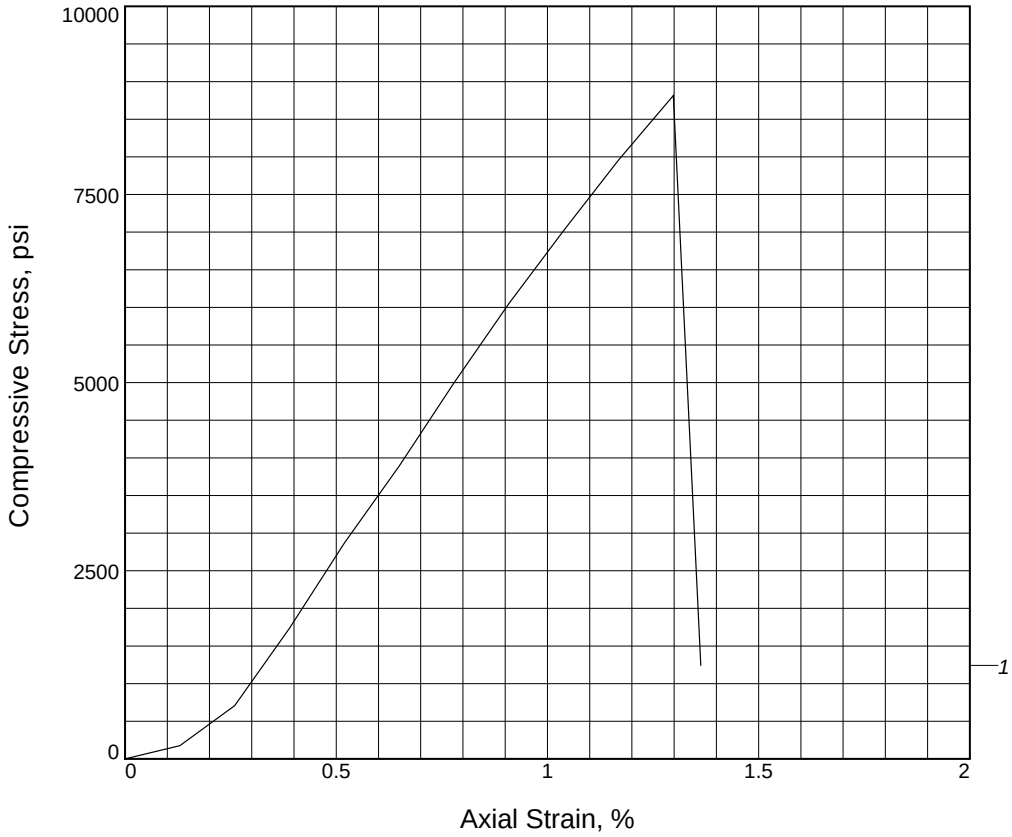
**Sample Number:** WTG-06, R-3 **Depth:** 12.7'-13.0'

ANS

**Tested By:** MG **Checked By:** MF

25-N-583
WTG-06
R-3
12.7'-13.0'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 8814.60 | | | |
| Undrained shear strength, psi | 4407.30 | | | |
| Failure strain, % | 1.3 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 2.6 | | | |
| Wet density, pcf | 166.7 | | | |
| Dry density, pcf | 162.5 | | | |
| Saturation, % | 96.3 | | | |
| Void ratio | 0.0756 | | | |
| Specimen diameter, in. | 2.00 | | | |
| Specimen height, in. | 3.85 | | | |
| Height/diameter ratio | 1.93 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated
H/D Ratio < 2.0

**Figure** _____

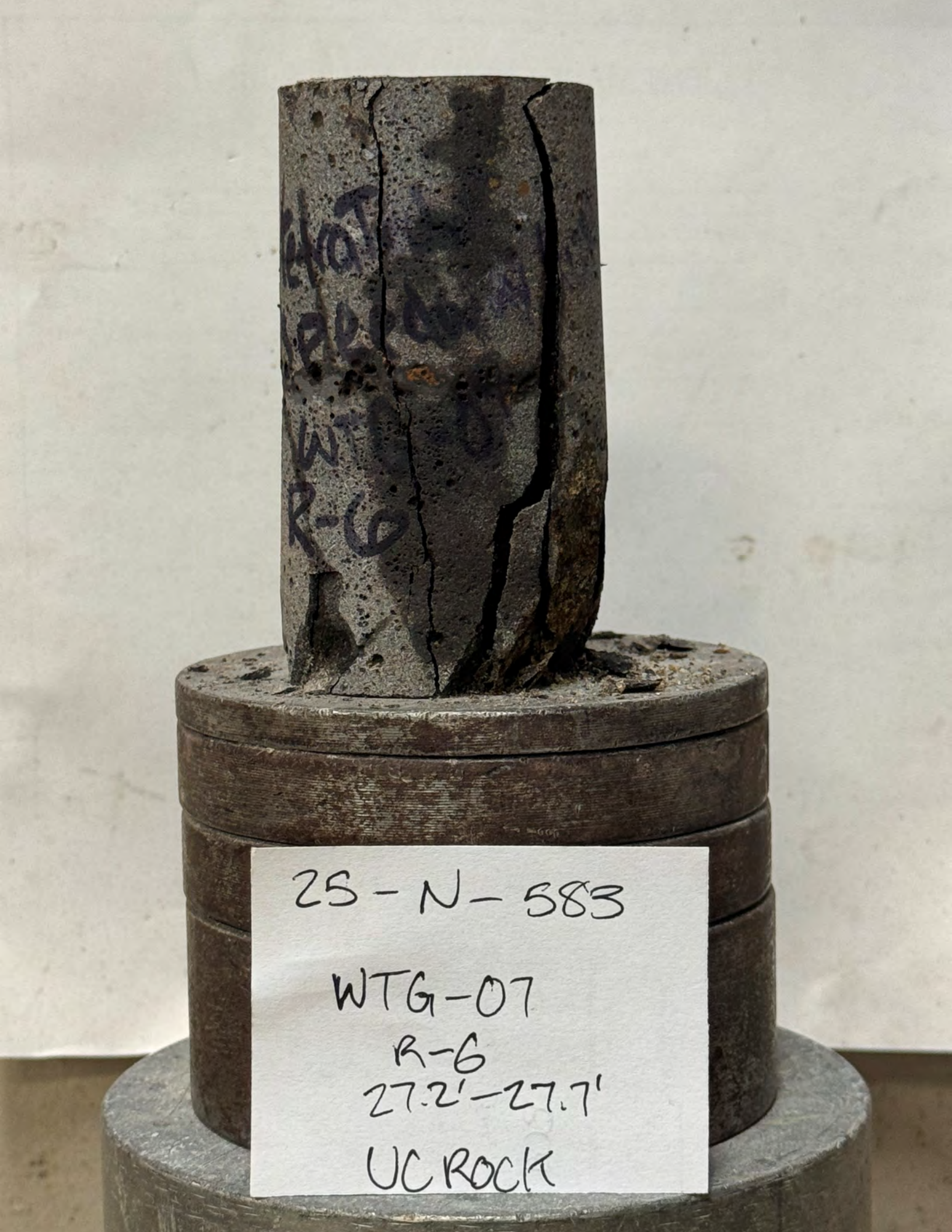
**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

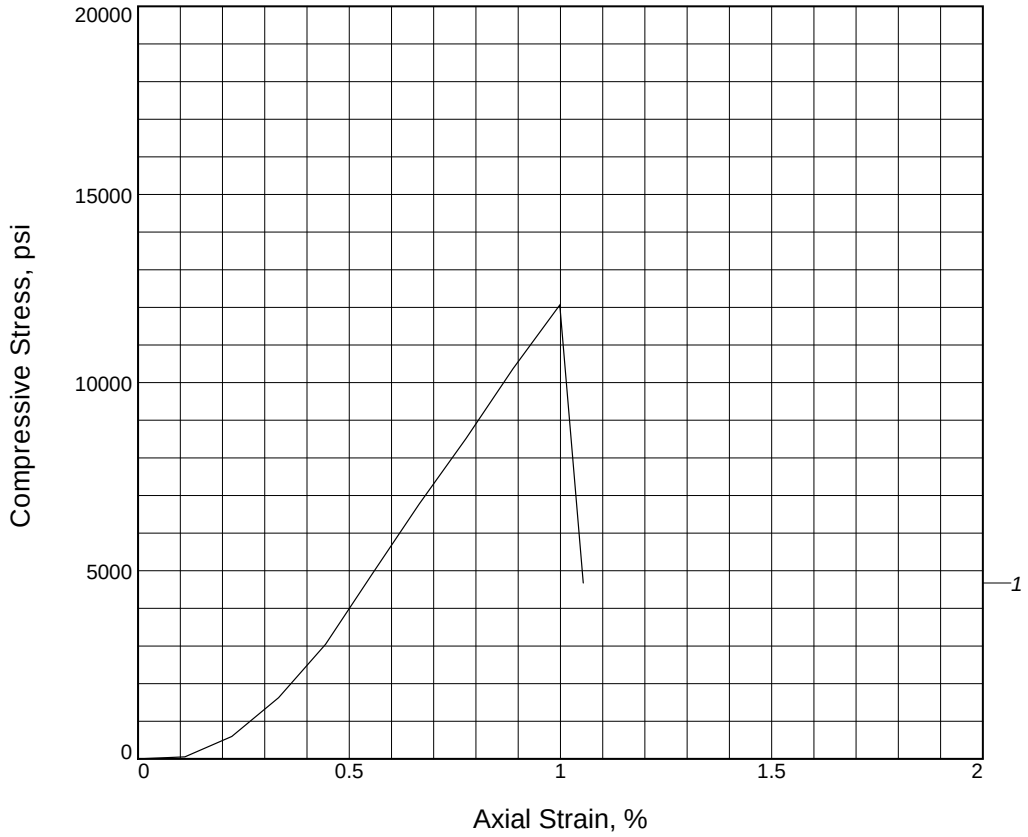
**Sample Number:** WTG-07, R-6 **Depth:** 27.2'-27.7'

A N S

**Tested By:** MG **Checked By:** MF


25-N-583
WTG-07
R-6
27.2'-27.7'
UC ROCK

# UNCONFINED COMPRESSION TEST




| | | | | |
|---|---|---|---|---|
| Sample No. | 1 | | | |
| Unconfined strength, psi | 12063.02 | | | |
| Undrained shear strength, psi | 6031.51 | | | |
| Failure strain, % | 1.0 | | | |
| Strain rate, in./min. | N/A | | | |
| Water content, % | 2.0 | | | |
| Wet density, pcf | 168.6 | | | |
| Dry density, pcf | 165.3 | | | |
| Saturation, % | 99.3 | | | |
| Void ratio | 0.0577 | | | |
| Specimen diameter, in. | 1.99 | | | |
| Specimen height, in. | 4.51 | | | |
| Height/diameter ratio | 2.26 | | | |

**Description:** Gray Rock Core

| **LL =** | **PL =** | **PI =** | **Assumed GS=** 2.8 | **Type:** |
|---|---|---|---|---|

**Project No.:** IRN 25-N-583

**Date Sampled:** 10/14/2025

**Remarks:**
ASTM D7012 - Method C
Loading Manner: Constant Stress Rate (0.5 MPa/sec)
Undrained Shear Strength estimated using Mohr's circle as half of max UC Strength

**Figure** _____

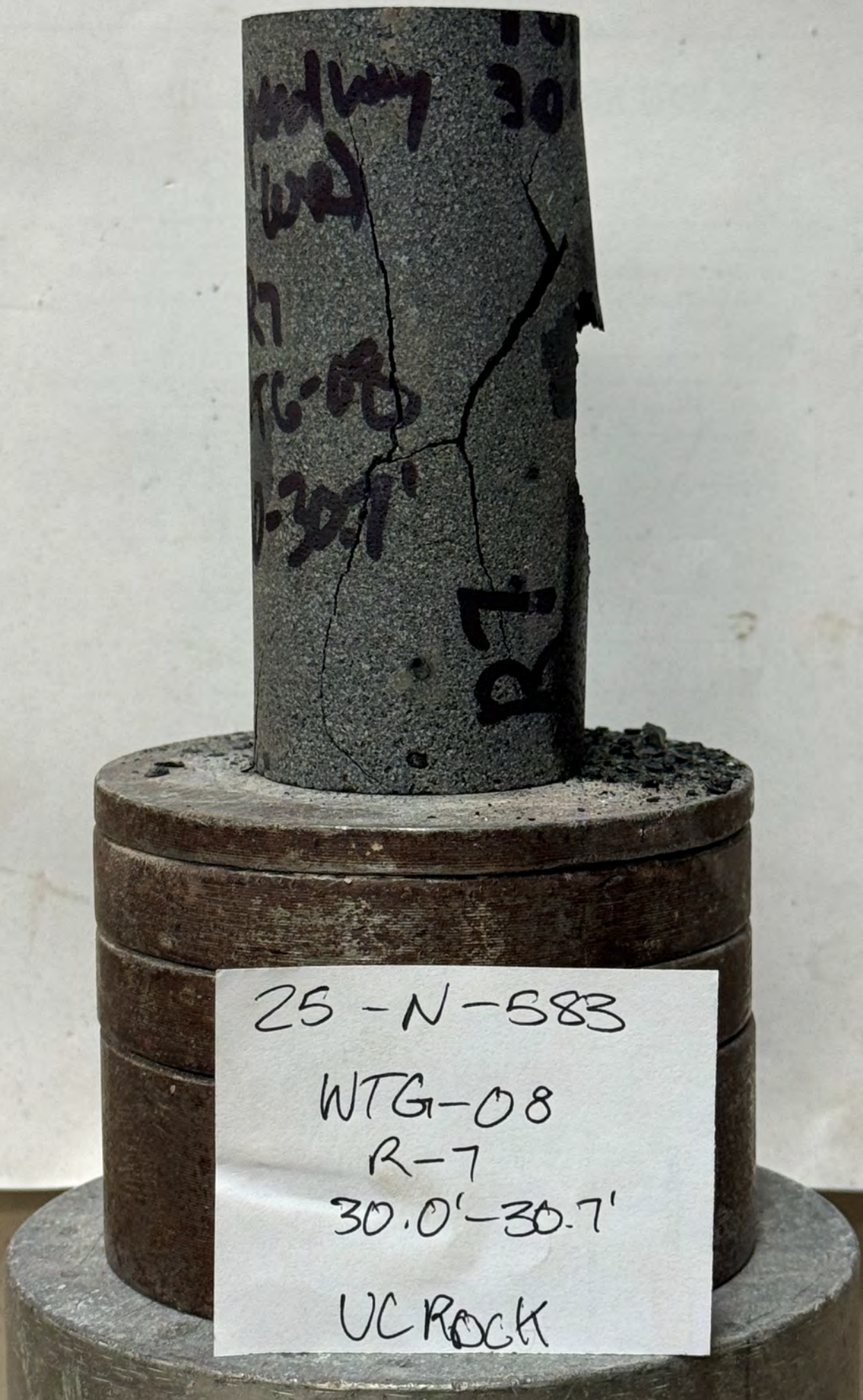
**Client:** TetraTech

**Project:** Speedway, Sherman County, OR

**Sample Number:** WTG-08, R-7 **Depth:** 30.0'-30.7'

ANS

**Tested By:** MG **Checked By:** MF


25-N-583
WTG-08
R-7
30.0'-30.7'
UC ROCK

# Appendix D: Infiltration Testing Results

| FIELD PERCOLATION TEST SUMMARY | | |
|---|---|---|
| **Location ID** | **Soil Classification below Testing Depth** | **Infiltration Rate (in/hr)** |
| IT-SB-01 | Silty Sand (SM) | 1.46 |
| IT-SB-02 | Sandy Lean Clay (CL) | 0.41 |
| IT-WTG-01 | Silty, Clayey Sand (SC-SM) | 1.08 |
| IT-WTG-02 | Silty, Clayey Sand (SC-SM) | 0.47 |
| IT-WTG-03 | Silty, Clayey Sand (SC-SM) | 0.65 |
| IT-WTG-04 | Sandy Lean Clay with Gravel (CL) | 1.02 |
| IT-WTG-05 | Clayey Sand with Gravel (SC) | 1.45 |
| IT-WTG-06 | Sandy Lean Clay (CL) | 2.12 |
| IT-WTG-07 | Sandy Lean Clay with Gravel (CL) | 1.46 |
| IT-WTG-08 | Clayey Gravel with Sand (GC) | 2.00 |
| IT-PV-008 | Sandy, Silty Clay (CL-ML) | 1.60 |
| IT-PV-021 | Sandy, Silty Clay (CL-ML) | 0.89 |
| IT-PV-024 | Silty, Clayey Sand (SC-SM) | 1.90 |
| IT-PV-034 | Sandy, Silty Clay (CL-ML) | 2.02 |
| IT-PV-045 | Silty Clay with Sand (CL-ML) | 2.08 |
| IT-PV-058 | Sandy Silt with Gravel (ML) | 1.14 |
| IT-PV-079 | Lean Clay with Sand (CL) | 0.65 |
| IT-PV-089 | Sandy, Silty Clay (CL-ML) | 1.02 |
| IT-PV-100 | Lean Clay with Sand (CL) | 0.35 |
| IT-PV-114 | Silty Sand (SM) | 2.14 |
| IT-PV-123 | Sandy Silt (ML) | 1.33 |
| IT-PV-132 | Silty, Clayey Sand with Gravel (SC-SM) | 1.61 |
| IT-PV-144 | Sandy, Silty Clay (CL-ML) | 2.57 |
| IT-PV-151 | Gravelly Lean Clay with Sand (CL) | 2.07 |
| IT-PV-164 | Lean Clay with Sand (CL) | 2.03 |
| IT-PV-178 | Silty Clayey Sand with Gravel (SC-SM) | 1.46 |
| IT-PV-183 | Lean Clay (CL) | 1.46 |
| IT-PV-198 | Sandy Lean Clay (CL) | 1.46 |
| IT-PV-207 | Lean Clay with Sand (CL) | 1.86 |
| IT-PV-214 | Clayey Sand with Gravel (SC) | 2.49 |
| **OVERALL SITE AVERAGES =** | | **1.48** |

| | |
|---|---|
| **Average (SC, SC-SM and SM) =** | **1.52** |
| **Average (CL and ML) =** | **1.45** |

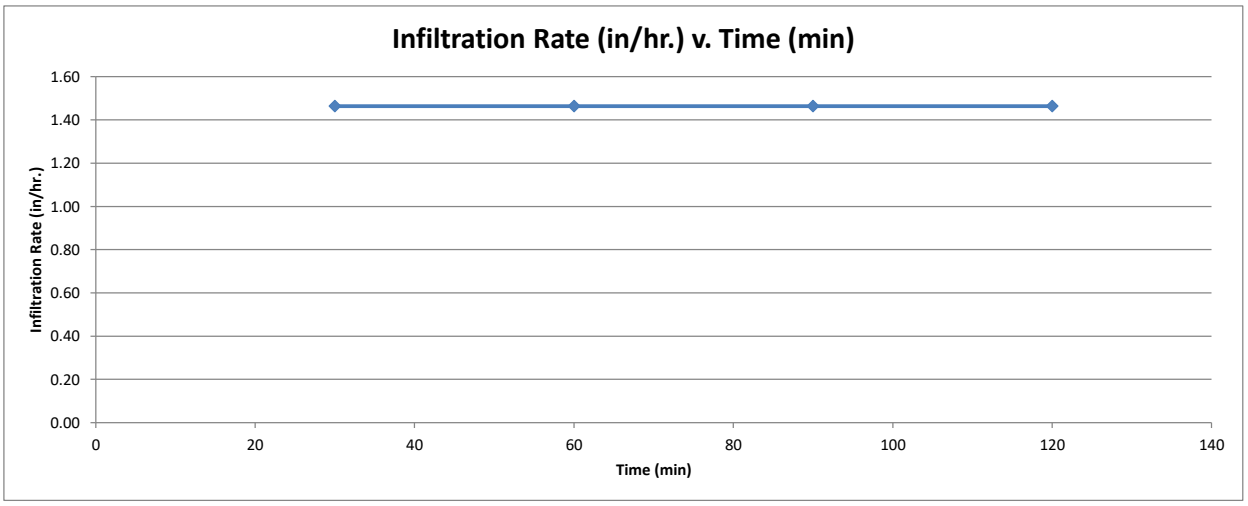
TETRA TECH

# PERCOLATION TESTS

| | | | |
|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-SB-01** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/11/2025 |
| **Surface Elevation:** | **2162 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty Sand (SM)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **12:10** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 12:40 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 13:10 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| **13:10** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 13:40 | 30 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:10 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:40 | 90 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 15:10 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.46** |
|---|---|




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

| | | | |
|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-SB-02** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/11/2025 |
| **Surface Elevation:** | **2205 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Lean Clay (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:47** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:17 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:47 | 60 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| **9:47** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:17 | 30 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| 10:47 | 60 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| 11:17 | 90 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| 11:47 | 120 | 30 | 6.00 | 5.75 | 0.25 | 0.50 | 2.18 | 0.23 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **0.41** |
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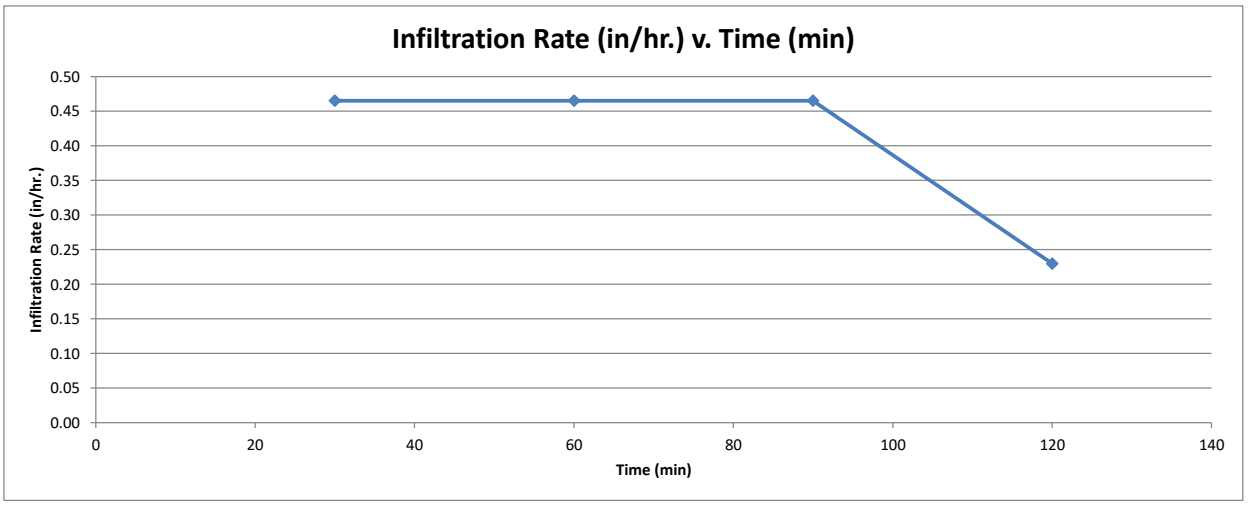


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-01** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/12/2025 |
| **Surface Elevation:** | **2217 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty, Clayey Sand (SC-SM)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **9:07** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:37 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 10:07 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| **10:07** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:37 | 30 | 30 | 6.00 | 4.75 | 1.25 | 2.50 | 2.08 | 1.20 |
| 11:07 | 60 | 30 | 6.00 | 4.75 | 1.25 | 2.50 | 2.08 | 1.20 |
| 11:37 | 90 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| 12:07 | 120 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.08** |
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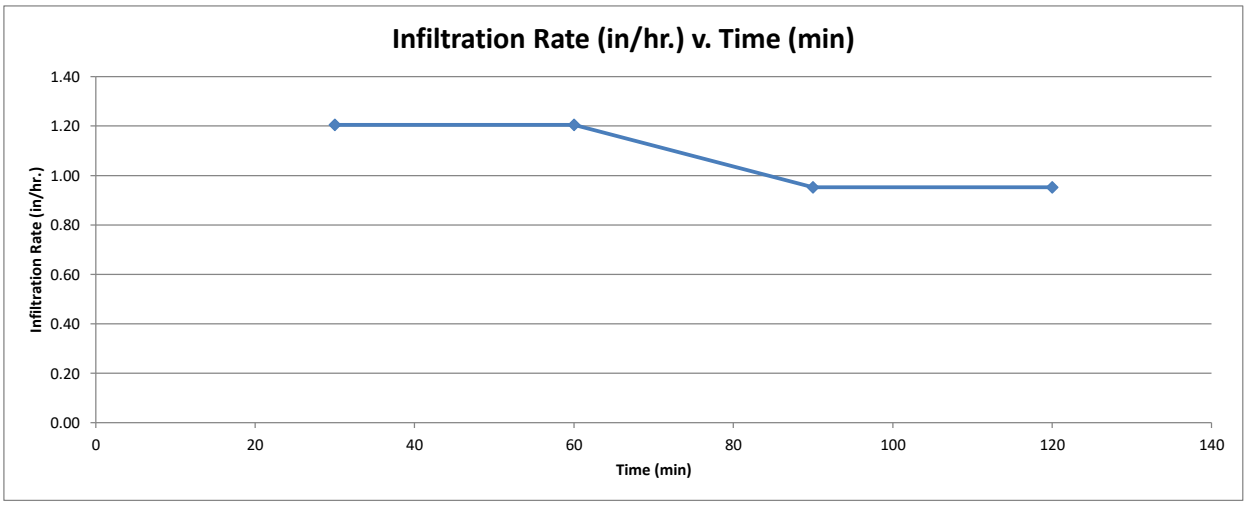


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-02** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/13/2025 |
| **Surface Elevation:** | **2361 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty, Clayey Sand (SC-SM)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:40** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:10 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:40 | 60 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| **9:40** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:10 | 30 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| 10:40 | 60 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| 11:10 | 90 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| 11:40 | 120 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
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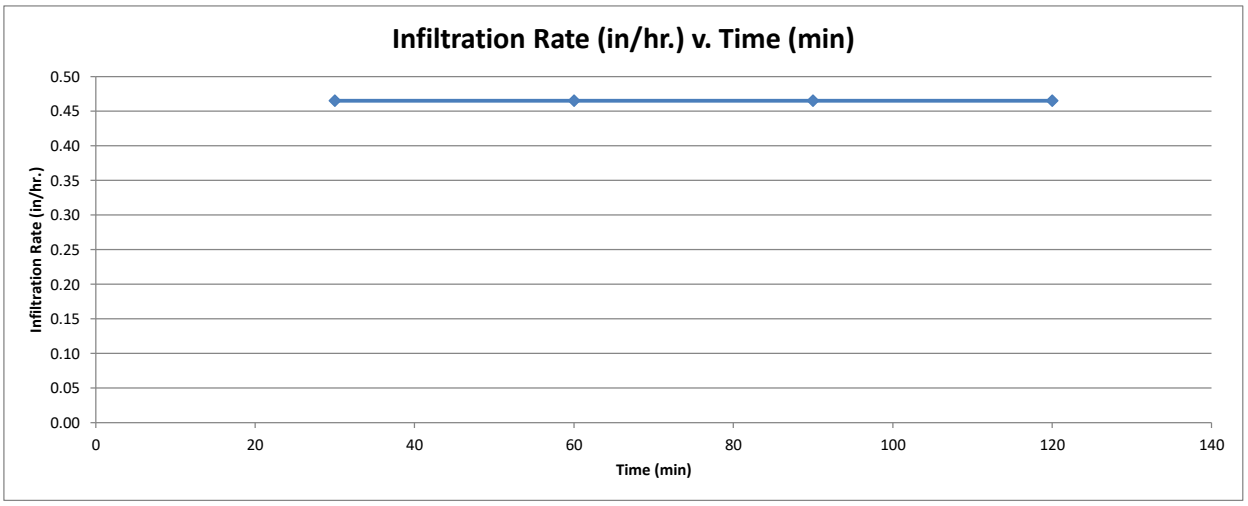
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **0.47** |




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-03** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/14/2025 |
| **Surface Elevation:** | **2328 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty, Clayey Sand (SC-SM)** | **Test Hole Depth:** | 8.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:55** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:25 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:55 | 60 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
| **9:55** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:25 | 30 | 30 | 6.00 | 5.25 | 0.75 | 1.50 | 2.13 | 0.71 |
| 10:55 | 60 | 30 | 6.00 | 5.25 | 0.75 | 1.50 | 2.13 | 0.71 |
| 11:25 | 90 | 30 | 6.00 | 5.25 | 0.75 | 1.50 | 2.13 | 0.71 |
| 11:55 | 120 | 30 | 6.00 | 5.50 | 0.50 | 1.00 | 2.15 | 0.47 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **0.65** |
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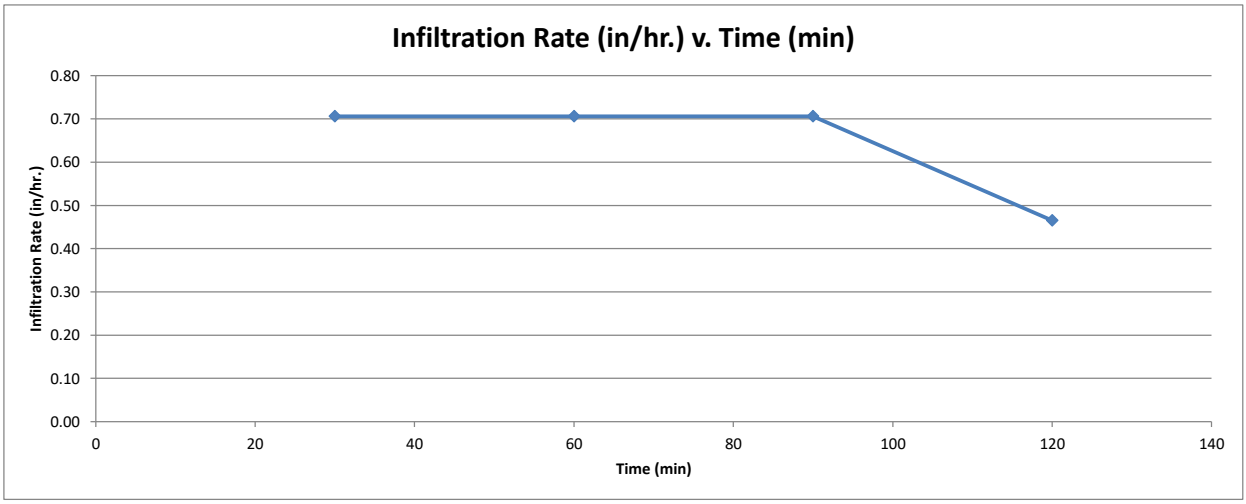


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-04** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/10/2025 |
| **Surface Elevation:** | **2404 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Lean Clay with Gravel (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:15** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 8:45 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:15 | 60 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| **9:15** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 9:45 | 30 | 30 | 6.00 | 4.75 | 1.25 | 2.50 | 2.08 | 1.20 |
| 10:15 | 60 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| 10:45 | 90 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| 11:15 | 120 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.02** |
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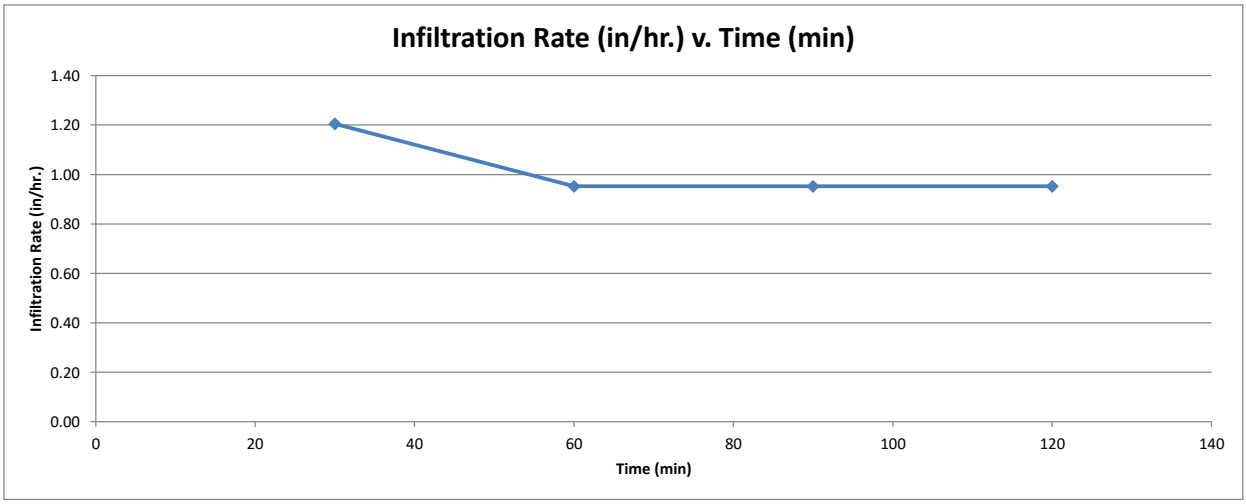


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-05** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/3/2025 |
| **Surface Elevation:** | **2343 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Clayey Sand with Gravel (SC)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **15:10** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 15:40 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 16:10 | 60 | 30 | 6.00 | 4.81 | 1.19 | 2.38 | 2.08 | 1.14 |
| **16:10** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 16:40 | 30 | 30 | 6.00 | 4.43 | 1.57 | 3.14 | 2.04 | 1.54 |
| 17:10 | 60 | 30 | 6.00 | 4.63 | 1.37 | 2.74 | 2.06 | 1.33 |
| 17:40 | 90 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 18:10 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.45** |
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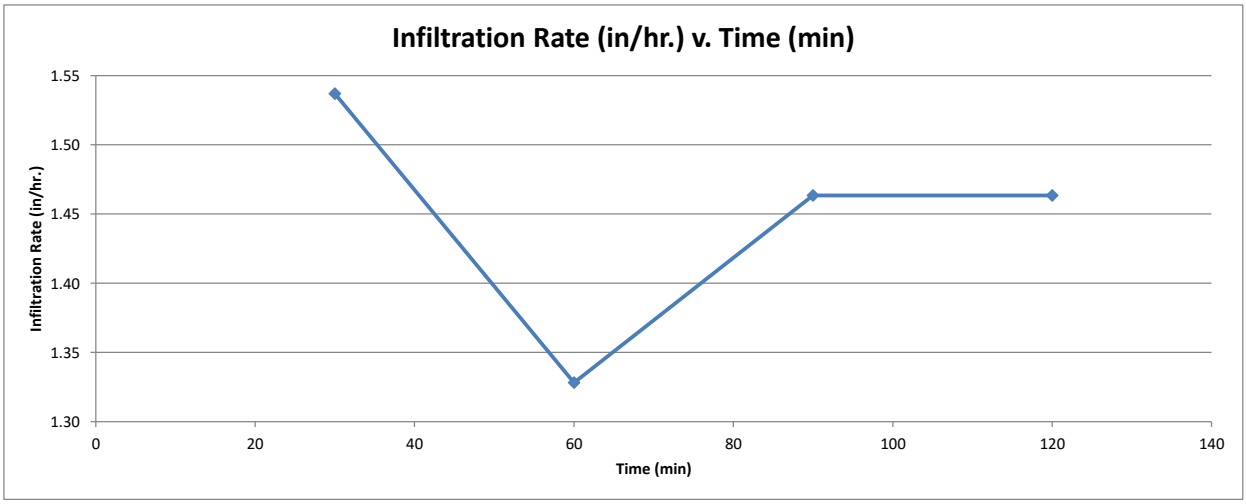


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-06** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/9/2025 |
| **Surface Elevation:** | **2253 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Lean Clay (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:05** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 8:35 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:05 | 60 | 30 | 6.00 | 0.00 | 6.00 | 12.00 | 1.60 | 7.50 |
| **9:05** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 9:15 | 10 | 10 | 6.00 | 5.25 | 0.75 | 4.50 | 2.13 | 2.12 |
| 9:25 | 20 | 10 | 6.00 | 5.25 | 0.75 | 4.50 | 2.13 | 2.12 |
| 9:35 | 30 | 10 | 6.00 | 5.25 | 0.75 | 4.50 | 2.13 | 2.12 |
| 9:45 | 40 | 10 | 6.00 | 5.25 | 0.75 | 4.50 | 2.13 | 2.12 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.12** |
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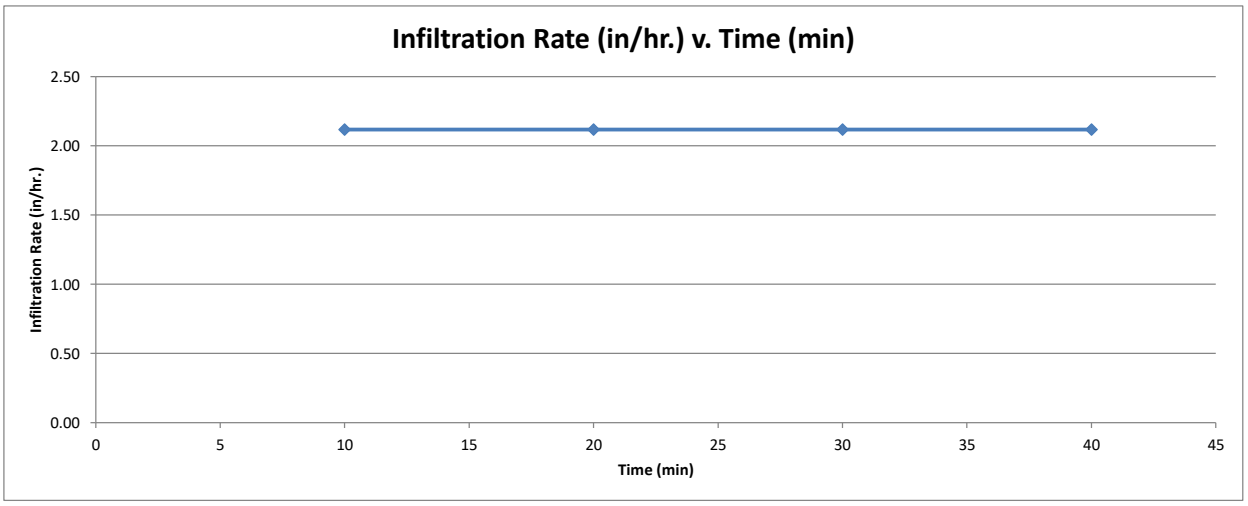


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-07** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/9/2025 |
| **Surface Elevation:** | **2483 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Lean Clay with Gravel (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **11:03** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 11:33 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 12:03 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| **12:03** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 12:33 | 30 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 13:03 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 13:33 | 90 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:03 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
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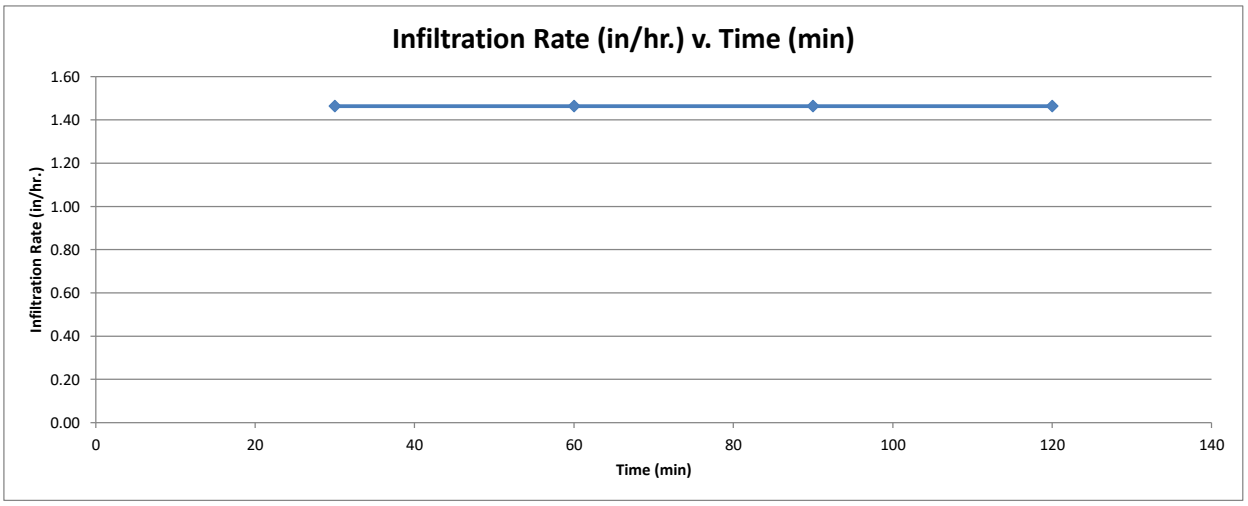
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.46** |




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-WTG-08** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/4/2025 |
| **Surface Elevation:** | **2504 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Clayey Gravel with Sand (GC)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **15:16** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 15:46 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 16:16 | 60 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| **16:16** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 16:46 | 30 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 17:16 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 17:46 | 90 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 18:16 | 120 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.00** |
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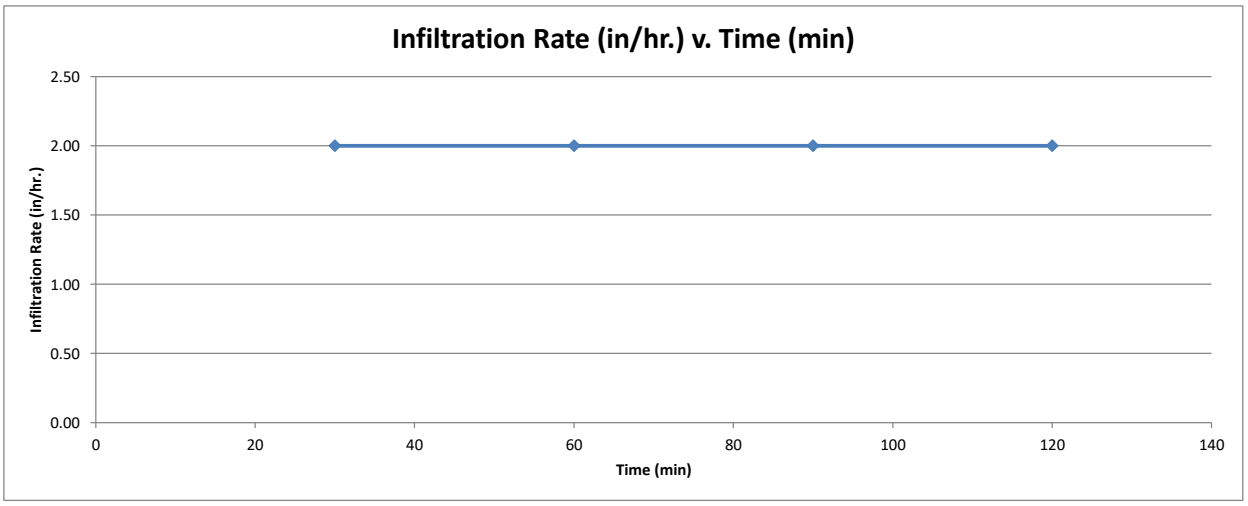


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-008** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/15/2025 |
| **Surface Elevation:** | **2258 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy, Silty Clay (CL-ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **9:37** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 10:07 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 10:37 | 60 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| **10:39** | **Percolation Testing** | | | 6.00 | -- | -- | | -- |
| 11:09 | 30 | 30 | 6.00 | 4.38 | 1.63 | 3.25 | 2.04 | 1.60 |
| 11:39 | 60 | 30 | 6.00 | 4.38 | 1.63 | 3.25 | 2.04 | 1.60 |
| 12:09 | 90 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| 12:39 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.60** |
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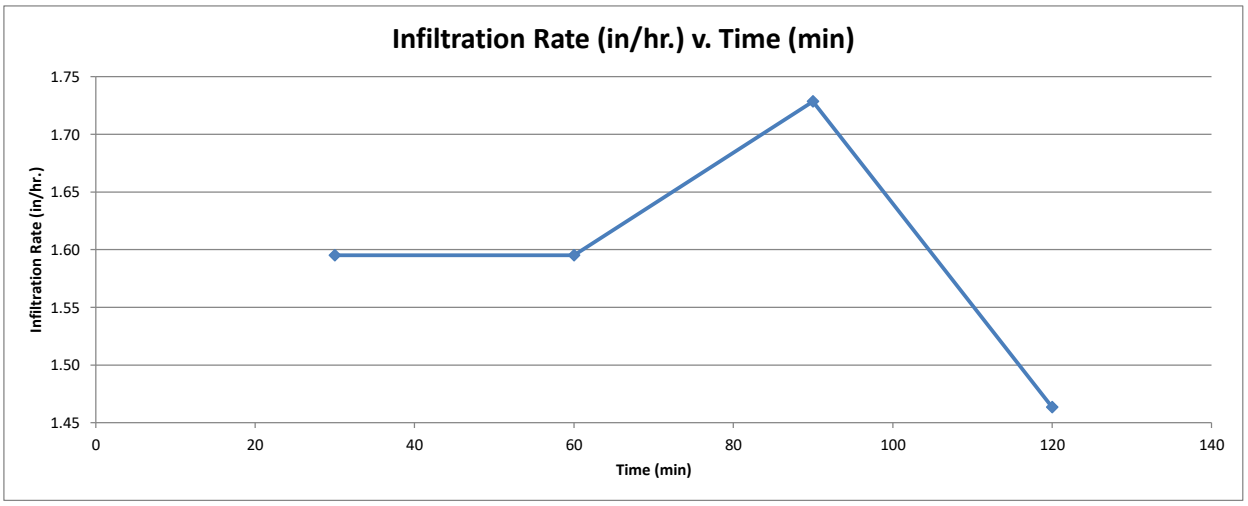


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-021** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/16/2025 |
| **Surface Elevation:** | **2349 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy, Silty Clay (CL-ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:49** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:19 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:49 | 60 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| **9:52** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:22 | 30 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| 10:52 | 60 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| 11:22 | 90 | 30 | 6.00 | 5.25 | 0.75 | 1.50 | 2.13 | 0.71 |
| 11:52 | 120 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **0.89** |
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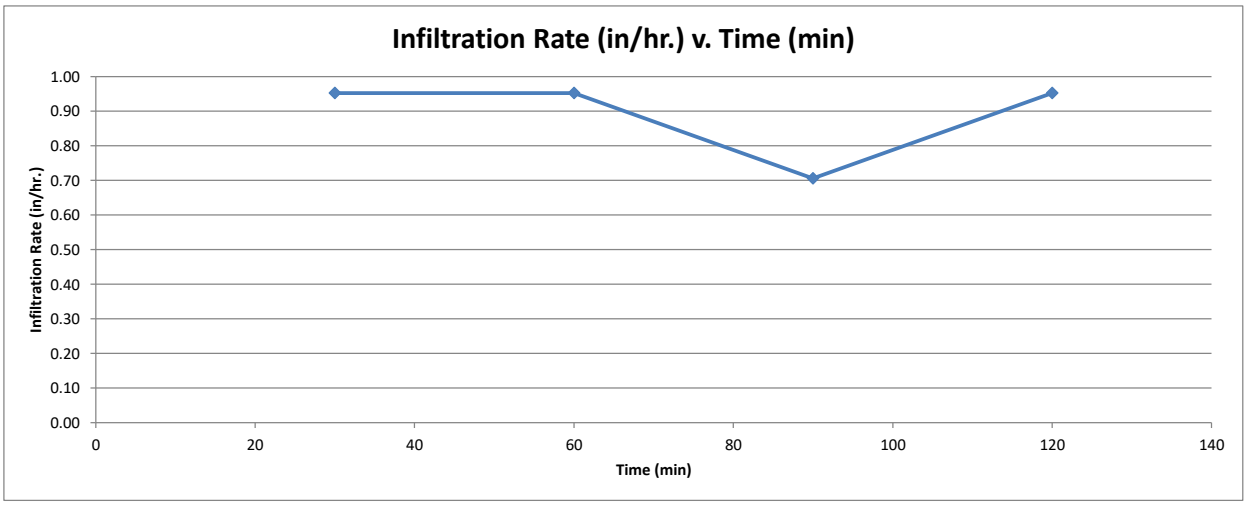


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-024** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/17/2025 |
| **Surface Elevation:** | **2330 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty, Clayey Sand (SC-SM)** | **Test Hole Depth:** | 9.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:40** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:10 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:40 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| **9:42** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:12 | 30 | 30 | 6.00 | 4.13 | 1.88 | 3.75 | 2.01 | 1.86 |
| 10:42 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 11:12 | 90 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 11:42 | 120 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.90** |
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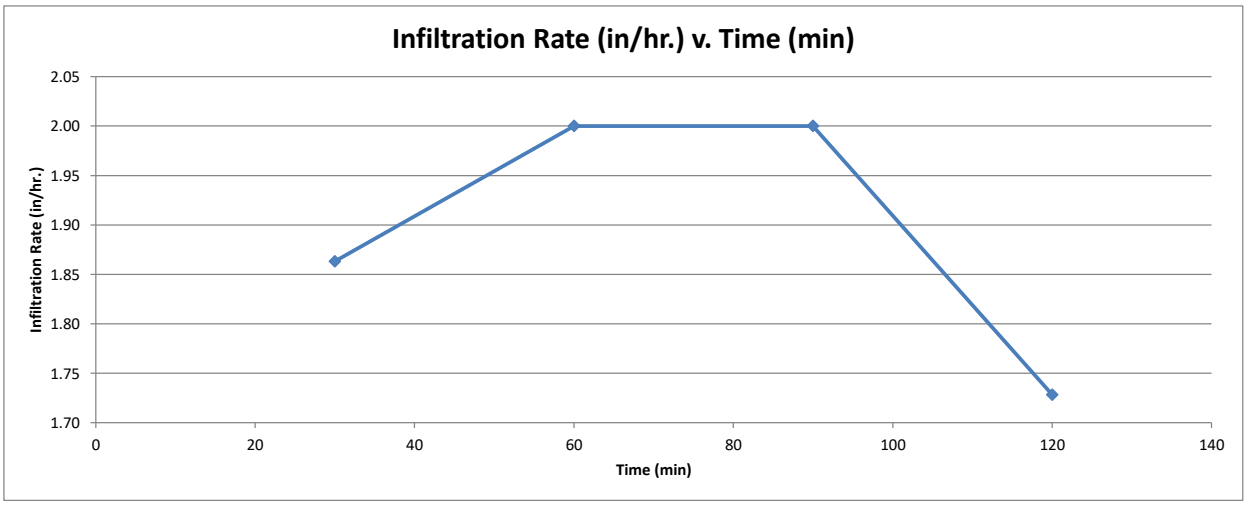


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-034** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/18/2025 |
| **Surface Elevation:** | **2293 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy, Silty Clay (CL-ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **9:06** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:36 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 10:06 | 60 | 30 | 6.00 | 3.00 | 3.00 | 6.00 | 1.90 | 3.16 |
| **10:09** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:39 | 30 | 30 | 6.00 | 3.25 | 2.75 | 5.50 | 1.93 | 2.86 |
| 11:09 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 11:39 | 90 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 12:09 | 120 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 12:39 | 150 | 30 | 6.00 | 3.94 | 2.06 | 4.12 | 1.99 | 2.07 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.02** |
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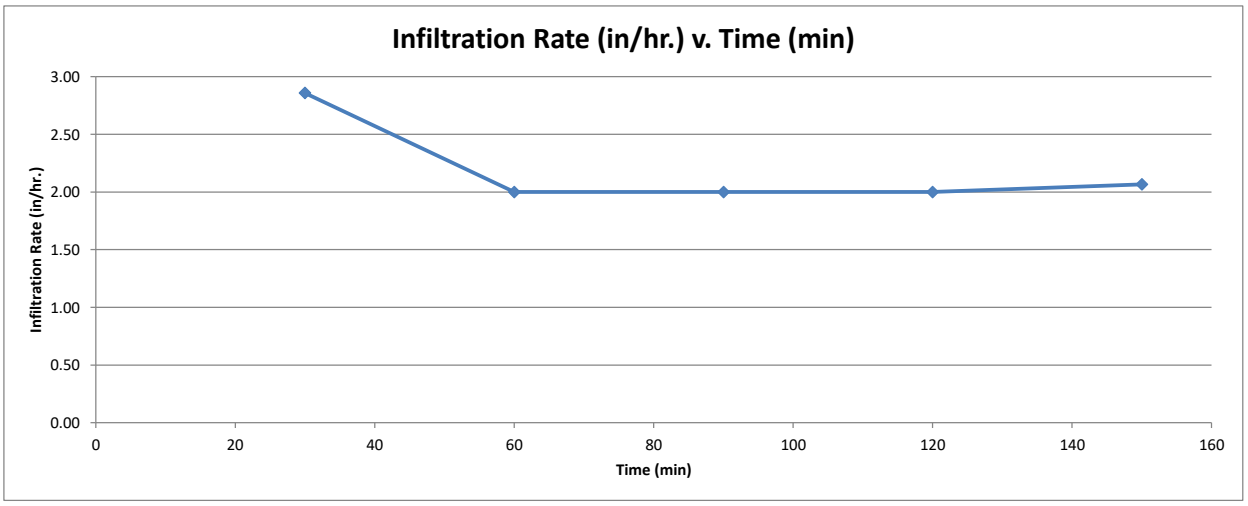


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-045** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/18/2025 |
| **Surface Elevation:** | **2309 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty Clay with Sand (CL-ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **9:45** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 10:15 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 10:45 | 60 | 30 | 6.00 | 2.94 | 3.06 | 6.12 | 1.89 | 3.23 |
| **10:47** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 11:17 | 30 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 11:47 | 60 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 12:17 | 90 | 30 | 6.00 | 3.88 | 2.12 | 4.24 | 1.99 | 2.13 |
| 12:47 | 120 | 30 | 6.00 | 3.84 | 2.16 | 4.32 | 1.98 | 2.18 |
| 13:17 | 150 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 13:47 | 180 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.08** |
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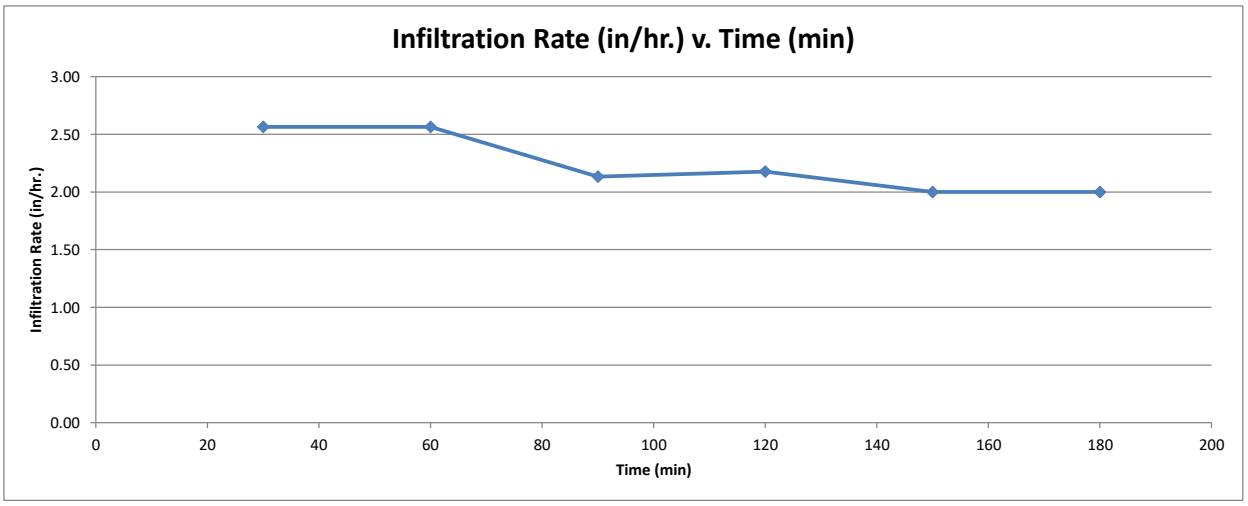


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-058** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/20/2025 |
| **Surface Elevation:** | **2365 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Silt with Gravel (ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **1:07** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 1:37 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 2:07 | 60 | 30 | 6.00 | 4.63 | 1.38 | 2.75 | 2.06 | 1.33 |
| **2:07** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 2:37 | 30 | 30 | 6.00 | 4.75 | 1.25 | 2.50 | 2.08 | 1.20 |
| 3:07 | 60 | 30 | 6.00 | 4.75 | 1.25 | 2.50 | 2.08 | 1.20 |
| 3:37 | 90 | 30 | 6.00 | 4.88 | 1.13 | 2.25 | 2.09 | 1.08 |
| 4:07 | 120 | 30 | 6.00 | 4.88 | 1.13 | 2.25 | 2.09 | 1.08 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.14** |
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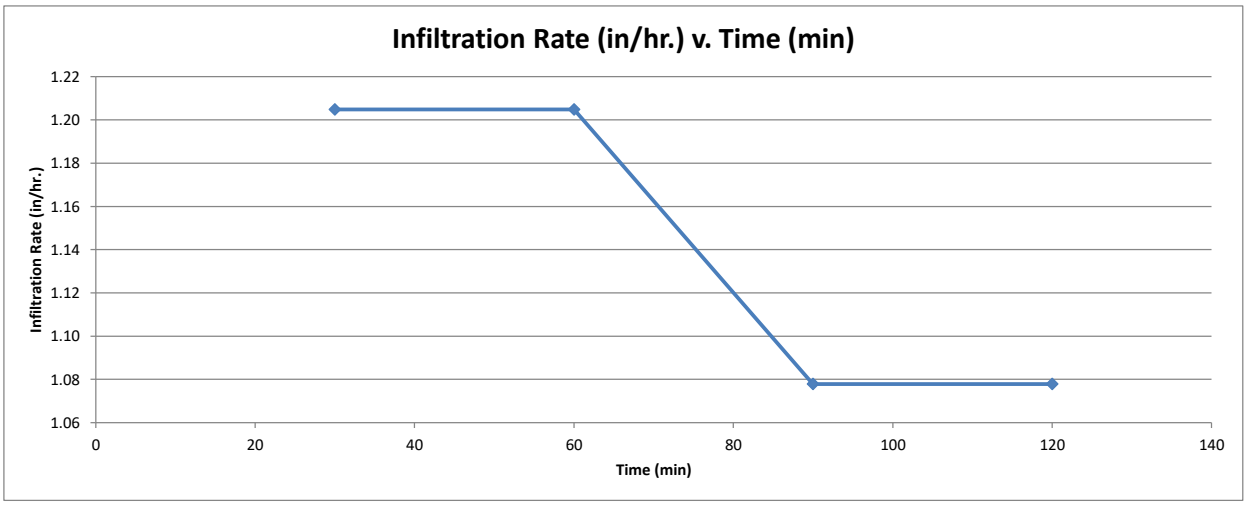


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-079** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/21/2025 |
| **Surface Elevation:** | **2268 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Lean Clay with Sand (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:05** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 8:35 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:05 | 60 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| **9:05** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 9:35 | 30 | 30 | 6.00 | 5.13 | 0.88 | 1.75 | 2.11 | 0.83 |
| 10:05 | 60 | 30 | 6.00 | 5.38 | 0.63 | 1.25 | 2.14 | 0.58 |
| 10:35 | 90 | 30 | 6.00 | 5.38 | 0.63 | 1.25 | 2.14 | 0.58 |
| 11:05 | 120 | 30 | 6.00 | 5.38 | 0.63 | 1.25 | 2.14 | 0.58 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **0.65** |
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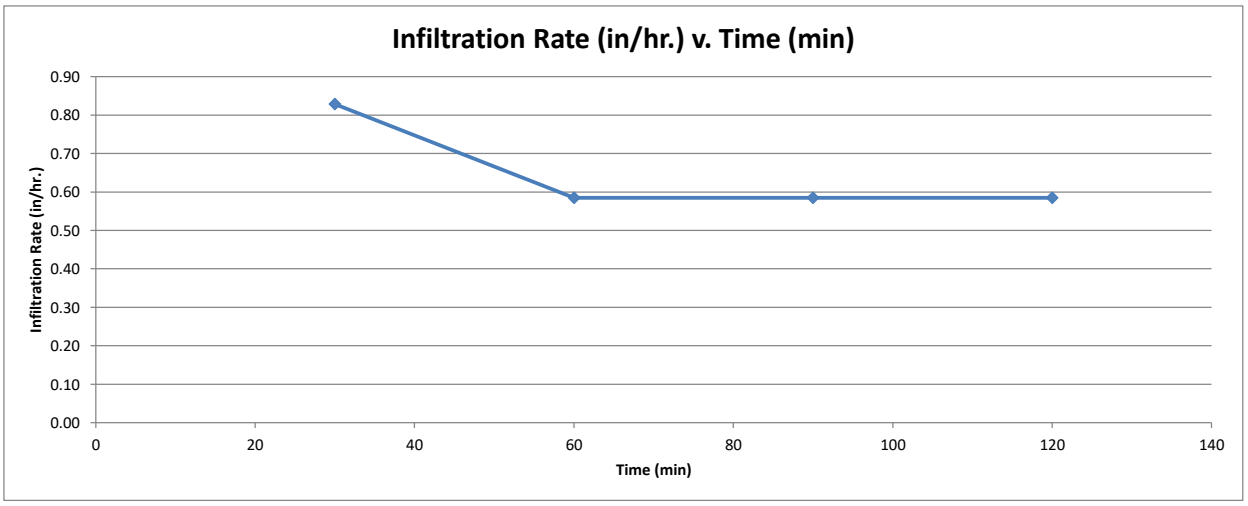


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-089** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/21/2025 |
| **Surface Elevation:** | **2388 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy, Silty Clay (CL-ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **11:38** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 12:08 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 12:38 | 60 | 30 | 6.00 | 4.38 | 1.63 | 3.25 | 2.04 | 1.60 |
| **12:38** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 13:08 | 30 | 30 | 6.00 | 4.88 | 1.13 | 2.25 | 2.09 | 1.08 |
| 13:38 | 60 | 30 | 6.00 | 4.88 | 1.13 | 2.25 | 2.09 | 1.08 |
| 14:08 | 90 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
| 14:38 | 120 | 30 | 6.00 | 5.00 | 1.00 | 2.00 | 2.10 | 0.95 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.02** |
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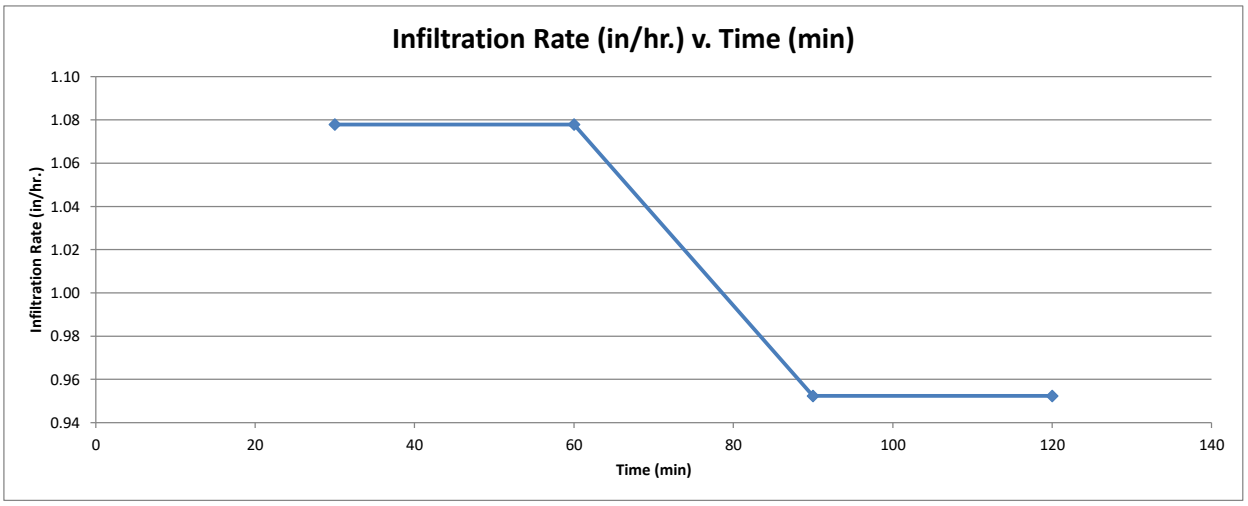


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-100** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/22/2025 |
| **Surface Elevation:** | **2412 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Lean Clay with Sand (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:30** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 9:00 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:30 | 60 | 30 | 6.00 | 5.63 | 0.38 | 0.75 | 2.16 | 0.35 |
| **9:30** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 10:00 | 30 | 30 | 6.00 | 5.63 | 0.38 | 0.75 | 2.16 | 0.35 |
| 10:30 | 60 | 30 | 6.00 | 5.63 | 0.38 | 0.75 | 2.16 | 0.35 |
| 11:00 | 90 | 30 | 6.00 | 5.63 | 0.38 | 0.75 | 2.16 | 0.35 |
| 11:30 | 120 | 30 | 6.00 | 5.63 | 0.38 | 0.75 | 2.16 | 0.35 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **0.35** |
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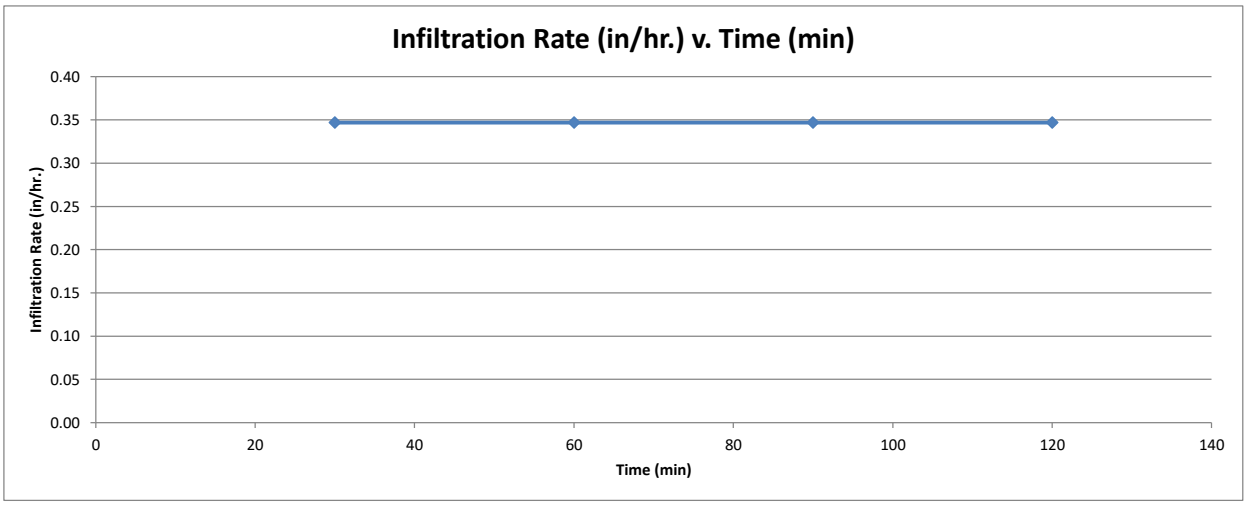


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-114** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/22/2025 |
| **Surface Elevation:** | **2434 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty Sand (SM)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **12:00** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 12:30 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 13:00 | 60 | 30 | 6.00 | 3.63 | 2.38 | 4.75 | 1.96 | 2.42 |
| **13:00** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 13:30 | 30 | 30 | 6.00 | 3.88 | 2.13 | 4.25 | 1.99 | 2.14 |
| 14:00 | 60 | 30 | 6.00 | 3.88 | 2.13 | 4.25 | 1.99 | 2.14 |
| 14:30 | 90 | 30 | 6.00 | 3.88 | 2.13 | 4.25 | 1.99 | 2.14 |
| 15:00 | 120 | 30 | 6.00 | 3.88 | 2.13 | 4.25 | 1.99 | 2.14 |
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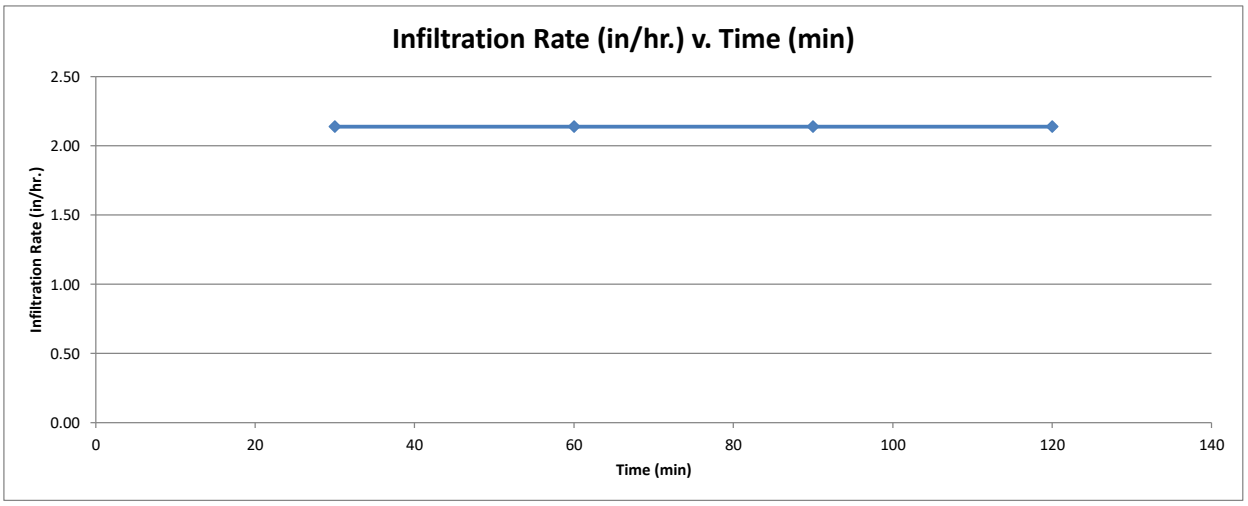
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.14** |
|---|---|




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-123** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/24/2025 |
| **Surface Elevation:** | **2389 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Silt (ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:15** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 8:45 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:15 | 60 | 30 | 6.00 | 4.13 | 1.88 | 3.75 | 2.01 | 1.86 |
| **9:15** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 9:45 | 30 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 10:15 | 60 | 30 | 6.00 | 4.63 | 1.38 | 2.75 | 2.06 | 1.33 |
| 10:45 | 90 | 30 | 6.00 | 4.63 | 1.38 | 2.75 | 2.06 | 1.33 |
| 11:15 | 120 | 30 | 6.00 | 4.75 | 1.25 | 2.50 | 2.08 | 1.20 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.33** |
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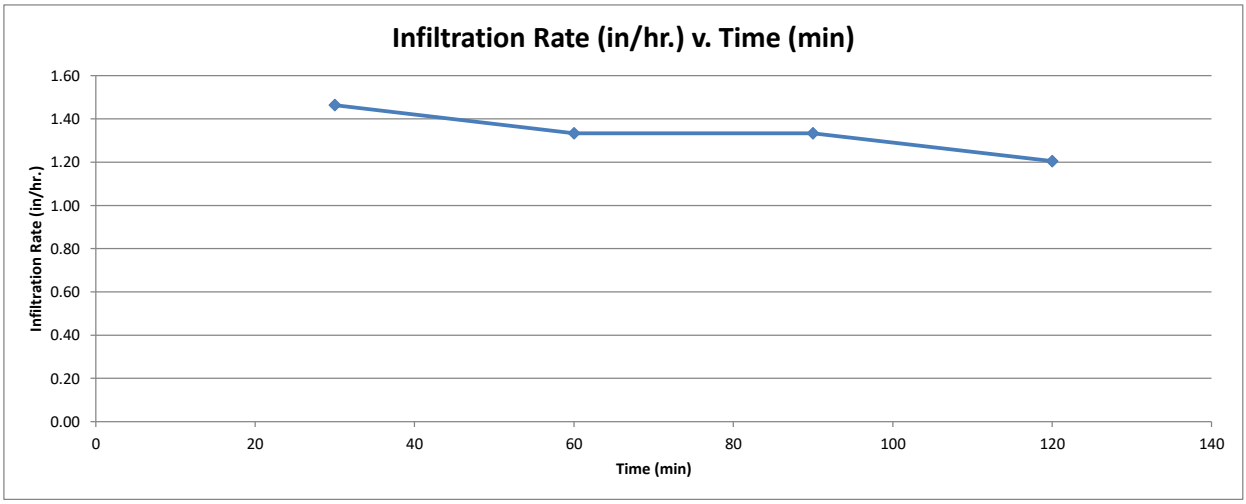


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-132** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/3/2025 |
| **Surface Elevation:** | **2337 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty, Clayey Sand with Gravel (SC-SM)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **10:50** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 11:20 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 11:50 | 60 | 30 | 6.00 | 4.13 | 1.87 | 3.74 | 2.01 | 1.86 |
| **11:50** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 12:20 | 30 | 30 | 6.00 | 4.13 | 1.87 | 3.74 | 2.01 | 1.86 |
| 12:50 | 60 | 30 | 6.00 | 4.38 | 1.62 | 3.24 | 2.04 | 1.59 |
| 13:20 | 90 | 30 | 6.00 | 4.18 | 1.82 | 3.64 | 2.02 | 1.80 |
| 13:50 | 120 | 30 | 6.00 | 4.44 | 1.56 | 3.12 | 2.04 | 1.53 |
| 14:20 | 150 | 30 | 6.00 | 4.44 | 1.56 | 3.12 | 2.04 | 1.53 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.61** |
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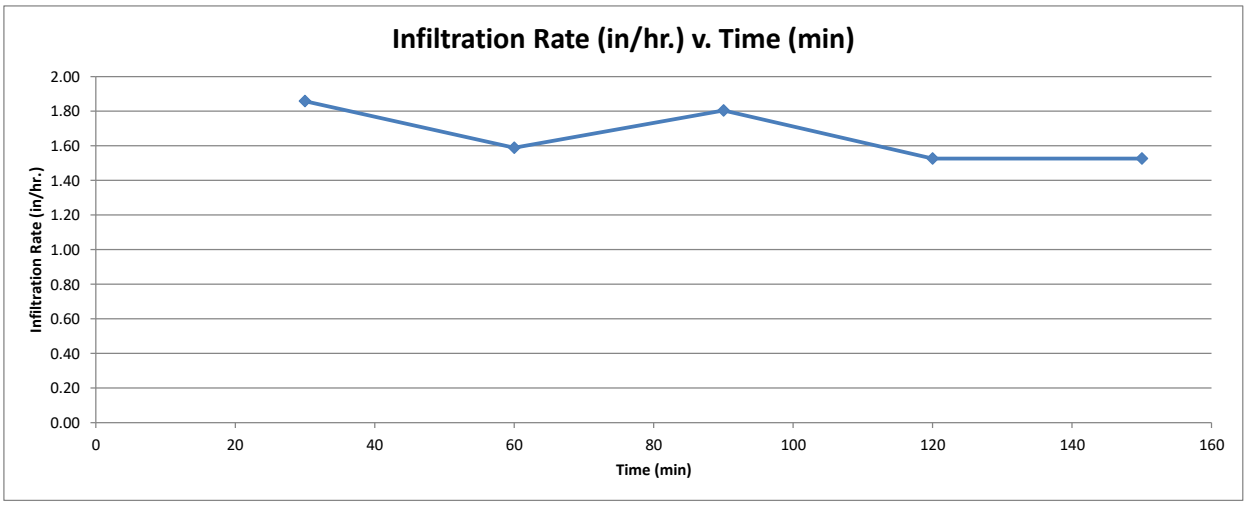


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-144** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 9/28/2025 |
| **Surface Elevation:** | **2322 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy, Silty Clay (CL-ML)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **12:29** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 12:59 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 13:29 | 60 | 30 | 6.00 | 3.06 | 2.94 | 5.88 | 1.91 | 3.08 |
| **13:30** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 14:00 | 30 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 14:30 | 60 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 15:00 | 90 | 30 | 6.00 | 3.25 | 2.75 | 5.50 | 1.93 | 2.86 |
| 15:30 | 120 | 30 | 6.00 | 3.75 | 2.25 | 4.50 | 1.98 | 2.28 |
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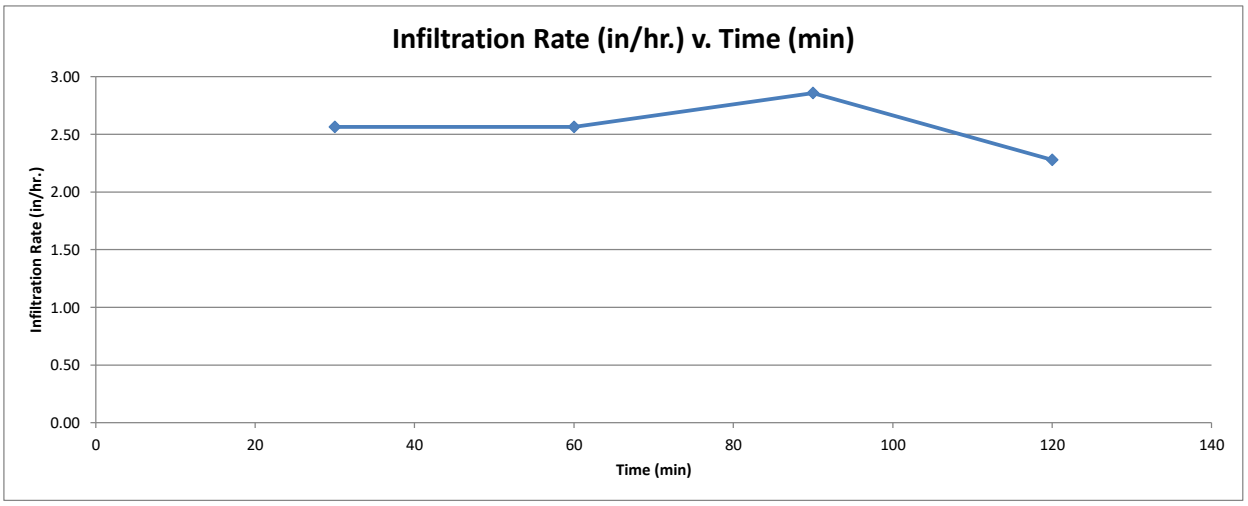
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.57** |




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-151** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/6/2025 |
| **Surface Elevation:** | **2333 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Gravelly Lean Clay with Sand (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **15:00** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 15:30 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 16:00 | 60 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| **16:00** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 16:30 | 30 | 30 | 6.00 | 3.75 | 2.25 | 4.50 | 1.98 | 2.28 |
| 17:00 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 17:30 | 90 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 18:00 | 120 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.07** |
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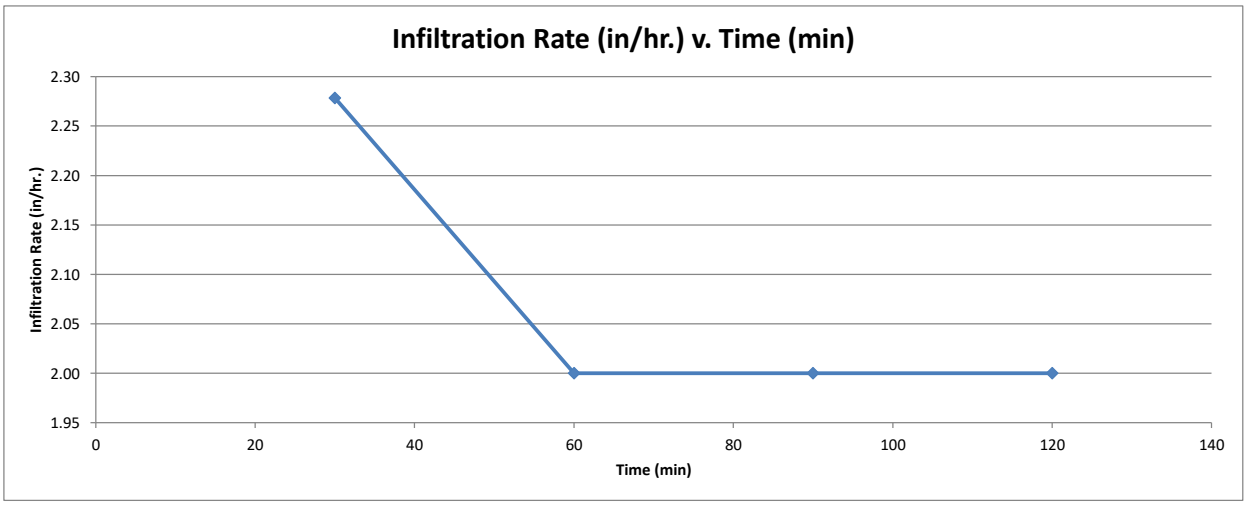


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-164** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/6/2025 |
| **Surface Elevation:** | **2278 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Lean Clay with Sand (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **11:00** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 11:30 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 12:00 | 60 | 30 | 6.00 | 3.75 | 2.25 | 4.50 | 1.98 | 2.28 |
| **12:00** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 12:30 | 30 | 30 | 6.00 | 3.88 | 2.13 | 4.25 | 1.99 | 2.14 |
| 13:00 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 13:30 | 90 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 14:00 | 120 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.03** |
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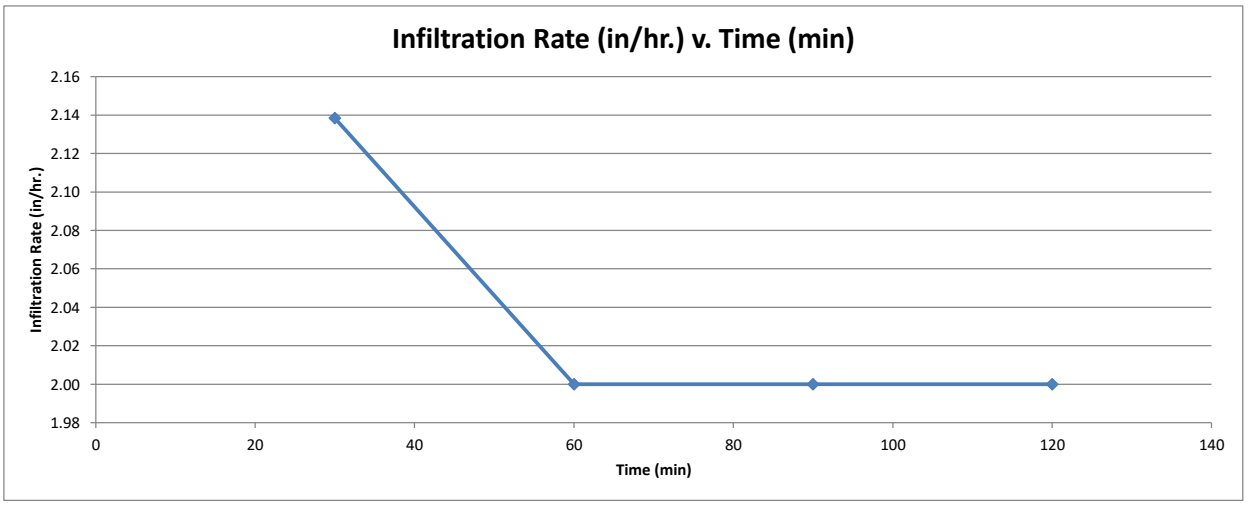


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-178** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/7/2025 |
| **Surface Elevation:** | **2385 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Silty Clayey Sand with Gravel (SC-SM)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **9:30** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 10:00 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 10:30 | 60 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| **10:33** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 11:03 | 30 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 11:33 | 60 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| 12:03 | 90 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| 12:33 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 13:03 | 150 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 13:33 | 180 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:03 | 210 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:33 | 240 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.46** |
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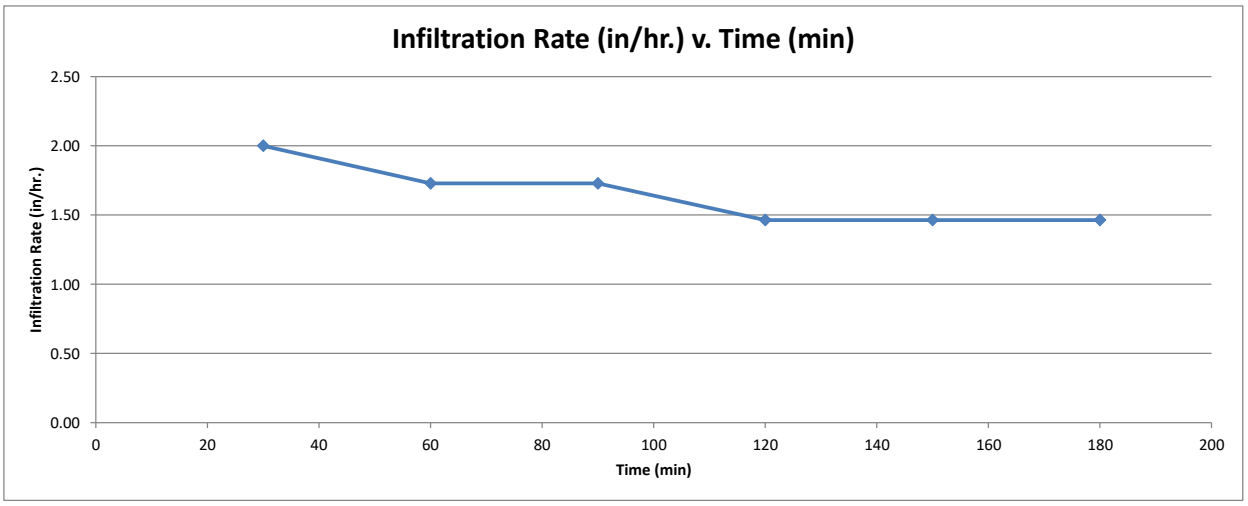


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-183** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/8/2025 |
| **Surface Elevation:** | **2420 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Lean Clay (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **8:06** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 8:36 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 9:06 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| **9:06** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 9:36 | 30 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 10:06 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 10:36 | 90 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 11:06 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
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| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.46** |
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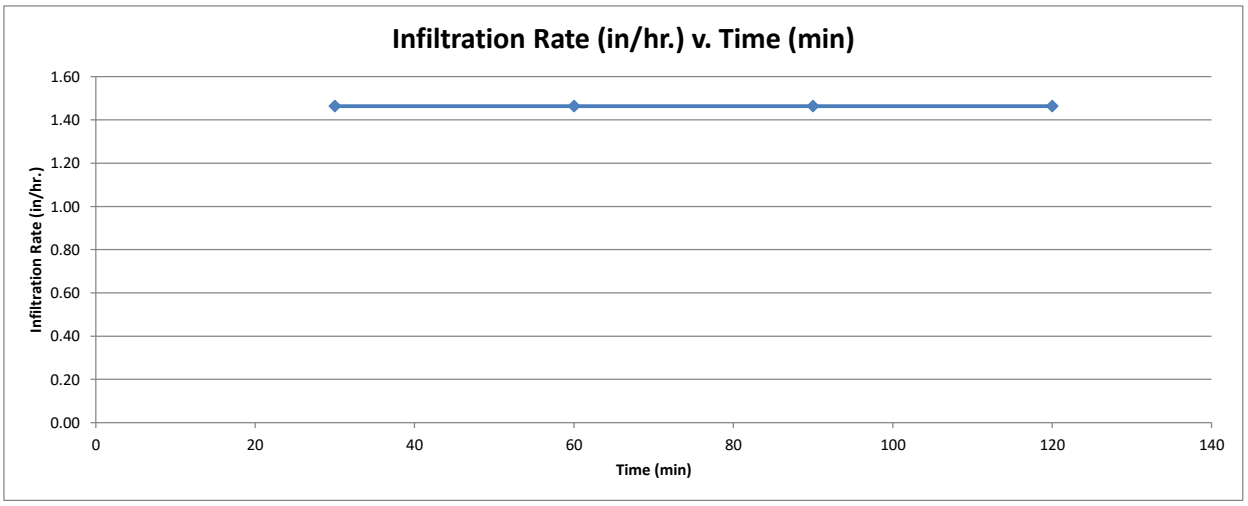


**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

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|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-198** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/8/2025 |
| **Surface Elevation:** | **2404 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Sandy Lean Clay (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **11:58** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 12:28 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 12:58 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| **12:58** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 13:28 | 30 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 13:58 | 60 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:28 | 90 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
| 14:58 | 120 | 30 | 6.00 | 4.50 | 1.50 | 3.00 | 2.05 | 1.46 |
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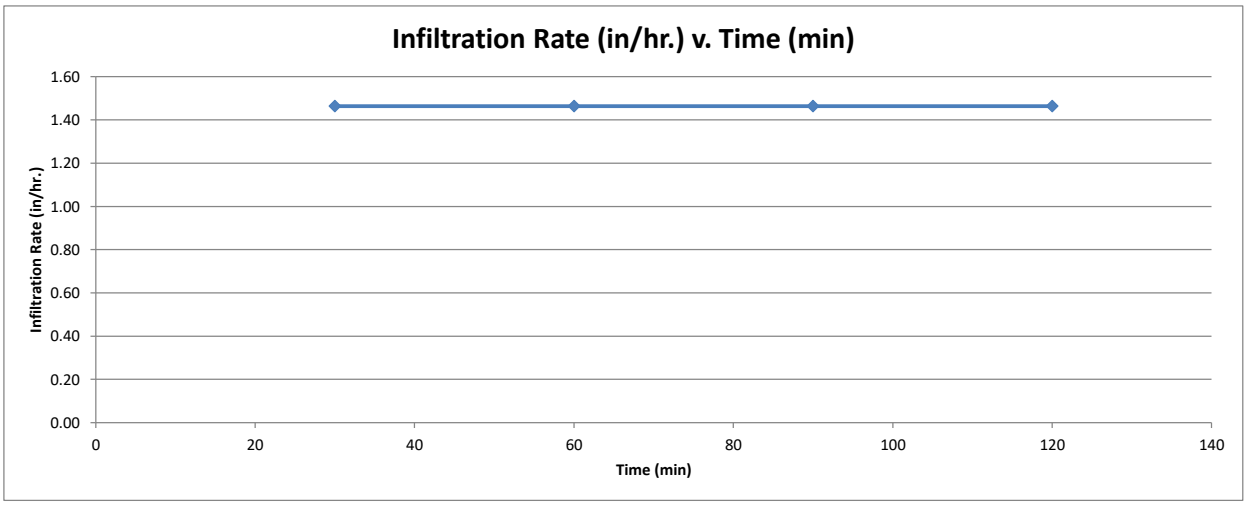
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.46** |
|---|---|




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

| | | | |
|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-207** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/5/2025 |
| **Surface Elevation:** | **2462 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Lean Clay with Sand (CL)** | **Test Hole Depth:** | 10.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **10:50** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 11:20 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 11:50 | 60 | 30 | 6.00 | 3.81 | 2.19 | 4.38 | 1.98 | 2.21 |
| **11:50** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 12:20 | 30 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 12:50 | 60 | 30 | 6.00 | 4.00 | 2.00 | 4.00 | 2.00 | 2.00 |
| 13:20 | 90 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
| 13:50 | 120 | 30 | 6.00 | 4.25 | 1.75 | 3.50 | 2.03 | 1.73 |
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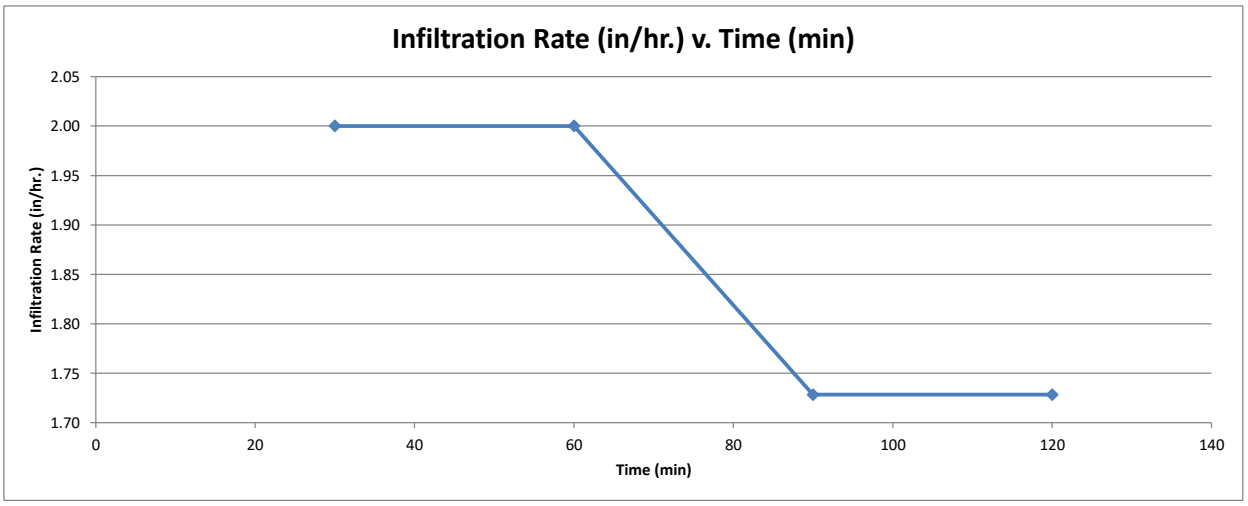
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **1.86** |
|---|---|




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

TETRA TECH

# PERCOLATION TESTS

| | | | |
|---|---|---|---|
| **PROJECT:** | **SPEEDWAY SOLAR GEOTECHNICAL EXPLORATION** | **Test No.** | **IT-PV-214** |
| **LOCATION:** | **GRASS VALLEY, SHERMAN COUNTY, OREGON** | **Test Date:** | 10/4/2025 |
| **Surface Elevation:** | **2410 feet** | **Test Hole Diameter:** | 10.0 in |
| **Soil Type at Test Depth:** | **Clayey Sand with Gravel (SC)** | **Test Hole Depth:** | 12.0 in |
| **Test Type:** | Percolation Test using Reduction Factor | | |

| Clock Time | Time (min) | Δ time (min) | Initial Water Depth, $d_i$ (in) | Final Water Depth, $d_f$ (in) | Water Drop Depth, Δd (in) | Percolation Rate k (in/hr) | Reduction Factor, $R_f$ | Infiltration Rate K (in/hr) |
|---|---|---|---|---|---|---|---|---|
| **11:30** | **Presoaking** | | | 6.00 | -- | -- | | -- |
| 12:00 | 30 | 30 | 6.00 | 6.00 | 0.00 | 0.00 | 2.20 | 0.00 |
| 12:30 | 60 | 30 | 6.00 | 3.25 | 2.75 | 5.50 | 1.93 | 2.86 |
| **12:30** | **Percolation Testing** | | | 6.00 | -- | -- | -- | -- |
| 13:00 | 30 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 13:30 | 60 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 14:00 | 90 | 30 | 6.00 | 3.50 | 2.50 | 5.00 | 1.95 | 2.56 |
| 14:30 | 120 | 30 | 6.00 | 3.75 | 2.25 | 4.50 | 1.98 | 2.28 |
| | | | | | | | | |
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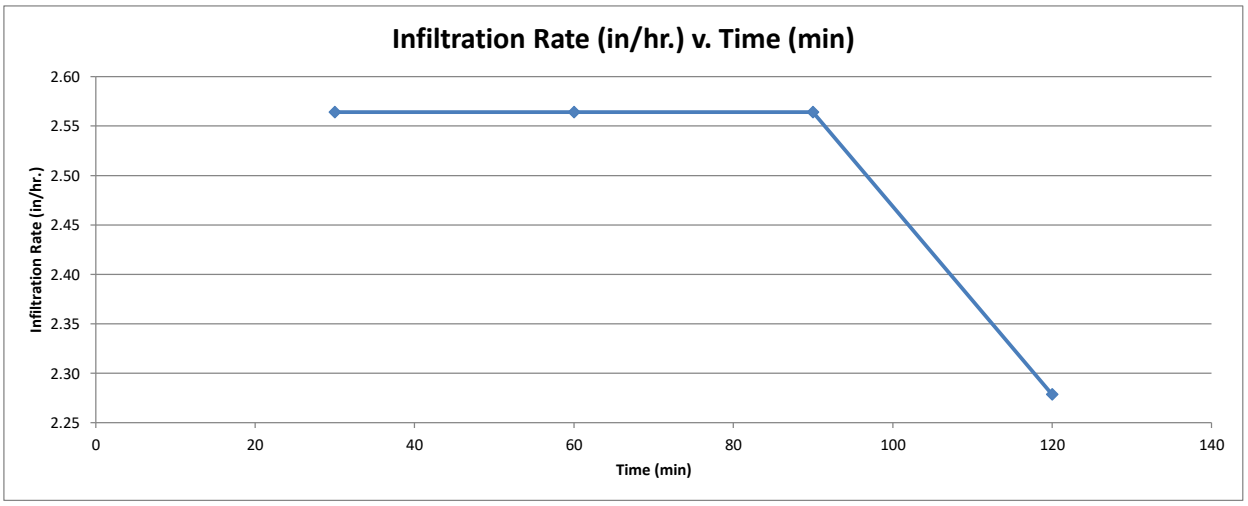
| **Average Design Infiltration Rate over last 4 readings (in/hr):** | **2.49** |
|---|---|




**PREPARATION:**

(1) Perform field percolation test using reduction factor method in accordance with Oregon State requirements. https://extension.oregonstate.edu/sites/extd8/files/documents/12281/infiltration-testing-fact-sheet.pdf
(2) Dig a test hole 6 to 10 inches in diameters and 8 to 12 inches in depth using posthole digger or shovel.
(3) Pre-soak the open hole for an hour in total then measure infiltration rates at 30 minutes intervals.
(4) Measure at least 6 inches above the soil surface in the pit and mark this level with a nail, stake, or pencil.

**PRESOAKING:**

(1) Fill the hole with water to the marker level.
(2) Keep filling the hole as needed to maintain the approximately 6-inch water depth for the next 30 minutes.
(3) In the last 30 minutes of the soaking hour, do not add water.
(4) If the pit contains no water after 30 minutes, use a 10-minute measurement interval for testing.
(5) If water remains in the pit, use a 30-minute interval.

**TESTING:**

(1) Refill the hole to the marked water depth. Using the established interval times (i.e., 10-mins or 30-mins intervals) and from a fixed reference, measure and record the drop in water level.
(2) After each recording, stop the timer, refill the pit to the marker level and restart the timer.
(3) When eight readings have been collected, or when the drop in water level stabilizes (when the highest and lowest measurement within four consecutive readings is no more than a ¼-inch difference), no more measurements are required.

# Appendix E: Electrical Resistivity Testing Results

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025 - 11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 | 75 | 100 | 200 |
| ERT-SB-01 | N-S | Measured Resistance (Ω) | **8** | 40.57 | 15.35 | 10.36 | 5.64 | 2.92 | 1.80 | 1.86 | 1.62 | 1.49 | 1.17 |
| | | Apparent Resistivity (Ω-m) | **153** | 77.69 | 58.80 | 59.53 | 53.95 | 55.93 | 86.17 | 177.85 | 228.66 | 285.02 | 446.53 |
| | E-W | Measured Resistance (Ω) | **7** | 33.54 | 11.21 | 9.84 | 5.27 | 2.76 | 2.02 | 1.68 | 1.54 | 1.37 | 1.27 |
| | | Apparent Resistivity (Ω-m) | **149** | 64.22 | 42.95 | 56.51 | 50.44 | 52.85 | 96.47 | 160.81 | 220.77 | 261.61 | 486.77 |
| ERT-SB-02 | N-S | Measured Resistance (Ω) | **10** | 44.55 | 13.76 | 11.72 | 9.10 | 6.62 | 3.91 | 2.22 | 1.90 | 1.56 | 1.13 |
| | | Apparent Resistivity (Ω-m) | **182** | 85.31 | 52.70 | 67.33 | 87.11 | 126.71 | 187.36 | 212.57 | 272.19 | 299.59 | 431.90 |
| | E-W | Measured Resistance (Ω) | **8** | 33.52 | 12.92 | 9.81 | 8.53 | 6.63 | 3.72 | 1.88 | 1.89 | 1.38 | 1.14 |
| | | Apparent Resistivity (Ω-m) | **168** | 64.19 | 49.47 | 56.33 | 81.69 | 126.86 | 177.88 | 180.23 | 239.76 | 265.05 | 436.78 |
| ERT-WTG-01 | N-S | Measured Resistance (Ω) | **12** | 63.18 | 23.58 | 13.89 | 8.34 | 4.54 | 2.28 | 1.57 | 1.34 | 1.17 | 0.86 |
| | | Apparent Resistivity (Ω-m) | **146** | 121.01 | 90.34 | 79.83 | 79.86 | 86.96 | 109.15 | 150.66 | 192.15 | 224.88 | 327.66 |
| | E-W | Measured Resistance (Ω) | **12** | 64.48 | 23.06 | 14.21 | 8.51 | 4.54 | 2.38 | 1.72 | 1.44 | 1.30 | 0.87 |
| | | Apparent Resistivity (Ω-m) | **153** | 123.47 | 88.33 | 81.66 | 81.44 | 86.99 | 113.93 | 164.23 | 206.04 | 248.20 | 332.23 |
| ERT-WTG-02 | N-S | Measured Resistance (Ω) | **10** | 54.69 | 20.74 | 12.25 | 6.49 | 3.83 | 2.05 | 1.38 | 1.08 | 0.88 | 0.61 |
| | | Apparent Resistivity (Ω-m) | **118** | 104.73 | 79.43 | 70.35 | 62.18 | 73.30 | 98.18 | 132.22 | 154.44 | 168.22 | 234.51 |
| | E-W | Measured Resistance (Ω) | **10** | 49.46 | 21.67 | 11.40 | 6.91 | 3.74 | 1.94 | 1.38 | 1.08 | 0.93 | 0.56 |
| | | Apparent Resistivity (Ω-m) | **116** | 94.73 | 83.00 | 65.50 | 66.11 | 71.69 | 92.81 | 132.56 | 155.30 | 177.49 | 215.89 |
| ERT-WTG-03 | N-S | Measured Resistance (Ω) | **21** | 123.10 | 36.36 | 23.47 | 14.96 | 4.00 | 1.40 | 1.14 | 1.11 | 1.15 | 1.01 |
| | | Apparent Resistivity (Ω-m) | **167** | 235.82 | 139.20 | 134.84 | 143.26 | 76.69 | 66.93 | 109.18 | 160.05 | 219.91 | 385.27 |
| | E-W | Measured Resistance (Ω) | **22** | 120.00 | 50.83 | 24.32 | 12.74 | 3.92 | 1.31 | 1.18 | 1.15 | 1.18 | 1.09 |
| | | Apparent Resistivity (Ω-m) | **175** | 229.85 | 194.68 | 139.72 | 121.95 | 75.01 | 62.58 | 112.59 | 165.75 | 226.41 | 417.88 |
| ERT-WTG-04 | N-S | Measured Resistance (Ω) | **6** | 27.35 | 10.03 | 7.69 | 5.13 | 3.68 | 2.23 | 1.41 | 0.99 | 0.76 | 0.35 |
| | | Apparent Resistivity (Ω-m) | **92** | 52.40 | 38.44 | 44.20 | 49.07 | 70.53 | 106.50 | 135.00 | 141.52 | 145.63 | 135.79 |
| | E-W | Measured Resistance (Ω) | **6** | 30.91 | 11.02 | 7.85 | 5.04 | 3.71 | 2.24 | 1.43 | 0.47 | 0.75 | 0.39 |
| | | Apparent Resistivity (Ω-m) | **87** | 59.19 | 42.21 | 45.08 | 48.25 | 70.96 | 106.98 | 136.58 | 67.91 | 144.57 | 148.89 |
| ERT-WTG-05 | N-S | Measured Resistance (Ω) | **19** | 126.20 | 34.47 | 13.02 | 8.85 | 4.74 | 2.23 | 1.08 | 0.66 | 0.46 | 0.22 |
| | | Apparent Resistivity (Ω-m) | **110** | 241.58 | 132.04 | 74.80 | 84.76 | 90.83 | 106.68 | 103.66 | 95.46 | 87.57 | 82.39 |
| | E-W | Measured Resistance (Ω) | **20** | 138.80 | 26.38 | 16.01 | 9.02 | 4.53 | 1.96 | 1.06 | 0.65 | 0.43 | 0.19 |
| | | Apparent Resistivity (Ω-m) | **107** | 265.85 | 101.07 | 91.99 | 86.32 | 86.75 | 94.03 | 101.13 | 94.03 | 82.24 | 71.38 |
| ERT-WTG-06 | N-S | Measured Resistance (Ω) | **15** | 65.75 | 30.60 | 18.17 | 9.97 | 6.37 | 5.13 | 3.59 | 2.84 | 2.19 | 0.83 |
| | | Apparent Resistivity (Ω-m) | **230** | 125.91 | 117.23 | 104.36 | 95.43 | 121.98 | 245.52 | 343.51 | 407.21 | 420.01 | 319.13 |
| | E-W | Measured Resistance (Ω) | **12** | 37.46 | 33.17 | 18.33 | 10.18 | 5.90 | 4.92 | 3.83 | 3.42 | 2.85 | 1.49 |
| | | Apparent Resistivity (Ω-m) | **272** | 71.75 | 127.04 | 105.34 | 97.44 | 112.90 | 235.55 | 366.52 | 490.42 | 547.12 | 569.43 |
| ERT-WTG-07 | N-S | Measured Resistance (Ω) | **7** | 24.57 | 11.96 | 10.24 | 8.13 | 5.99 | 3.24 | 1.75 | 1.24 | 0.98 | 0.58 |
| | | Apparent Resistivity (Ω-m) | **125** | 47.06 | 45.81 | 58.83 | 77.85 | 114.64 | 154.99 | 167.88 | 177.79 | 187.36 | 220.86 |
| | E-W | Measured Resistance (Ω) | **338** | 177.70 | 145.10 | 203.00 | 270.10 | 391.80 | 487.80 | 489.00 | 498.60 | 0.95 | 720.20 |
| | | Apparent Resistivity (Ω-m) | **121** | 54.16 | 44.23 | 61.87 | 82.33 | 119.42 | 148.68 | 149.05 | 151.97 | 181.02 | 219.52 |
| ERT-WTG-08 | N-S | Measured Resistance (Ω) | **9** | 28.67 | 18.05 | 13.53 | 10.21 | 5.93 | 4.00 | 3.27 | 2.79 | 2.49 | 1.51 |
| | | Apparent Resistivity (Ω-m) | **237** | 54.92 | 69.13 | 77.72 | 97.75 | 113.63 | 191.54 | 313.03 | 400.90 | 476.10 | 579.42 |
| | E-W | Measured Resistance (Ω) | **6** | 18.39 | 11.36 | 8.62 | 6.15 | 4.09 | 4.34 | 3.28 | 2.97 | 2.47 | 1.51 |
| | | Apparent Resistivity (Ω-m) | **226** | 35.20 | 43.53 | 49.53 | 58.89 | 78.27 | 207.42 | 313.64 | 426.72 | 473.05 | 576.44 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-001 | N-S | Measured Resistance (Ω) | **17** | 58.59 | 25.19 | 17.32 | 9.85 | 4.42 | 2.37 | 1.55 |
| | | Apparent Resistivity (Ω-m) | **107** | 112.20 | 96.47 | 99.49 | 94.27 | 84.61 | 113.66 | 148.56 |
| | E-W | Measured Resistance (Ω) | **18** | 63.22 | 29.44 | 16.88 | 10.02 | 4.48 | 2.40 | 1.48 |
| | | Apparent Resistivity (Ω-m) | **110** | 121.07 | 112.75 | 96.96 | 95.89 | 85.83 | 114.91 | 141.58 |
| ERT-PV-003 | N-S | Measured Resistance (Ω) | **13** | 43.00 | 16.11 | 14.22 | 9.33 | 5.16 | 2.63 | 1.72 |
| | | Apparent Resistivity (Ω-m) | **101** | 82.36 | 61.72 | 81.72 | 89.31 | 98.85 | 125.76 | 164.32 |
| | E-W | Measured Resistance (Ω) | **12** | 35.38 | 16.38 | 14.14 | 8.56 | 5.07 | 2.71 | 1.70 |
| | | Apparent Resistivity (Ω-m) | **98** | 67.76 | 62.76 | 81.23 | 81.93 | 97.02 | 129.97 | 163.04 |
| ERT-PV-007 | N-S | Measured Resistance (Ω) | **14** | 51.15 | 22.84 | 13.71 | 6.00 | 2.77 | 2.02 | 1.39 |
| | | Apparent Resistivity (Ω-m) | **86** | 97.96 | 87.51 | 78.79 | 57.45 | 53.07 | 96.65 | 132.71 |
| | E-W | Measured Resistance (Ω) | **17** | 65.74 | 29.25 | 14.73 | 6.40 | 2.95 | 1.92 | 1.36 |
| | | Apparent Resistivity (Ω-m) | **95** | 125.88 | 112.01 | 84.61 | 61.33 | 56.57 | 92.11 | 130.36 |
| ERT-PV-008 | N-S | Measured Resistance (Ω) | **57** | 305.20 | 45.22 | 26.74 | 11.16 | 4.67 | 1.68 | 1.14 |
| | | Apparent Resistivity (Ω-m) | **185** | 584.36 | 173.22 | 153.62 | 106.86 | 89.43 | 80.25 | 108.69 |
| | E-W | Measured Resistance (Ω) | **55** | 174.00 | 130.80 | 61.47 | 11.56 | 3.92 | 1.66 | 1.27 |
| | | Apparent Resistivity (Ω-m) | **225** | 333.15 | 501.09 | 353.26 | 110.64 | 75.10 | 79.61 | 121.74 |
| ERT-PV-012 | N-S | Measured Resistance (Ω) | **38** | 169.00 | 47.91 | 24.26 | 14.03 | 6.06 | 2.36 | 1.64 |
| | | Apparent Resistivity (Ω-m) | **167** | 323.70 | 183.52 | 139.35 | 134.36 | 116.13 | 112.84 | 156.55 |
| | E-W | Measured Resistance (Ω) | **37** | 156.00 | 53.36 | 28.41 | 11.94 | 6.19 | 2.57 | 1.72 |
| | | Apparent Resistivity (Ω-m) | **170** | 298.80 | 204.40 | 163.22 | 114.30 | 118.48 | 122.96 | 164.87 |
| ERT-PV-014 | N-S | Measured Resistance (Ω) | **52** | 219.30 | 65.86 | 38.75 | 23.26 | 10.12 | 3.84 | 1.78 |
| | | Apparent Resistivity (Ω-m) | **238** | 420.01 | 252.28 | 222.63 | 222.78 | 193.82 | 184.01 | 170.26 |
| | E-W | Measured Resistance (Ω) | **54** | 221.60 | 75.05 | 45.34 | 22.19 | 9.83 | 3.86 | 1.61 |
| | | Apparent Resistivity (Ω-m) | **245** | 424.40 | 287.49 | 260.48 | 212.48 | 188.31 | 184.71 | 154.47 |
| ERT-PV-015 | N-S | Measured Resistance (Ω) | **34** | 132.70 | 63.48 | 32.70 | 5.56 | 3.19 | 1.78 | 1.33 |
| | | Apparent Resistivity (Ω-m) | **145** | 254.17 | 243.14 | 187.91 | 53.22 | 61.08 | 85.13 | 127.44 |
| | E-W | Measured Resistance (Ω) | **28** | 107.30 | 43.32 | 31.99 | 8.77 | 3.08 | 1.78 | 1.41 |
| | | Apparent Resistivity (Ω-m) | **131** | 205.47 | 165.93 | 183.82 | 84.00 | 58.98 | 85.34 | 135.15 |
| ERT-PV-016 | N-S | Measured Resistance (Ω) | **38** | 120.20 | 90.98 | 28.35 | 14.98 | 8.36 | 3.43 | 1.75 |
| | | Apparent Resistivity (Ω-m) | **197** | 230.15 | 348.39 | 162.89 | 143.44 | 160.17 | 164.32 | 167.40 |
| | E-W | Measured Resistance (Ω) | **45** | 199.80 | 61.54 | 25.25 | 14.63 | 7.15 | 3.34 | 1.70 |
| | | Apparent Resistivity (Ω-m) | **195** | 382.52 | 235.73 | 145.05 | 140.09 | 136.92 | 159.96 | 163.01 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-019 | N-S | Measured Resistance (Ω) | **35** | 135.80 | 65.81 | 26.47 | 7.82 | 3.64 | 1.76 | 0.53 |
| | | Apparent Resistivity (Ω-m) | **135** | 259.99 | 252.07 | 152.06 | 74.89 | 69.77 | 84.37 | 51.02 |
| | E-W | Measured Resistance (Ω) | **37** | 143.60 | 58.64 | 36.52 | 12.02 | 3.25 | 2.08 | 1.54 |
| | | Apparent Resistivity (Ω-m) | **162** | 274.93 | 224.64 | 209.82 | 115.12 | 62.18 | 99.70 | 147.68 |
| ERT-PV-021 | N-S | Measured Resistance (Ω) | **16** | 67.54 | 19.34 | 9.95 | 5.44 | 3.71 | 2.16 | 1.49 |
| | | Apparent Resistivity (Ω-m) | **90** | 129.36 | 74.07 | 57.15 | 52.06 | 70.96 | 103.21 | 142.55 |
| | E-W | Measured Resistance (Ω) | **14** | 56.18 | 18.07 | 9.42 | 5.25 | 3.31 | 2.13 | 1.38 |
| | | Apparent Resistivity (Ω-m) | **83** | 107.59 | 69.22 | 54.13 | 50.29 | 63.37 | 101.99 | 131.95 |
| ERT-PV-024 | N-S | Measured Resistance (Ω) | **33** | 123.00 | 51.61 | 27.89 | 13.76 | 6.92 | 2.98 | 1.68 |
| | | Apparent Resistivity (Ω-m) | **166** | 235.64 | 197.66 | 160.26 | 131.73 | 132.44 | 142.59 | 161.27 |
| | E-W | Measured Resistance (Ω) | **39** | 150.10 | 68.30 | 29.25 | 15.63 | 7.06 | 2.81 | 1.50 |
| | | Apparent Resistivity (Ω-m) | **183** | 287.49 | 261.61 | 168.04 | 149.66 | 135.24 | 134.72 | 143.96 |
| ERT-PV-025 | N-S | Measured Resistance (Ω) | **28** | 111.20 | 38.67 | 25.49 | 11.34 | 5.06 | 2.13 | 1.26 |
| | | Apparent Resistivity (Ω-m) | **134** | 213.02 | 148.13 | 146.49 | 108.57 | 96.87 | 102.11 | 120.49 |
| | E-W | Measured Resistance (Ω) | **38** | 174.90 | 42.66 | 28.94 | 12.02 | 5.03 | 2.08 | 1.31 |
| | | Apparent Resistivity (Ω-m) | **157** | 334.98 | 163.40 | 166.27 | 115.09 | 96.32 | 99.70 | 125.30 |
| ERT-PV-026 | N-S | Measured Resistance (Ω) | **13** | 41.96 | 19.70 | 11.82 | 7.20 | 4.14 | 2.38 | 1.58 |
| | | Apparent Resistivity (Ω-m) | **91** | 80.35 | 75.44 | 67.88 | 68.95 | 79.31 | 113.84 | 151.58 |
| | E-W | Measured Resistance (Ω) | **13** | 46.58 | 19.76 | 12.14 | 7.35 | 4.03 | 2.63 | 1.63 |
| | | Apparent Resistivity (Ω-m) | **95** | 89.21 | 75.68 | 69.77 | 70.38 | 77.11 | 125.73 | 156.36 |
| ERT-PV-029 | N-S | Measured Resistance (Ω) | **27** | 112.20 | 47.79 | 19.95 | 5.59 | 2.53 | 1.68 | 0.98 |
| | | Apparent Resistivity (Ω-m) | **113** | 214.98 | 183.03 | 114.64 | 53.49 | 48.40 | 80.16 | 93.82 |
| | E-W | Measured Resistance (Ω) | **31** | 141.80 | 40.81 | 22.99 | 7.50 | 2.43 | 1.63 | 1.18 |
| | | Apparent Resistivity (Ω-m) | **124** | 271.52 | 156.33 | 132.07 | 71.84 | 46.54 | 78.15 | 112.96 |
| ERT-PV-03 | N-S | Measured Resistance (Ω) | **28** | 131.00 | 37.61 | 15.00 | 6.40 | 3.87 | 2.34 | 1.28 |
| | | Apparent Resistivity (Ω-m) | **122** | 250.91 | 144.05 | 86.20 | 61.33 | 74.10 | 111.92 | 122.80 |
| | E-W | Measured Resistance (Ω) | **21** | 97.96 | 24.56 | 12.37 | 6.74 | 3.46 | 2.38 | 1.21 |
| | | Apparent Resistivity (Ω-m) | **102** | 187.60 | 94.09 | 71.05 | 64.56 | 66.23 | 113.87 | 115.34 |
| ERT-PV-034 | N-S | Measured Resistance (Ω) | **42** | 158.90 | 66.84 | 43.34 | 15.09 | 6.27 | 2.24 | 1.50 |
| | | Apparent Resistivity (Ω-m) | **189** | 304.37 | 256.03 | 248.99 | 144.44 | 120.06 | 107.38 | 143.62 |
| | E-W | Measured Resistance (Ω) | **36** | 129.70 | 62.67 | 38.83 | 14.87 | 5.44 | 2.49 | 1.46 |
| | | Apparent Resistivity (Ω-m) | **174** | 248.47 | 240.06 | 223.08 | 142.43 | 104.27 | 119.02 | 139.96 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-035 | N-S | Measured Resistance (Ω) | **69** | 318.70 | 101.80 | 32.84 | 15.52 | 7.78 | 1.80 | 1.16 |
| | | Apparent Resistivity (Ω-m) | **269** | 682.62 | 435.88 | 210.99 | 166.17 | 166.55 | 96.48 | 124.60 |
| | E-W | Measured Resistance (Ω) | **65** | 323.20 | 68.19 | 35.45 | 18.22 | 6.48 | 1.79 | 1.00 |
| | | Apparent Resistivity (Ω-m) | **250** | 692.16 | 292.03 | 227.76 | 195.04 | 138.77 | 95.94 | 106.70 |
| ERT-PV-036 | N-S | Measured Resistance (Ω) | **89** | 313.70 | 179.00 | 89.35 | 26.90 | 9.93 | 3.16 | 1.57 |
| | | Apparent Resistivity (Ω-m) | **407** | 671.72 | 766.46 | 573.91 | 287.98 | 212.69 | 169.34 | 167.64 |
| | E-W | Measured Resistance (Ω) | **72** | 289.10 | 105.20 | 72.46 | 26.56 | 8.64 | 3.36 | 1.93 |
| | | Apparent Resistivity (Ω-m) | **342** | 618.89 | 450.54 | 465.53 | 284.40 | 185.05 | 179.87 | 206.46 |
| ERT-PV-040 | N-S | Measured Resistance (Ω) | **13** | 36.37 | 19.90 | 14.30 | 10.16 | 5.18 | 2.56 | 1.52 |
| | | Apparent Resistivity (Ω-m) | **111** | 77.87 | 85.20 | 91.85 | 108.92 | 110.83 | 137.14 | 162.53 |
| | E-W | Measured Resistance (Ω) | **12** | 33.49 | 19.73 | 14.95 | 9.42 | 5.33 | 2.50 | 1.45 |
| | | Apparent Resistivity (Ω-m) | **108** | 71.70 | 84.48 | 96.04 | 100.88 | 114.17 | 133.90 | 155.51 |
| ERT-PV-043 | N-S | Measured Resistance (Ω) | **49** | 214.60 | 64.28 | 36.39 | 14.90 | 8.95 | 4.32 | 2.38 |
| | | Apparent Resistivity (Ω-m) | **258** | 459.40 | 275.30 | 233.75 | 159.49 | 191.56 | 231.16 | 255.23 |
| | E-W | Measured Resistance (Ω) | **44** | 160.80 | 76.67 | 37.48 | 16.32 | 9.06 | 4.12 | 2.27 |
| | | Apparent Resistivity (Ω-m) | **249** | 344.21 | 328.33 | 240.78 | 174.76 | 193.88 | 220.26 | 243.23 |
| ERT-PV-045 | N-S | Measured Resistance (Ω) | **32** | 131.70 | 47.82 | 27.99 | 8.46 | 2.69 | 1.13 | 0.93 |
| | | Apparent Resistivity (Ω-m) | **139** | 281.94 | 204.82 | 179.77 | 90.58 | 57.53 | 60.63 | 99.24 |
| | E-W | Measured Resistance (Ω) | **32** | 131.80 | 53.42 | 26.65 | 10.46 | 2.81 | 1.09 | 1.06 |
| | | Apparent Resistivity (Ω-m) | **147** | 282.15 | 228.78 | 171.18 | 111.95 | 60.12 | 58.45 | 113.01 |
| ERT-PV-047 | N-S | Measured Resistance (Ω) | **9** | 20.36 | 17.88 | 12.74 | 8.56 | 3.18 | 1.15 | 1.00 |
| | | Apparent Resistivity (Ω-m) | **76** | 43.59 | 76.58 | 81.83 | 91.61 | 67.99 | 61.51 | 106.94 |
| | E-W | Measured Resistance (Ω) | **9** | 23.65 | 13.75 | 12.60 | 8.54 | 3.00 | 1.15 | 1.32 |
| | | Apparent Resistivity (Ω-m) | **78** | 50.64 | 58.89 | 80.94 | 91.40 | 64.17 | 61.75 | 140.75 |
| ERT-PV-049 | N-S | Measured Resistance (Ω) | **7** | 15.89 | 17.82 | 9.52 | 3.90 | 1.03 | 0.51 | 0.40 |
| | | Apparent Resistivity (Ω-m) | **44** | 34.02 | 76.34 | 61.17 | 41.71 | 22.11 | 27.04 | 42.91 |
| | E-W | Measured Resistance (Ω) | **8** | 26.02 | 16.67 | 9.15 | 4.03 | 1.08 | 0.53 | 0.45 |
| | | Apparent Resistivity (Ω-m) | **47** | 55.72 | 71.36 | 58.75 | 43.11 | 23.16 | 28.60 | 47.92 |
| ERT-PV-051 | N-S | Measured Resistance (Ω) | **8** | 29.48 | 12.82 | 6.79 | 4.62 | 1.49 | 0.51 | 0.41 |
| | | Apparent Resistivity (Ω-m) | **45** | 63.12 | 54.87 | 43.62 | 49.42 | 31.97 | 27.24 | 44.03 |
| | E-W | Measured Resistance (Ω) | **8** | 29.01 | 13.97 | 8.37 | 4.42 | 1.74 | 0.59 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **49** | 62.13 | 59.84 | 53.74 | 47.37 | 37.22 | 31.84 | 50.27 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-052 | N-S | Measured Resistance (Ω) | **2** | 3.91 | 2.91 | 1.77 | 0.86.3 | 0.33 | 0.78 | 0.28 |
| | | Apparent Resistivity (Ω-m) | **15** | 7.49 | 11.15 | 10.19 | 8.24 | 6.25 | 37.16 | 27.13 |
| | E-W | Measured Resistance (Ω) | **2** | 4.31 | 3.40 | 2.38 | 1.18 | 0.33 | 0.41 | 0.36 |
| | | Apparent Resistivity (Ω-m) | **15** | 8.25 | 13.00 | 13.66 | 11.26 | 6.30 | 19.56 | 34.50 |
| ERT-PV-056 | N-S | Measured Resistance (Ω) | **2** | 7.35 | 3.73 | 2.83 | 1.47 | 0.48 | 0.26 | 0.27 |
| | | Apparent Resistivity (Ω-m) | **15** | 14.07 | 14.30 | 16.24 | 14.03 | 9.06 | 12.59 | 25.95 |
| | E-W | Measured Resistance (Ω) | **3** | 8.81 | 4.43 | 2.79 | 1.20 | 0.46 | 0.26 | 0.24 |
| | | Apparent Resistivity (Ω-m) | **15** | 16.88 | 17.00 | 16.01 | 11.51 | 8.84 | 12.63 | 22.57 |
| ERT-PV-058 | N-S | Measured Resistance (Ω) | **10** | 33.96 | 18.81 | 10.00 | 4.06 | 1.78 | 0.63 | 0.32 |
| | | Apparent Resistivity (Ω-m) | **47** | 65.04 | 72.02 | 57.49 | 38.92 | 34.05 | 30.06 | 30.85 |
| | E-W | Measured Resistance (Ω) | **9** | 25.55 | 19.38 | 10.05 | 4.37 | 1.65 | 0.61 | 0.29 |
| | | Apparent Resistivity (Ω-m) | **45** | 48.92 | 74.22 | 57.73 | 41.88 | 31.64 | 28.97 | 28.21 |
| ERT-PV-060 | N-S | Measured Resistance (Ω) | **2** | 6.69 | 3.94 | 2.22 | 0.77 | 0.50 | 0.44 | 0.39 |
| | | Apparent Resistivity (Ω-m) | **16** | 12.81 | 15.09 | 12.76 | 7.37 | 9.49 | 20.26 | 37.43 |
| | E-W | Measured Resistance (Ω) | **2** | 8.29 | 3.01 | 2.19 | 0.95 | 0.53 | 0.38 | 0.41 |
| | | Apparent Resistivity (Ω-m) | **17** | 15.88 | 11.52 | 12.59 | 9.12 | 10.15 | 18.04 | 38.95 |
| ERT-PV-062 | N-S | Measured Resistance (Ω) | **7** | 17.31 | 9.39 | 7.13 | 5.47 | 3.42 | 2.21 | 1.49 |
| | | Apparent Resistivity (Ω-m) | **68** | 33.16 | 35.97 | 40.97 | 52.36 | 65.50 | 105.98 | 142.31 |
| | E-W | Measured Resistance (Ω) | **6** | 16.39 | 8.68 | 6.87 | 5.60 | 4.00 | 2.18 | 1.54 |
| | | Apparent Resistivity (Ω-m) | **69** | 31.39 | 33.25 | 39.44 | 53.58 | 76.57 | 104.15 | 147.68 |
| ERT-PV-064 | N-S | Measured Resistance (Ω) | **29** | 133.20 | 23.46 | 17.12 | 11.65 | 7.68 | 4.46 | 2.18 |
| | | Apparent Resistivity (Ω-m) | **161** | 255.03 | 89.86 | 98.36 | 111.59 | 147.07 | 213.60 | 208.45 |
| | E-W | Measured Resistance (Ω) | **37** | 183.30 | 28.19 | 16.79 | 14.43 | 10.09 | 4.07 | 2.70 |
| | | Apparent Resistivity (Ω-m) | **191** | 350.92 | 107.96 | 96.50 | 138.17 | 193.15 | 194.74 | 258.65 |
| ERT-PV-068 | N-S | Measured Resistance (Ω) | **28** | 172.10 | 10.45 | 6.52 | 3.74 | 1.28 | 0.63 | 0.67 |
| | | Apparent Resistivity (Ω-m) | **80** | 329.49 | 40.02 | 37.46 | 35.84 | 24.44 | 30.40 | 63.73 |
| | E-W | Measured Resistance (Ω) | **16** | 84.38 | 11.92 | 10.21 | 5.10 | 1.68 | 0.73 | 0.59 |
| | | Apparent Resistivity (Ω-m) | **63** | 161.60 | 45.63 | 58.67 | 48.83 | 32.13 | 34.93 | 56.94 |
| ERT-PV-071 | N-S | Measured Resistance (Ω) | **55** | 188.10 | 97.74 | 59.50 | 23.96 | 10.18 | 4.55 | 2.22 |
| | | Apparent Resistivity (Ω-m) | **276** | 360.27 | 374.29 | 341.99 | 229.42 | 195.01 | 217.72 | 212.54 |
| | E-W | Measured Resistance (Ω) | **50** | 147.60 | 95.27 | 62.04 | 26.22 | 9.27 | 4.58 | 2.39 |
| | | Apparent Resistivity (Ω-m) | **269** | 282.70 | 364.85 | 356.31 | 251.03 | 177.52 | 219.15 | 228.57 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-072 | N-S | Measured Resistance (Ω) | **7** | 21.72 | 14.86 | 9.28 | 3.27 | 0.46 | 0.11 | 0.11 |
| | | Apparent Resistivity (Ω-m) | **30** | 41.61 | 56.94 | 53.31 | 31.30 | 8.88 | 5.50 | 10.84 |
| | E-W | Measured Resistance (Ω) | **7** | 29.21 | 13.72 | 6.37 | 2.47 | 0.48 | 0.12 | 0.10 |
| | | Apparent Resistivity (Ω-m) | **28** | 55.93 | 52.55 | 36.58 | 23.67 | 9.28 | 5.90 | 9.79 |
| ERT-PV-074 | N-S | Measured Resistance (Ω) | **4** | 11.38 | 6.62 | 4.20 | 3.50 | 1.54 | 0.35 | 0.12 |
| | | Apparent Resistivity (Ω-m) | **23** | 21.79 | 25.33 | 24.14 | 33.50 | 29.39 | 16.64 | 11.15 |
| | E-W | Measured Resistance (Ω) | **3** | 8.90 | 5.01 | 4.64 | 3.31 | 1.68 | 0.37 | 0.13 |
| | | Apparent Resistivity (Ω-m) | **22** | 17.05 | 19.19 | 26.65 | 31.67 | 32.13 | 17.63 | 12.15 |
| ERT-PV-076 | N-S | Measured Resistance (Ω) | **4** | 9.72 | 6.61 | 3.67 | 2.31 | 1.27 | 0.84 | 0.26 |
| | | Apparent Resistivity (Ω-m) | **25** | 18.61 | 25.32 | 21.11 | 22.11 | 24.23 | 40.39 | 25.19 |
| | E-W | Measured Resistance (Ω) | **5** | 15.55 | 8.12 | 4.08 | 1.99 | 1.23 | 0.78 | 0.79 |
| | | Apparent Resistivity (Ω-m) | **34** | 29.77 | 31.09 | 23.43 | 19.02 | 23.49 | 37.43 | 75.83 |
| ERT-PV-079 | N-S | Measured Resistance (Ω) | **3** | 8.38 | 5.21 | 4.11 | 3.30 | 2.03 | 0.88 | 0.55 |
| | | Apparent Resistivity (Ω-m) | **32** | 16.05 | 19.96 | 23.61 | 31.55 | 38.80 | 41.97 | 53.04 |
| | E-W | Measured Resistance (Ω) | **3** | 7.42 | 5.02 | 3.47 | 3.03 | 2.08 | 0.91 | 0.56 |
| | | Apparent Resistivity (Ω-m) | **31** | 14.21 | 19.21 | 19.96 | 29.04 | 39.75 | 43.40 | 53.22 |
| ERT-PV-081 | N-S | Measured Resistance (Ω) | **4** | 13.48 | 7.60 | 4.15 | 2.28 | 0.83 | 0.39 | 0.06 |
| | | Apparent Resistivity (Ω-m) | **20** | 25.82 | 29.10 | 23.86 | 21.81 | 15.98 | 18.45 | 5.54 |
| | E-W | Measured Resistance (Ω) | **4** | 9.13 | 7.90 | 4.07 | 2.86 | 0.79 | 0.14 | 0.05 |
| | | Apparent Resistivity (Ω-m) | **18** | 17.49 | 30.27 | 23.39 | 27.33 | 15.06 | 6.82 | 4.89 |
| ERT-PV-084 | N-S | Measured Resistance (Ω) | **2** | 6.86 | 4.21 | 1.98 | 1.16 | 0.66 | 0.13 | 0.05 |
| | | Apparent Resistivity (Ω-m) | **11** | 13.13 | 16.12 | 11.35 | 11.08 | 12.65 | 6.00 | 5.23 |
| | E-W | Measured Resistance (Ω) | **2** | 7.87 | 3.80 | 2.12 | 0.91 | 0.60 | 0.12 | 0.07 |
| | | Apparent Resistivity (Ω-m) | **11** | 15.08 | 14.56 | 12.16 | 8.67 | 11.56 | 5.77 | 6.46 |
| ERT-PV-086 | N-S | Measured Resistance (Ω) | **3** | 13.88 | 4.87 | 2.35 | 1.37 | 0.85 | 0.41 | 0.08 |
| | | Apparent Resistivity (Ω-m) | **16** | 25.06 | 18.65 | 13.48 | 13.16 | 16.21 | 19.72 | 7.38 |
| | E-W | Measured Resistance (Ω) | **3** | 12.87 | 5.22 | 1.94 | 1.43 | 0.77 | 0.36 | 0.08 |
| | | Apparent Resistivity (Ω-m) | **16** | 24.64 | 19.99 | 11.16 | 13.68 | 14.83 | 17.34 | 7.97 |
| ERT-PV-089 | N-S | Measured Resistance (Ω) | **8** | 26.72 | 13.97 | 9.84 | 2.85 | 1.28 | 0.81 | 0.56 |
| | | Apparent Resistivity (Ω-m) | **44** | 51.18 | 53.49 | 56.54 | 27.29 | 24.55 | 38.77 | 53.58 |
| | E-W | Measured Resistance (Ω) | **8** | 28.24 | 13.00 | 6.60 | 3.01 | 1.36 | 0.73 | 0.56 |
| | | Apparent Resistivity (Ω-m) | **41** | 54.10 | 49.77 | 37.92 | 28.85 | 25.96 | 35.11 | 53.61 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-090 | N-S | Measured Resistance (Ω) | **9** | 29.32 | 15.05 | 11.47 | 4.00 | 1.22 | 1.10 | 0.45 |
| | | Apparent Resistivity (Ω-m) | **48** | 56.14 | 57.64 | 65.90 | 38.28 | 23.29 | 52.82 | 43.37 |
| | E-W | Measured Resistance (Ω) | **9** | 28.86 | 17.05 | 9.83 | 4.66 | 2.19 | 1.05 | 0.41 |
| | | Apparent Resistivity (Ω-m) | **50** | 55.26 | 65.32 | 56.45 | 44.65 | 41.88 | 50.20 | 39.72 |
| ERT-PV-093 | N-S | Measured Resistance (Ω) | **12** | 43.26 | 18.17 | 10.56 | 4.54 | 2.82 | 2.06 | 1.55 |
| | | Apparent Resistivity (Ω-m) | **80** | 82.84 | 69.59 | 60.69 | 43.49 | 53.95 | 98.39 | 148.01 |
| | E-W | Measured Resistance (Ω) | **11** | 40.55 | 14.80 | 8.04 | 5.31 | 2.85 | 2.15 | 1.56 |
| | | Apparent Resistivity (Ω-m) | **77** | 77.66 | 56.66 | 46.21 | 50.84 | 54.65 | 102.93 | 149.20 |
| ERT-PV-095 | N-S | Measured Resistance (Ω) | **2** | 4.68 | 3.78 | 3.35 | 1.91 | 1.15 | 0.63 | 0.46 |
| | | Apparent Resistivity (Ω-m) | **22** | 8.95 | 14.49 | 19.27 | 18.25 | 22.04 | 29.97 | 43.71 |
| | E-W | Measured Resistance (Ω) | **2** | 5.37 | 4.04 | 2.95 | 2.11 | 1.22 | 0.65 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **23** | 10.29 | 15.48 | 16.96 | 20.21 | 23.32 | 30.91 | 44.78 |
| ERT-PV-097 | N-S | Measured Resistance (Ω) | **4** | 7.47 | 8.57 | 5.03 | 1.95 | 0.96 | 0.48 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **26** | 14.37 | 32.83 | 28.90 | 18.64 | 18.46 | 22.85 | 44.65 |
| | E-W | Measured Resistance (Ω) | **4** | 10.30 | 7.75 | 4.96 | 1.90 | 0.85 | 0.44 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **26** | 19.73 | 29.68 | 28.49 | 18.20 | 16.29 | 21.25 | 45.05 |
| ERT-PV-100 | N-S | Measured Resistance (Ω) | **3** | 5.37 | 5.47 | 4.77 | 3.93 | 2.13 | 0.81 | 0.44 |
| | | Apparent Resistivity (Ω-m) | **31** | 10.28 | 20.93 | 27.41 | 37.64 | 40.72 | 38.56 | 42.12 |
| | E-W | Measured Resistance (Ω) | **3** | 5.14 | 4.69 | 4.97 | 3.46 | 2.16 | 0.90 | 0.46 |
| | | Apparent Resistivity (Ω-m) | **31** | 9.85 | 17.95 | 28.57 | 33.16 | 41.42 | 43.22 | 44.50 |
| ERT-PV-101 | N-S | Measured Resistance (Ω) | **4** | 12.89 | 8.05 | 5.17 | 2.43 | 0.72 | 0.30 | 0.26 |
| | | Apparent Resistivity (Ω-m) | **23** | 24.68 | 30.85 | 29.70 | 23.29 | 13.83 | 14.17 | 25.08 |
| | E-W | Measured Resistance (Ω) | **4** | 12.04 | 7.85 | 6.04 | 2.31 | 1.50 | 0.28 | 0.28 |
| | | Apparent Resistivity (Ω-m) | **26** | 23.06 | 30.05 | 34.72 | 22.13 | 28.72 | 13.53 | 26.74 |
| ERT-PV-102 | N-S | Measured Resistance (Ω) | **13** | 48.56 | 17.75 | 11.25 | 6.38 | 4.15 | 2.02 | 1.08 |
| | | Apparent Resistivity (Ω-m) | **81** | 92.99 | 68.00 | 64.65 | 61.08 | 79.52 | 96.74 | 103.27 |
| | E-W | Measured Resistance (Ω) | **13** | 50.97 | 12.73 | 9.70 | 6.91 | 3.88 | 2.18 | 1.13 |
| | | Apparent Resistivity (Ω-m) | **79** | 97.63 | 48.77 | 55.75 | 66.17 | 74.25 | 104.21 | 108.48 |
| ERT-PV-105 | N-S | Measured Resistance (Ω) | **6** | 12.28 | 11.20 | 8.31 | 4.69 | 2.40 | 1.11 | 0.54 |
| | | Apparent Resistivity (Ω-m) | **44** | 23.51 | 42.92 | 47.73 | 44.87 | 45.93 | 53.31 | 52.06 |
| | E-W | Measured Resistance (Ω) | **5** | 12.14 | 9.27 | 6.59 | 4.22 | 2.41 | 1.11 | 0.66 |
| | | Apparent Resistivity (Ω-m) | **43** | 23.25 | 35.51 | 37.86 | 40.42 | 46.12 | 53.07 | 63.22 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-107 | N-S | Measured Resistance (Ω) | **3** | 5.75 | 4.97 | 3.45 | 2.84 | 2.02 | 0.98 | 0.44 |
| | | Apparent Resistivity (Ω-m) | **26** | 11.01 | 19.03 | 19.83 | 2.85 | 38.68 | 47.03 | 41.97 |
| | E-W | Measured Resistance (Ω) | **3** | 5.22 | 4.21 | 3.56 | 2.91 | 2.05 | 0.99 | 0.46 |
| | | Apparent Resistivity (Ω-m) | **31** | 9.99 | 16.13 | 20.46 | 27.83 | 48.49 | 47.43 | 44.53 |
| ERT-PV-109 | N-S | Measured Resistance (Ω) | **3** | 6.68 | 4.46 | 3.86 | 2.79 | 1.74 | 0.59 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **27** | 12.79 | 17.07 | 22.17 | 26.75 | 33.31 | 28.48 | 44.99 |
| | E-W | Measured Resistance (Ω) | **3** | 7.10 | 5.05 | 4.30 | 2.84 | 1.60 | 0.59 | 0.48 |
| | | Apparent Resistivity (Ω-m) | **27** | 13.59 | 19.35 | 24.87 | 27.17 | 30.72 | 28.42 | 46.06 |
| ERT-PV-111 | N-S | Measured Resistance (Ω) | **13** | 52.89 | 22.57 | 9.06 | 4.40 | 1.44 | 0.60 | 0.37 |
| | | Apparent Resistivity (Ω-m) | **53** | 101.29 | 86.44 | 52.03 | 42.15 | 27.57 | 28.90 | 35.81 |
| | E-W | Measured Resistance (Ω) | **13** | 50.07 | 24.25 | 8.92 | 2.62 | 1.29 | 0.52 | 0.38 |
| | | Apparent Resistivity (Ω-m) | **50** | 95.89 | 92.87 | 51.21 | 25.05 | 24.73 | 24.93 | 36.55 |
| ERT-PV-112 | N-S | Measured Resistance (Ω) | **9** | 31.28 | 17.95 | 8.21 | 3.16 | 1.34 | 0.62 | 0.43 |
| | | Apparent Resistivity (Ω-m) | **43** | 59.89 | 68.76 | 46.21 | 30.30 | 25.70 | 29.87 | 40.75 |
| | E-W | Measured Resistance (Ω) | **9** | 33.09 | 16.02 | 8.72 | 2.93 | 1.27 | 0.64 | 0.45 |
| | | Apparent Resistivity (Ω-m) | **43** | 63.37 | 61.39 | 50.11 | 28.04 | 24.36 | 30.66 | 42.64 |
| ERT-PV-114 | N-S | Measured Resistance (Ω) | **7** | 21.58 | 12.83 | 6.94 | 4.47 | 1.70 | 0.82 | 0.24 |
| | | Apparent Resistivity (Ω-m) | **38** | 41.33 | 49.13 | 39.90 | 42.79 | 32.49 | 39.47 | 22.87 |
| | E-W | Measured Resistance (Ω) | **6** | 13.24 | 12.40 | 7.84 | 3.43 | 1.65 | 0.87 | 0.36 |
| | | Apparent Resistivity (Ω-m) | **37** | 25.35 | 47.40 | 45.08 | 32.83 | 31.52 | 41.67 | 34.44 |
| ERT-PV-117 | N-S | Measured Resistance (Ω) | **5** | 13.07 | 8.94 | 6.54 | 3.07 | 1.92 | 0.99 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **36** | 25.02 | 34.23 | 37.58 | 29.41 | 36.79 | 47.27 | 44.96 |
| | E-W | Measured Resistance (Ω) | **6** | 17.21 | 11.57 | 6.80 | 3.39 | 1.85 | 0.90 | 0.47 |
| | | Apparent Resistivity (Ω-m) | **39** | 32.95 | 44.29 | 39.11 | 32.46 | 35.39 | 43.10 | 44.53 |
| ERT-PV-118 | N-S | Measured Resistance (Ω) | **5** | 13.24 | 7.85 | 6.07 | 2.91 | 1.59 | 0.54 | 0.34 |
| | | Apparent Resistivity (Ω-m) | **30** | 25.39 | 30.08 | 34.90 | 27.85 | 30.39 | 25.83 | 32.67 |
| | E-W | Measured Resistance (Ω) | **7** | 24.85 | 12.23 | 5.55 | 2.86 | 1.14 | 0.66 | 0.40 |
| | | Apparent Resistivity (Ω-m) | **36** | 47.73 | 46.85 | 31.85 | 27.35 | 31.33 | 31.52 | 38.56 |
| ERT-PV-121 | N-S | Measured Resistance (Ω) | **23** | 90.77 | 36.24 | 15.51 | 7.94 | 5.01 | 2.89 | 2.21 |
| | | Apparent Resistivity (Ω-m) | **132** | 173.83 | 138.81 | 89.09 | 76.05 | 96.01 | 138.17 | 211.20 |
| | E-W | Measured Resistance (Ω) | **30** | 155.60 | 24.35 | 14.04 | 9.11 | 4.92 | 2.81 | 2.27 |
| | | Apparent Resistivity (Ω-m) | **144** | 298.06 | 93.27 | 80.68 | 87.23 | 94.12 | 134.57 | 217.44 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-122 | N-S | Measured Resistance (Ω) | **45** | 205.70 | 50.81 | 27.20 | 16.18 | 10.49 | 3.50 | 2.09 |
| | | Apparent Resistivity (Ω-m) | **210** | 393.80 | 194.61 | 156.24 | 154.96 | 200.83 | 167.37 | 200.53 |
| | E-W | Measured Resistance (Ω) | **43** | 197.20 | 43.02 | 30.60 | 17.93 | 8.19 | 3.88 | 2.08 |
| | | Apparent Resistivity (Ω-m) | **182** | 377.95 | 164.77 | 175.84 | 17.17 | 156.85 | 185.62 | 198.97 |
| ERT-PV-123 | N-S | Measured Resistance (Ω) | **30** | 119.50 | 44.24 | 20.71 | 11.01 | 7.71 | 5.11 | 2.85 |
| | | Apparent Resistivity (Ω-m) | **184** | 228.81 | 169.47 | 118.96 | 105.43 | 147.71 | 244.57 | 273.16 |
| | E-W | Measured Resistance (Ω) | **48** | 254.40 | 35.11 | 18.69 | 11.31 | 8.22 | 5.33 | 2.92 |
| | | Apparent Resistivity (Ω-m) | **219** | 487.38 | 134.48 | 107.38 | 108.36 | 157.40 | 255.18 | 279.68 |
| ERT-PV-126 | N-S | Measured Resistance (Ω) | **75** | 406.40 | 62.47 | 26.83 | 14.78 | 7.43 | 3.34 | 1.49 |
| | | Apparent Resistivity (Ω-m) | **251** | 778.46 | 239.30 | 154.14 | 141.49 | 142.28 | 159.81 | 142.31 |
| | E-W | Measured Resistance (Ω) | **54** | 266.50 | 59.79 | 28.45 | 13.35 | 7.64 | 3.26 | 1.57 |
| | | Apparent Resistivity (Ω-m) | **212** | 510.54 | 229.03 | 163.49 | 127.86 | 146.36 | 156.12 | 150.17 |
| ERT-PV-127 | N-S | Measured Resistance (Ω) | **4** | 12.09 | 6.15 | 4.09 | 1.89 | 1.00 | 0.92 | 0.50 |
| | | Apparent Resistivity (Ω-m) | **29** | 23.15 | 23.57 | 23.51 | 18.10 | 19.17 | 44.07 | 48.13 |
| | E-W | Measured Resistance (Ω) | **4** | 12.08 | 6.05 | 3.32 | 1.71 | 0.99 | 0.78 | 0.57 |
| | | Apparent Resistivity (Ω-m) | **27** | 23.13 | 23.17 | 19.09 | 16.38 | 19.01 | 37.49 | 54.22 |
| ERT-PV-128 | N-S | Measured Resistance (Ω) | **79** | 353.60 | 97.06 | 57.31 | 24.69 | 10.79 | 5.24 | 2.64 |
| | | Apparent Resistivity (Ω-m) | **332** | 677.27 | 371.86 | 329.18 | 236.40 | 206.72 | 251.06 | 252.56 |
| | E-W | Measured Resistance (Ω) | **56** | 246.90 | 64.61 | 39.33 | 20.08 | 13.38 | 6.39 | 2.90 |
| | | Apparent Resistivity (Ω-m) | **285** | 472.74 | 247.47 | 225.98 | 211.41 | 256.34 | 305.71 | 277.25 |
| ERT-PV-130 | N-S | Measured Resistance (Ω) | **16** | 58.97 | 24.25 | 12.74 | 8.01 | 4.23 | 1.85 | 0.99 |
| | | Apparent Resistivity (Ω-m) | **89** | 112.93 | 92.90 | 73.18 | 76.69 | 80.95 | 88.39 | 94.49 |
| | E-W | Measured Resistance (Ω) | **15** | 56.24 | 22.80 | 13.63 | 8.01 | 4.00 | 1.69 | 0.91 |
| | | Apparent Resistivity (Ω-m) | **85** | 107.69 | 87.57 | 78.30 | 76.72 | 76.57 | 80.99 | 87.14 |
| ERT-PV-132 | N-S | Measured Resistance (Ω) | **34** | 129.80 | 47.82 | 30.11 | 17.93 | 7.97 | 3.16 | 1.62 |
| | | Apparent Resistivity (Ω-m) | **176** | 248.56 | 183.15 | 173.00 | 171.66 | 152.52 | 151.33 | 155.05 |
| | E-W | Measured Resistance (Ω) | **40** | 177.10 | 47.76 | 28.93 | 15.72 | 7.78 | 3.02 | 1.51 |
| | | Apparent Resistivity (Ω-m) | **182** | 339.24 | 182.91 | 166.18 | 150.51 | 148.96 | 144.72 | 144.72 |
| ERT-PV-134 | N-S | Measured Resistance (Ω) | **25** | 99.11 | 33.42 | 20.72 | 12.40 | 6.30 | 2.65 | 1.52 |
| | | Apparent Resistivity (Ω-m) | **436** | 622.70 | 420.00 | 390.60 | 389.70 | 396.00 | 416.30 | 415.90 |
| | E-W | Measured Resistance (Ω) | **30** | 131.80 | 36.62 | 20.78 | 11.06 | 6.34 | 2.89 | 1.45 |
| | | Apparent Resistivity (Ω-m) | **145** | 252.40 | 140.24 | 119.42 | 105.92 | 121.74 | 138.41 | 138.99 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-136 | N-S | Measured Resistance (Ω) | **42** | 203.50 | 46.90 | 22.37 | 11.33 | 7.08 | 3.68 | 1.55 |
| | | Apparent Resistivity (Ω-m) | **181** | 389.84 | 179.65 | 128.53 | 108.51 | 134.60 | 176.11 | 148.65 |
| | E-W | Measured Resistance (Ω) | **37** | 165.70 | 44.39 | 23.03 | 12.23 | 6.73 | 3.22 | 1.74 |
| | | Apparent Resistivity (Ω-m) | **170** | 317.30 | 170.02 | 132.28 | 117.13 | 128.96 | 155.33 | 166.73 |
| ERT-PV-137 | N-S | Measured Resistance (Ω) | **58** | 342.70 | 26.95 | 16.61 | 9.97 | 5.69 | 2.43 | 1.06 |
| | | Apparent Resistivity (Ω-m) | **184** | 656.23 | 110.89 | 95.46 | 95.46 | 109.06 | 116.37 | 101.13 |
| | E-W | Measured Resistance (Ω) | **42** | 227.40 | 28.65 | 15.74 | 10.21 | 5.55 | 2.40 | 1.04 |
| | | Apparent Resistivity (Ω-m) | **151** | 435.56 | 109.82 | 90.43 | 97.81 | 106.25 | 114.91 | 99.79 |
| ERT-PV-141 | N-S | Measured Resistance (Ω) | **19** | 168.5 | 54.55 | 22.86 | 9.18 | 4.17 | 1.77 | 1.090 |
| | | Apparent Resistivity (Ω-m) | **145** | 318.82 | 209.00 | 131.37 | 87.87 | 79.80 | 84.61 | 104.33 |
| | E-W | Measured Resistance (Ω) | **40** | 139.80 | 58.35 | 27.04 | 10.11 | 4.22 | 1.760 | 1.08 |
| | | Apparent Resistivity (Ω-m) | **145** | 267.71 | 223.54 | 155.36 | 96.80 | 80.86 | 84.25 | 103.81 |
| ERT-PV-142 | N-S | Measured Resistance (Ω) | **42** | 170.60 | 61.64 | 31.88 | 18.16 | 9.11 | 3.63 | 1.88 |
| | | Apparent Resistivity (Ω-m) | **207** | 326.75 | 236.10 | 183.18 | 173.92 | 174.38 | 173.98 | 180.01 |
| | E-W | Measured Resistance (Ω) | **28** | 95.65 | 41.66 | 29.16 | 18.82 | 8.87 | 3.16 | 1.78 |
| | | Apparent Resistivity (Ω-m) | **169** | 183.18 | 159.56 | 167.52 | 180.20 | 169.83 | 151.39 | 170.38 |
| ERT-PV-144 | N-S | Measured Resistance (Ω) | **5** | 12.21 | 6.92 | 5.80 | 4.03 | 3.30 | 1.59 | 0.71 |
| | | Apparent Resistivity (Ω-m) | **47** | 23.38 | 26.51 | 33.31 | 38.53 | 63.25 | 76.32 | 67.79 |
| | E-W | Measured Resistance (Ω) | **5** | 8.16 | 8.00 | 6.69 | 4.14 | 3.13 | 1.40 | 0.70 |
| | | Apparent Resistivity (Ω-m) | **45** | 15.62 | 30.66 | 38.44 | 39.62 | 60.02 | 67.06 | 66.90 |
| ERT-PV-145 | N-S | Measured Resistance (Ω) | **4** | 11.63 | 7.83 | 6.33 | 2.49 | 1.12 | 0.32 | 0.14 |
| | | Apparent Resistivity (Ω-m) | **23** | 22.26 | 29.98 | 36.36 | 23.78 | 21.43 | 15.31 | 13.09 |
| | E-W | Measured Resistance (Ω) | **5** | 14.92 | 11.18 | 6.23 | 2.92 | 1.14 | 0.33 | 0.14 |
| | | Apparent Resistivity (Ω-m) | **27** | 28.58 | 42.82 | 35.81 | 27.95 | 21.88 | 15.75 | 13.78 |
| ERT-PV-147 | N-S | Measured Resistance (Ω) | **6** | 17.53 | 11.91 | 6.23 | 3.54 | 1.37 | 0.78 | 0.88 |
| | | Apparent Resistivity (Ω-m) | **42** | 33.59 | 45.63 | 35.78 | 33.86 | 26.20 | 37.55 | 83.91 |
| | E-W | Measured Resistance (Ω) | **6** | 15.63 | 11.44 | 7.31 | 6.37 | 2.43 | 0.72 | 0.80 |
| | | Apparent Resistivity (Ω-m) | **48** | 29.93 | 43.80 | 41.97 | 61.02 | 46.48 | 34.69 | 76.84 |
| ERT-PV-151 | N-S | Measured Resistance (Ω) | **28** | 122.40 | 38.83 | 19.60 | 8.96 | 4.39 | 1.91 | 0.90 |
| | | Apparent Resistivity (Ω-m) | **121** | 234.48 | 148.71 | 112.62 | 85.80 | 84.06 | 91.59 | 86.59 |
| | E-W | Measured Resistance (Ω) | **35** | 166.40 | 38.16 | 20.45 | 9.89 | 4.39 | 2.03 | 0.97 |
| | | Apparent Resistivity (Ω-m) | **136** | 318.82 | 146.15 | 117.47 | 94.70 | 84.12 | 97.23 | 92.42 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-154 | N-S | Measured Resistance (Ω) | **21** | 67.68 | 41.06 | 18.33 | 9.70 | 5.33 | 3.56 | 3.08 |
| | | Apparent Resistivity (Ω-m) | **150** | 129.60 | 157.28 | 105.34 | 92.90 | 102.11 | 170.63 | 294.41 |
| | E-W | Measured Resistance (Ω) | **18** | 60.58 | 24.46 | 17.94 | 9.24 | 5.64 | 3.50 | 3.19 |
| | | Apparent Resistivity (Ω-m) | **140** | 116.04 | 93.70 | 103.05 | 88.51 | 108.08 | 167.94 | 305.71 |
| ERT-PV-156 | N-S | Measured Resistance (Ω) | **40** | 145.60 | 66.28 | 34.09 | 19.08 | 8.79 | 3.15 | 1.68 |
| | | Apparent Resistivity (Ω-m) | **199** | 278.83 | 253.87 | 195.86 | 182.76 | 168.25 | 150.57 | 160.66 |
| | E-W | Measured Resistance (Ω) | **27** | 64.25 | 50.09 | 38.31 | 19.82 | 9.55 | 3.10 | 1.74 |
| | | Apparent Resistivity (Ω-m) | **174** | 120.15 | 191.84 | 220.13 | 189.83 | 182.82 | 148.35 | 166.51 |
| ERT-PV-158 | N-S | Measured Resistance (Ω) | **31** | 141.60 | 40.97 | 20.41 | 9.92 | 4.02 | 1.95 | 1.26 |
| | | Apparent Resistivity (Ω-m) | **133** | 271.24 | 156.94 | 117.26 | 94.95 | 76.90 | 93.12 | 121.10 |
| | E-W | Measured Resistance (Ω) | **42** | 212.50 | 40.35 | 18.92 | 11.33 | 4.06 | 2.23 | 1.27 |
| | | Apparent Resistivity (Ω-m) | **155** | 406.91 | 154.53 | 108.66 | 108.51 | 77.82 | 106.92 | 121.83 |
| ERT-PV-160 | N-S | Measured Resistance (Ω) | **5** | 13.90 | 9.03 | 7.02 | 3.09 | 1.56 | 0.80 | 0.52 |
| | | Apparent Resistivity (Ω-m) | **36** | 26.63 | 34.56 | 40.36 | 29.57 | 29.95 | 38.28 | 49.87 |
| | E-W | Measured Resistance (Ω) | **5** | 12.66 | 9.05 | 6.65 | 2.79 | 1.61 | 0.86 | 0.50 |
| | | Apparent Resistivity (Ω-m) | **35** | 24.25 | 34.66 | 38.22 | 26.75 | 30.78 | 41.36 | 48.25 |
| ERT-PV-162 | N-S | Measured Resistance (Ω) | **10** | 37.49 | 16.48 | 8.49 | 4.49 | 2.30 | 0.52 | 0.17 |
| | | Apparent Resistivity (Ω-m) | **42** | 71.81 | 63.15 | 48.77 | 43.07 | 43.95 | 9.43 | 15.91 |
| | E-W | Measured Resistance (Ω) | **7** | 25.96 | 12.71 | 7.22 | 4.14 | 1.58 | 0.53 | 0.17 |
| | | Apparent Resistivity (Ω-m) | **36** | 49.71 | 48.71 | 41.48 | 39.68 | 30.27 | 25.16 | 16.42 |
| ERT-PV-163 | N-S | Measured Resistance (Ω) | **39** | 166.40 | 40.89 | 32.59 | 20.38 | 10.33 | 3.41 | 1.10 |
| | | Apparent Resistivity (Ω-m) | **189** | 318.52 | 156.64 | 187.24 | 195.13 | 197.94 | 163.40 | 105.00 |
| | E-W | Measured Resistance (Ω) | **39** | 173.90 | 42.71 | 28.79 | 16.71 | 9.91 | 2.67 | 1.28 |
| | | Apparent Resistivity (Ω-m) | **180** | 333.15 | 163.59 | 165.41 | 160.02 | 189.86 | 127.77 | 122.74 |
| ERT-PV-164 | N-S | Measured Resistance (Ω) | **24** | 118.90 | 24.79 | 14.78 | 6.31 | 2.45 | 1.35 | 0.95 |
| | | Apparent Resistivity (Ω-m) | **96** | 227.69 | 94.95 | 84.92 | 60.38 | 46.88 | 64.83 | 90.62 |
| | E-W | Measured Resistance (Ω) | **21** | 73.05 | 37.08 | 23.26 | 6.09 | 2.36 | 1.50 | 1.06 |
| | | Apparent Resistivity (Ω-m) | **100** | 143.74 | 142.01 | 133.62 | 58.31 | 45.26 | 71.78 | 101.80 |
| ERT-PV-167 | N-S | Measured Resistance (Ω) | **31** | 96.13 | 52.39 | 32.54 | 21.23 | 8.97 | 2.80 | 1.26 |
| | | Apparent Resistivity (Ω-m) | **172** | 185.26 | 200.68 | 186.93 | 203.27 | 171.69 | 133.90 | 121.07 |
| | E-W | Measured Resistance (Ω) | **33** | 110.10 | 50.77 | 36.77 | 22.95 | 9.81 | 2.17 | 1.53 |
| | | Apparent Resistivity (Ω-m) | **197** | 210.89 | 194.43 | 211.23 | 219.79 | 187.88 | 207.97 | 146.73 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-169 | N-S | Measured Resistance (Ω) | **47** | 265.70 | 33.14 | 14.30 | 8.42 | 4.37 | 2.35 | 1.61 |
| | | Apparent Resistivity (Ω-m) | **164** | 509.02 | 126.92 | 82.14 | 80.65 | 83.76 | 112.72 | 154.53 |
| | E-W | Measured Resistance (Ω) | **38** | 214.80 | 23.17 | 12.33 | 8.13 | 4.33 | 2.33 | 1.60 |
| | | Apparent Resistivity (Ω-m) | **142** | 411.48 | 88.73 | 70.84 | 77.85 | 82.94 | 112.68 | 152.70 |
| ERT-PV-172 | N-S | Measured Resistance (Ω) | **39** | 88.45 | 71.65 | 48.71 | 29.97 | 18.23 | 10.77 | 7.70 |
| | | Apparent Resistivity (Ω-m) | **374** | 169.26 | 274.38 | 279.87 | 286.94 | 349.00 | 515.42 | 744.02 |
| | E-W | Measured Resistance (Ω) | **44** | 133.70 | 61.40 | 45.62 | 29.33 | 17.41 | 11.43 | 8.09 |
| | | Apparent Resistivity (Ω-m) | **384** | 256.03 | 235.18 | 262.10 | 280.87 | 333.45 | 546.81 | 775.11 |
| ERT-PV-173 | N-S | Measured Resistance (Ω) | **46** | 224.50 | 47.29 | 24.99 | 14.33 | 7.73 | 3.72 | 2.56 |
| | | Apparent Resistivity (Ω-m) | **209** | 429.77 | 181.14 | 143.56 | 137.25 | 148.04 | 177.88 | 244.78 |
| | E-W | Measured Resistance (Ω) | **28** | 2.40 | 3.91 | 7.61 | 14.35 | 27.90 | 42.24 | 96.00 |
| | | Apparent Resistivity (Ω-m) | **172** | 183.86 | 161.79 | 160.29 | 137.40 | 145.66 | 187.30 | 229.73 |
| ERT-PV-177 | N-S | Measured Resistance (Ω) | **43** | 187.00 | 57.19 | 29.88 | 14.69 | 8.03 | 4.07 | 2.30 |
| | | Apparent Resistivity (Ω-m) | **208** | 358.14 | 219.06 | 171.66 | 140.63 | 153.71 | 194.80 | 219.88 |
| | E-W | Measured Resistance (Ω) | **36** | 138.30 | 52.23 | 31.41 | 15.34 | 8.66 | 4.19 | 2.34 |
| | | Apparent Resistivity (Ω-m) | **198** | 264.81 | 200.07 | 180.44 | 146.88 | 165.90 | 200.83 | 224.15 |
| ERT-PV-178 | N-S | Measured Resistance (Ω) | **33** | 133.70 | 48.95 | 23.15 | 11.50 | 5.57 | 2.96 | 2.18 |
| | | Apparent Resistivity (Ω-m) | **163** | 255.97 | 187.51 | 133.01 | 110.09 | 106.62 | 141.82 | 208.91 |
| | E-W | Measured Resistance (Ω) | **35** | 164.10 | 41.74 | 17.81 | 11.45 | 6.21 | 2.80 | 2.20 |
| | | Apparent Resistivity (Ω-m) | **164** | 314.25 | 159.87 | 102.32 | 109.67 | 118.96 | 134.05 | 210.86 |
| ERT-PV-179 | N-S | Measured Resistance (Ω) | **40** | 191.40 | 43.49 | 22.34 | 11.70 | 6.78 | 3.25 | 1.69 |
| | | Apparent Resistivity (Ω-m) | **174** | 366.67 | 166.57 | 128.35 | 112.04 | 129.91 | 155.60 | 161.70 |
| | E-W | Measured Resistance (Ω) | **35** | 160.00 | 38.67 | 23.10 | 13.31 | 7.31 | 3.13 | 1.65 |
| | | Apparent Resistivity (Ω-m) | **166** | 306.32 | 148.13 | 132.71 | 127.41 | 140.03 | 149.69 | 158.10 |
| ERT-PV-181 | N-S | Measured Resistance (Ω) | **42** | 224.30 | 39.91 | 17.30 | 8.26 | 3.25 | 1.71 | 1.04 |
| | | Apparent Resistivity (Ω-m) | **145** | 429.46 | 152.89 | 110.40 | 79.03 | 62.27 | 82.08 | 99.85 |
| | E-W | Measured Resistance (Ω) | **39** | 214.90 | 25.50 | 15.66 | 8.90 | 3.34 | 1.61 | 0.73 |
| | | Apparent Resistivity (Ω-m) | **128** | 411.48 | 97.69 | 89.98 | 85.25 | 64.01 | 77.30 | 70.38 |
| ERT-PV-183 | N-S | Measured Resistance (Ω) | **67** | 215.50 | 111.10 | 68.57 | 51.63 | 13.23 | 4.47 | 1.84 |
| | | Apparent Resistivity (Ω-m) | **338** | 412.70 | 425.50 | 393.80 | 494.39 | 253.29 | 211.10 | 175.78 |
| | E-W | Measured Resistance (Ω) | **80** | 298.10 | 124.90 | 74.00 | 42.85 | 12.03 | 3.35 | 1.53 |
| | | Apparent Resistivity (Ω-m) | **348** | 570.89 | 484.02 | 425.20 | 410.26 | 230.43 | 169.77 | 146.82 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-184 | N-S | Measured Resistance (Ω) | **83** | 428.50 | 99.04 | 34.80 | 13.77 | 3.73 | 1.43 | 1.02 |
| | | Apparent Resistivity (Ω-m) | **253** | 820.83 | 379.48 | 199.95 | 131.89 | 71.41 | 72.09 | 97.66 |
| | E-W | Measured Resistance (Ω) | **206** | 305.90 | 83.36 | 45.79 | 16.79 | 3.86 | 1.39 | 982.90 |
| | | Apparent Resistivity (Ω-m) | **223** | 585.83 | 319.43 | 263.07 | 160.78 | 73.97 | 66.51 | 94.12 |
| ERT-PV-188 | N-S | Measured Resistance (Ω) | **53** | 221.60 | 79.17 | 46.17 | 16.22 | 5.44 | 2.36 | 1.67 |
| | | Apparent Resistivity (Ω-m) | **218** | 424.28 | 303.25 | 265.24 | 155.30 | 103.97 | 112.90 | 159.81 |
| | E-W | Measured Resistance (Ω) | **37** | 107.30 | 78.56 | 46.68 | 16.25 | 5.21 | 2.39 | 1.71 |
| | | Apparent Resistivity (Ω-m) | **187** | 205.44 | 300.93 | 268.25 | 155.66 | 99.79 | 114.27 | 163.98 |
| ERT-PV-189 | N-S | Measured Resistance (Ω) | **72** | 246.90 | 117.40 | 65.59 | 30.66 | 19.57 | 13.38 | 7.16 |
| | | Apparent Resistivity (Ω-m) | **471** | 472.74 | 449.88 | 376.73 | 293.55 | 374.90 | 640.38 | 685.50 |
| | E-W | Measured Resistance (Ω) | **62** | 232.30 | 81.72 | 48.90 | 29.61 | 21.54 | 15.82 | 6.16 |
| | | Apparent Resistivity (Ω-m) | **440** | 445.01 | 313.03 | 280.96 | 285.32 | 411.78 | 757.43 | 589.48 |
| ERT-PV-191 | N-S | Measured Resistance (Ω) | **7** | 14.73 | 9.68 | 8.36 | 6.26 | 4.55 | 2.53 | 1.68 |
| | | Apparent Resistivity (Ω-m) | **77** | 28.21 | 37.06 | 48.07 | 59.89 | 87.20 | 120.88 | 161.12 |
| | E-W | Measured Resistance (Ω) | **8** | 20.82 | 8.50 | 8.37 | 6.37 | 4.79 | 2.37 | 1.55 |
| | | Apparent Resistivity (Ω-m) | **76** | 39.87 | 32.55 | 48.07 | 61.02 | 91.68 | 113.45 | 148.74 |
| ERT-PV-193 | N-S | Measured Resistance (Ω) | **12** | 41.16 | 14.69 | 10.84 | 7.92 | 6.16 | 2.84 | 1.74 |
| | | Apparent Resistivity (Ω-m) | **99** | 78.82 | 56.24 | 62.27 | 75.80 | 117.99 | 135.73 | 166.88 |
| | E-W | Measured Resistance (Ω) | **11** | 35.92 | 15.14 | 11.24 | 8.08 | 5.64 | 2.78 | 1.65 |
| | | Apparent Resistivity (Ω-m) | **95** | 68.79 | 58.00 | 64.59 | 77.39 | 107.96 | 132.86 | 158.01 |
| ERT-PV-195 | N-S | Measured Resistance (Ω) | **30** | 115.70 | 46.75 | 24.57 | 11.19 | 5.87 | 3.12 | 1.97 |
| | | Apparent Resistivity (Ω-m) | **157** | 221.80 | 179.04 | 141.15 | 107.20 | 112.17 | 149.53 | 188.46 |
| | E-W | Measured Resistance (Ω) | **36** | 157.80 | 58.71 | 16.82 | 9.31 | 6.75 | 3.10 | 2.01 |
| | | Apparent Resistivity (Ω-m) | **169** | 302.21 | 224.64 | 96.62 | 89.09 | 129.24 | 148.47 | 192.24 |
| ERT-PV-197 | N-S | Measured Resistance (Ω) | **10** | 33.49 | 15.44 | 10.04 | 7.12 | 1.63 | 3.20 | 0.43 |
| | | Apparent Resistivity (Ω-m) | **68** | 64.13 | 59.16 | 57.67 | 68.21 | 31.15 | 153.22 | 40.93 |
| | E-W | Measured Resistance (Ω) | **8** | 17.12 | 15.95 | 14.69 | 7.95 | 2.02 | 0.59 | 0.39 |
| | | Apparent Resistivity (Ω-m) | **51** | 32.80 | 61.11 | 84.43 | 76.11 | 38.62 | 28.41 | 37.64 |
| ERT-PV-198 | N-S | Measured Resistance (Ω) | **12** | 34.46 | 21.02 | 12.17 | 7.01 | 3.68 | 1.83 | 0.97 |
| | | Apparent Resistivity (Ω-m) | **76** | 65.99 | 80.50 | 69.92 | 67.15 | 70.50 | 87.54 | 92.84 |
| | E-W | Measured Resistance (Ω) | **13** | 46.00 | 18.32 | 12.29 | 7.30 | 3.46 | 1.66 | 0.97 |
| | | Apparent Resistivity (Ω-m) | **77** | 88.09 | 70.16 | 70.59 | 69.89 | 66.32 | 79.64 | 93.30 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-203 | N-S | Measured Resistance (Ω) | **17** | 36.53 | 27.69 | 25.92 | 14.80 | 7.65 | 2.58 | 1.38 |
| | | Apparent Resistivity (Ω-m) | **124** | 69.95 | 106.04 | 148.93 | 141.73 | 146.61 | 123.69 | 132.13 |
| | E-W | Measured Resistance (Ω) | **17** | 45.07 | 26.77 | 20.87 | 14.63 | 8.40 | 3.09 | 1.55 |
| | | Apparent Resistivity (Ω-m) | **129** | 86.32 | 102.53 | 119.91 | 140.09 | 160.96 | 147.98 | 148.38 |
| ERT-PV-204 | N-S | Measured Resistance (Ω) | **12** | 32.23 | 18.81 | 15.77 | 9.30 | 5.31 | 2.53 | 1.53 |
| | | Apparent Resistivity (Ω-m) | **98** | 61.72 | 72.02 | 90.65 | 89.03 | 101.68 | 121.13 | 146.67 |
| | E-W | Measured Resistance (Ω) | **12** | 28.51 | 18.85 | 14.08 | 10.25 | 5.74 | 2.23 | 1.29 |
| | | Apparent Resistivity (Ω-m) | **92** | 54.59 | 72.24 | 80.92 | 98.15 | 109.85 | 106.77 | 123.78 |
| ERT-PV-205 | N-S | Measured Resistance (Ω) | **15** | 47.17 | 22.51 | 14.13 | 10.39 | 6.67 | 3.80 | 2.34 |
| | | Apparent Resistivity (Ω-m) | **127** | 90.28 | 86.23 | 81.20 | 99.52 | 127.68 | 181.78 | 224.09 |
| | E-W | Measured Resistance (Ω) | **17** | 56.34 | 22.82 | 15.06 | 10.84 | 6.90 | 3.79 | 2.41 |
| | | Apparent Resistivity (Ω-m) | **133** | 107.90 | 87.39 | 86.53 | 103.78 | 132.13 | 181.42 | 231.25 |
| ERT-PV-206 | N-S | Measured Resistance (Ω) | **13** | 34.60 | 21.21 | 15.82 | 10.55 | 6.55 | 3.48 | 2.15 |
| | | Apparent Resistivity (Ω-m) | **120** | 66.26 | 81.23 | 90.86 | 101.04 | 125.43 | 166.76 | 206.04 |
| | E-W | Measured Resistance (Ω) | **14** | 35.07 | 23.55 | 15.43 | 10.86 | 6.86 | 3.42 | 2.15 |
| | | Apparent Resistivity (Ω-m) | **122** | 67.15 | 90.22 | 88.64 | 104.03 | 131.40 | 163.71 | 205.47 |
| ERT-PV-207 | N-S | Measured Resistance (Ω) | **13** | 42.20 | 19.74 | 13.43 | 8.26 | 4.55 | 2.39 | 1.62 |
| | | Apparent Resistivity (Ω-m) | **96** | 80.80 | 75.62 | 77.14 | 79.10 | 87.17 | 114.51 | 155.20 |
| | E-W | Measured Resistance (Ω) | **12** | 33.92 | 18.82 | 11.88 | 8.37 | 4.56 | 2.49 | 1.70 |
| | | Apparent Resistivity (Ω-m) | **94** | 64.95 | 72.09 | 68.24 | 80.13 | 87.26 | 119.36 | 163.07 |
| ERT-PV-210 | N-S | Measured Resistance (Ω) | **15** | 43.14 | 22.04 | 14.69 | 9.23 | 7.09 | 5.74 | 3.35 |
| | | Apparent Resistivity (Ω-m) | **153** | 82.63 | 84.43 | 84.40 | 88.39 | 135.82 | 274.90 | 320.65 |
| | E-W | Measured Resistance (Ω) | **17** | 48.32 | 27.53 | 15.40 | 10.03 | 6.96 | 5.79 | 4.02 |
| | | Apparent Resistivity (Ω-m) | **168** | 92.57 | 105.49 | 88.48 | 96.04 | 133.35 | 277.19 | 385.27 |
| ERT-PV-211 | N-S | Measured Resistance (Ω) | **11** | 32.50 | 18.19 | 11.69 | 7.37 | 4.02 | 1.79 | 1.25 |
| | | Apparent Resistivity (Ω-m) | **79** | 62.24 | 69.68 | 67.18 | 70.59 | 77.02 | 85.53 | 119.94 |
| | E-W | Measured Resistance (Ω) | **11** | 39.15 | 13.32 | 7.42 | 7.46 | 3.70 | 1.42 | 1.27 |
| | | Apparent Resistivity (Ω-m) | **46** | 74.98 | 51.02 | 42.64 | 71.38 | 70.87 | 6.86 | 1.22 |
| ERT-PV-212 | N-S | Measured Resistance (Ω) | **19** | 31.13 | 25.65 | 24.18 | 18.01 | 14.16 | 9.58 | 7.03 |
| | | Apparent Resistivity (Ω-m) | **268** | 59.62 | 98.27 | 138.93 | 172.43 | 271.36 | 458.72 | 673.30 |
| | E-W | Measured Resistance (Ω) | **20** | 38.18 | 27.78 | 22.67 | 18.52 | 14.00 | 9.13 | 7.13 |
| | | Apparent Resistivity (Ω-m) | **268** | 73.12 | 106.41 | 130.27 | 177.36 | 268.16 | 437.39 | 683.36 |

# Soil Resistivity Results

| | | | | | |
|---|---|---|---|---|---|
| Client: | Tetra Tech | Date: | 9/22/2025-11/21/2025 | Prepared by: | Julia Ayer |
| Project Name: | Speedway | Weather: | Variable | Checked by: | Alex Lesky |
| Project Location: | Sherman County, Oregon | Temperature: | Variable | | |
| Equipment: | AGI MiniSting | | | | |
| Test Method: | Wenner 4 Electrode Array | | | | |

| Array | | Data | Averages | Array spacing (ft) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 1 | 2 | 3 | 5 | 10 | 25 | 50 |
| ERT-PV-214 | N-S | Measured Resistance (Ω) | **12** | 33.34 | 19.91 | 13.17 | 7.77 | 4.76 | 2.85 | 2.06 |
| | | Apparent Resistivity (Ω-m) | **102** | 63.86 | 76.26 | 75.71 | 74.40 | 91.26 | 136.31 | 196.81 |
| | E-W | Measured Resistance (Ω) | **12** | 38.77 | 18.41 | 10.61 | 6.97 | 4.26 | 2.77 | 2.20 |
| | | Apparent Resistivity (Ω-m) | **100** | 74.28 | 70.50 | 60.96 | 66.75 | 81.53 | 132.65 | 210.89 |
| ERT-PV-217 | N-S | Measured Resistance (Ω) | **14** | 38.62 | 22.63 | 15.61 | 13.02 | 5.76 | 2.03 | 1.09 |
| | | Apparent Resistivity (Ω-m) | **98** | 73.94 | 86.72 | 89.67 | 124.75 | 110.31 | 97.44 | 104.45 |
| | E-W | Measured Resistance (Ω) | **14** | 38.65 | 23.43 | 14.74 | 9.69 | 5.66 | 2.19 | 1.27 |
| | | Apparent Resistivity (Ω-m) | **97** | 74.04 | 89.76 | 84.70 | 92.84 | 108.42 | 104.70 | 121.16 |
| ERT-PV-221 | N-S | Measured Resistance (Ω) | **14** | 33.26 | 22.24 | 16.70 | 11.47 | 6.47 | 2.86 | 1.70 |
| | | Apparent Resistivity (Ω-m) | **111** | 63.46 | 85.19 | 95.98 | 109.79 | 123.93 | 136.70 | 162.92 |
| | E-W | Measured Resistance (Ω) | **13** | 29.68 | 22.76 | 17.52 | 10.65 | 6.75 | 2.76 | 1.82 |
| | | Apparent Resistivity (Ω-m) | **112** | 56.85 | 87.20 | 100.68 | 101.99 | 129.20 | 132.34 | 173.95 |
| ERT-PV-223 | N-S | Measured Resistance (Ω) | **15** | 45.35 | 22.16 | 13.96 | 8.64 | 5.04 | 3.62 | 3.08 |
| | | Apparent Resistivity (Ω-m) | **129** | 86.87 | 84.92 | 80.22 | 82.72 | 96.50 | 173.40 | 295.47 |
| | E-W | Measured Resistance (Ω) | **14** | 40.05 | 25.03 | 13.23 | 8.47 | 5.19 | 3.34 | 2.99 |
| | | Apparent Resistivity (Ω-m) | **125** | 76.72 | 95.89 | 76.05 | 81.17 | 99.40 | 160.02 | 286.42 |
| ERT-PV-226 | N-S | Measured Resistance (Ω) | **42** | 172.70 | 66.66 | 29.37 | 14.38 | 6.50 | 3.12 | 2.15 |
| | | Apparent Resistivity (Ω-m) | **196** | 330.71 | 255.39 | 168.71 | 137.68 | 124.54 | 149.20 | 205.59 |
| | E-W | Measured Resistance (Ω) | **50** | 215.30 | 72.53 | 34.45 | 15.49 | 7.28 | 2.98 | 2.30 |
| | | Apparent Resistivity (Ω-m) | **220** | 412.39 | 277.79 | 197.91 | 148.35 | 139.54 | 142.46 | 220.77 |
| ERT-PV-230 | N-S | Measured Resistance (Ω) | **16** | 29.76 | 24.60 | 19.19 | 15.87 | 10.88 | 5.72 | 3.66 |
| | | Apparent Resistivity (Ω-m) | **178** | 57.00 | 94.21 | 110.28 | 151.91 | 208.45 | 273.62 | 350.52 |
| | E-W | Measured Resistance (Ω) | **15** | 29.17 | 22.59 | 19.07 | 15.61 | 10.72 | 5.71 | 3.43 |
| | | Apparent Resistivity (Ω-m) | **173** | 55.87 | 86.53 | 109.55 | 149.50 | 205.28 | 273.50 | 328.57 |

# Appendix F: Pile Load Testing Results

ANS

January 14, 2026

# Speedway Solar

Sherman County, Oregon

## Pile Load Testing Report (Rev.1)

Prepared for:
**Tetra Tech**

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**ATTACHMENTS**


**Attachment A** – Investigation Location Plan
**Attachment B** – Pile Load Testing Logs
**Attachment C** – PLT Photo Log
**Attachment D** – Pile Extraction Photo Log

# 1. Summary of Scope

ANS was retained by Tetra Tech to conduct a pile load testing program in support of the proposed Speedway Solar project located in Sherman County, Oregon. The purpose of this Pile Load Testing Report (Report) is to provide data to Tetra Tech for their information and design. This Report summarizes the information gathered during our pile load testing program conducted between October 27th and December 10th, 2025.

A Location Plan identifying our pile installation and testing locations is provided as **Attachment A**. The results of the pile load testing program have been recorded and are presented as **Attachment B**.

As part of this work, the following activities were completed:

- ANS installed a total of 154 W6x9 test piles across the site.
- Pile installation was carried out in accordance with Tetra Techs provided *pile scope*
- This scope included 125 pile locations.
    - At 97 locations, one (1) test pile was installed denoted as "PT-PV-XXX".
    - At 27 locations, two (2) test piles were installed denoted as "PT-PV-XXXA" and "PT-PV-XXXB".
    - At one (1) location (PT-PV-127), three (3) test piles were installed denoted as "PT-PV-127A", "PT-PV-127B, and "PT-PV-127C".
    - All piles were installed to target depths ranging between six (6) and 12 feet below grade and consisted of the following:
        - 85 locations with one (1) pile driven into a 5.875-inch pre-drilled diameter pilot hole
        - 12 locations with one (1) pile directly driven into the existing grade
        - 19 locations with two (2) piles, an "A" pile driven into a 5.875-inch pre-drilled diameter pilot hole and a "B" pile directly driven into the existing grade
        - 5 locations with two (2) piles, an "A" pile driven into a 5.875-inch pre-drilled diameter pilot hole and a "B" pile driven into a 6.5-inch pre-drilled diameter pilot hole
        - 3 locations with two (2) piles, an "A" and "B" pile both directly driven into the existing grade
        - 1 location with three (3) piles, an "A" pile driven into a 5.875-inch pre-drilled diameter pilot hole, a "B" pile directly driven into the existing grade, and a "C" pile driven into a 6.5-inch pre-drilled diameter pilot hole
- After installation, all piles were given a minimum 48-hour soak period prior to testing
- All piles were tested for both uplift and lateral capacity
- At 42 select locations, piles were also tested for compression capacity
- Uplift testing was loaded to 15,000 lbs., or until 1-inch of vertical displacement was measured
- Lateral testing was loaded to 6,000 lbs., or until 1-inch of horizontal deflection measured at 6 inches above grade was measured
    - All lateral loading was applied at 36 inches (3 feet) above ground surface
- Compression testing was loaded to 15,000 lbs., or until 1-inch of vertical displacement was measured
- At the conclusion of the program, all piles were extracted or cut at the top of rock and were properly disposed of
- A photo log depicting pile installation and the load testing setup is presented as **Attachment C**
  A photo log depicting locations where piles were cut and could not be fully extracted is presented as **Attachment D**

# 2. Investigation Methodology

## 2.1. PILE LOAD TESTING

### 2.1.1. PILE INSTALLATIONS

ANS conducted a pile load testing program consisting of 154 W6x9 steel sections across the proposed solar array areas between October 27th and December 10th, 2025. A total of 125 installation locations were considered with a varying number of piles installed at each location.

At 85 locations one (1) pile was installed denoted as "PT-PV-XXX" driven into a 5.875-inch pre-drilled diameter pilot hole and at 12 locations one (1) pile was installed denoted as "PT-PV-XXX" directly driven into the existing grade. At 19 locations two (2) piles were installed, one (1) pile denoted as "PT-PV-XXXA" driven into a 5.875-inch pre-drilled diameter pilot hole and one (1) pile denoted as "PT-PV-XXXB" directly driven into the existing grade. At five (5) locations two (2) piles were installed, one (1) pile denoted as "PT-PV-XXXA" driven into a 5.875-inch pre-drilled diameter pilot hole and one (1) pile denoted as "PT-PV-XXXB" driven into a 6.5-inch pre-drilled diameter pilot hole. At three (3) locations two (2) piles were installed, one (1) pile denoted as "PT-PV-XXXA" and one (1) pile denoted as "PT-PV-XXXB" both directly driven into the existing grade. At one (1) location three (3) piles were installed, one (1) pile denoted as "PT-PV-XXXA" driven into a 5.875-inch pre-drilled diameter pilot hole, one (1) pile denoted as "PT-PV-XXXB" directly driven into the existing grade, and one (1) pile denoted as "PT-PV-XXXC" driven into a 6.5-inch pre-drilled diameter pilot hole.

All piles were installed to target depths ranging between six (6) and 12 feet below grade. Refusal was encountered in 21 test piles at depths ranging between five (5) and 11 feet below grade. All piles were driven to their targeted depth or until refusal using a GAYK HRE 4000 Pile Driver. All piles were allowed a minimum of 48 hours of soak time prior to testing. The pile load testing program was overseen by an ANS geotechnical representative.

### 2.1.2. UPLIFT LOAD TESTING

Once installed to their embedded depth, an uplift load test was performed on each test pile in accordance with the ASTM D3689 (uplift) test method. The tension load was applied using an excavator which applied the load concentrically to the pile by using a Grade 100 0.5-inch chain attached to a dynamometer, as well as a "pacman" clamp attachment to secure the assembly to the pile.

Tension loads were applied in 1-minute, 1,000-pound increments up to 15,000 pounds. Loads were applied until the maximum target load was reached or until a maximum vertical displacement of approximately 1-inch (pile failure criteria) was achieved. Following maximum load or maximum displacement, the load was released and the final displacement was recorded. A photograph generally depicting the uplift test arrangement is provided as **Figure 1**.

Figure 1: Typical Uplift Setup

## 2.1.3. LATERAL LOAD TESTING

A lateral load test was then performed on each pile following the uplift load test in accordance with ASTM D3966 (lateral) test method. Each test load was applied using the pulling force from an Enerpac hydraulic jack attached to an excavator.

Lateral loads were applied in 1-minute, 500-pound increments up to 6,000 pounds. Lateral loads were applied at 36 inches (3 feet) above grade and were applied until the maximum specified target load was reached or until a maximum lateral deflection of approximately 1-inch (pile failure criteria) measured at six (6) inches above grade was achieved. Following maximum load or maximum deflection, the load was released and the final deflection was recorded. A photograph generally depicting the lateral test arrangement is provided as **Figure 2**.

Figure 2: Typical Lateral Setup

## 2.1.4. COMPRESSION LOAD TESTING

A compression load test was performed on 42 select test piles following each uplift and lateral load test in accordance with the ASTM D1143 (compression) test method. The compression loads were applied using an excavator, which applied the load concentrically to the pile.

Compression loads were applied in 1-minute, 1,000-pound increments up to 15,000 pounds. Loads were applied until the maximum target load was reached or until a maximum vertical displacement of approximately 1-inch was achieved. Following maximum load or maximum displacement, the load was released and the final displacement was recorded. A photograph generally depicting the compression test arrangement is provided as **Figure 3**.

**Figure 3: Typical Compression Setup**

## 2.1.5. REMOVAL OF PILES

Upon completion of the pile load testing program, all piles were removed in full or cut at the top of rock and were properly disposed of. A photo log depicting locations where piles were cut and could not be fully extracted is presented as **Attachment D**.

# 3. Pile Load Testing Investigation Results

The full pile load testing program results are provided as **Attachment B**; however, a summary of the recorded data is provided in **Table 1**.

**TABLE 1: PILE LOAD TESTING PROGRAM SUMMARY**

| Pile ID | Pre-drilled Location | Pre-drill Depth (ft) | Target Embedment Depth (ft) | Actual Embedment Depth (ft) | Total Drive Time (sec.) | Max Uplift Load (lbs.) | Max Vertical Displacement at Max Uplift Load (in.) | Max Lateral Load (lbs.) | Max Lateral Deflection at Max Lateral Load (in.) | Max Compression Load (lbs.) | Max Vertical Displacement at Max Compression Load (in.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PT-PV-001A | Yes | 8 | 8 | 8 | 3.4 | 6,420 | 1.0660 | 3,920 | 1.1440 | --- | --- |
| PT-PV-001B | No | --- | 8 | 8 | 5.9 | 12,480 | 1.0780 | 3,500 | 1.1070 | 15,000 | 0.2380 |
| PT-PV-002 | No | --- | 7 | 7 | 11.1 | 15,000 | 0.2680 | 3,640 | 1.0260 | --- | --- |
| PT-PV-004 | No | --- | 8 | 8 | 10.5 | 15,000 | 0.2100 | 3,500 | 1.0550 | --- | --- |
| PT-PV-005A | No | --- | 8 | 8 | 11.0 | 15,000 | 0.4350 | 4,500 | 1.0580 | 15,000 | 0.3420 |
| PT-PV-005B | No | --- | 12 | 12 | 21.3 | 15,000 | 0.1410 | 3,320 | 1.1090 | 15,000 | 0.1480 |
| PT-PV-007A | Yes | 8 | 8 | 8 | 5.7 | 5,640 | 1.2910 | 3,500 | 1.0980 | --- | --- |
| PT-PV-007B | No | --- | 8 | 8 | 14.5 | 15,000 | 0.2980 | 4,340 | 1.0700 | 15,000 | 0.1910 |
| PT-PV-009 | No | --- | 9 | 9 | 9.4 | 13,480 | 1.1550 | 3,720 | 1.0370 | 15,000 | 0.2340 |
| PT-PV-010 | No | --- | 8 | 8 | 14.4 | 14,000 | 1.0540 | 4,500 | 1.0420 | 15,000 | 0.1870 |
| PT-PV-011A | Yes | 8 | 8 | 8 | 2.6 | 9,680 | 1.3120 | 4,300 | 1.1160 | --- | --- |
| PT-PV-011B | No | --- | 8 | 8 | 29.3 | 15,000 | 0.0560 | 4,000 | 1.0290 | --- | --- |
| PT-PV-015A | Yes | 7 | 7 | 7 | 6.1 | 5,430 | 1.1380 | 6,000 | 0.9640 | --- | --- |
| PT-PV-015B | No | --- | 7 | 7 | 19.5 | 15,000 | 0.2230 | 5,350 | 1.0590 | --- | --- |
| PT-PV-017A | No | --- | 8 | 8 | 16.8 | 15,000 | 0.1210 | 5,230 | 1.0210 | 15,000 | 0.0860 |
| PT-PV-017B | No | --- | 12 | 12 | 51.9 | 15,000 | 0.0830 | 5,000 | 1.0630 | 15,000 | 0.0340 |
| PT-PV-019 | No | --- | 8 | 8 | 7.8 | 15,000 | 0.5070 | 4,280 | 1.0620 | --- | --- |
| PT-PV-021 | Yes | 8 | 8 | 8 | 14.9 | 15,000 | 0.0190 | 3,500 | 1.0820 | --- | --- |
| PT-PV-022 | No | --- | 7 | 7 | 29.1 | 15,000 | 0.0720 | 3,000 | 1.1850 | 15,000 | 0.0230 |
| PT-PV-025 | No | --- | 7 | 6.5 | 48.1 | 15,000 | 0.0190 | 5,880 | 1.0220 | 15,000 | 0.0090 |
| PT-PV-028A | Yes | 8 | 8 | 8 | 2.4 | 7,840 | 1.1420 | 3,780 | 0.1580 | --- | --- |
| PT-PV-028B | No | --- | 8 | 8 | 14.0 | 15,000 | 0.1090 | 3,000 | 1.0300 | --- | --- |
| PT-PV-029 | No | --- | 8 | 8 | 11.3 | 5,380 | 1.0710 | 4,000 | 1.0360 | 15,000 | 0.5650 |
| PT-PV-030A | Yes | 7 | 7 | 7 | 6.7 | 7,490 | 1.1150 | 4,380 | 1.0460 | --- | --- |
| PT-PV-030B | No | --- | 7 | 7 | 14.3 | 15,000 | 0.6460 | 6,000 | 0.8810 | --- | --- |
| PT-PV-031A | Yes | 7 | 7 | 7 | 1.3 | 10,480 | 1.1280 | 6,000 | 0.8710 | --- | --- |
| PT-PV-031B | No | --- | 7 | 7 | 7.0 | 15,000 | 0.1210 | 6,000 | 0.6860 | 15,000 | 0.0130 |
| PT-PV-034 | No | --- | 7 | 7 | 16.3 | 13,000 | 1.1270 | 4,500 | 1.0610 | --- | --- |
| PT-PV-035 | Yes | 8 | 8 | 8 | 81.4 | 15,000 | 0.0340 | 6,000 | 0.6100 | --- | --- |
| PT-PV-036 | Yes | 10 | 10 | 9 | 137.1 | 15,000 | 0.0210 | 6,000 | 0.4420 | --- | --- |
| PT-PV-040 | Yes | 8 | 8 | 8 | 25.9 | 15,000 | 0.0320 | 5,350 | 1.0680 | --- | --- |
| PT-PV-043 | Yes | 8 | 8 | 8 | 37.4 | 15,000 | 0.0200 | 6,000 | 0.8855 | --- | --- |
| PT-PV-045A | No | --- | 8 | 8 | 7.8 | 4,320 | 1.0510 | 5,690 | 1.0320 | 15,000 | 0.5040 |
| PT-PV-045B | No | --- | 12 | 12 | 27.3 | 15,000 | 0.1260 | 5,280 | 1.1580 | 15,000 | 0.1000 |
| PT-PV-047 | Yes | 10 | 10 | 9 | 98.2 | 15,000 | 0.0350 | 6,000 | 0.7100 | --- | --- |
| PT-PV-048 | No | --- | 7 | 7 | 33.1 | 15,000 | 0.0710 | 6,000 | 0.9670 | --- | --- |
| PT-PV-051 | Yes | 8 | 8 | 8 | 67.4 | 15,000 | 0.0210 | 6,000 | 0.6260 | --- | --- |
| PT-PV-052 | Yes | 10 | 10 | 10 | 123.2 | 15,000 | 0.0360 | 6,000 | 0.7250 | --- | --- |
| PT-PV-056 | Yes | 8 | 8 | 8 | 12.9 | 15,000 | 0.0250 | 6,000 | 0.9520 | --- | --- |
| PT-PV-058 | Yes | 10 | 10 | 10 | 62.5 | 15,000 | 0.0350 | 4,280 | 1.0180 | 15,000 | 0.0210 |
| PT-PV-060A | Yes | 7 | 7 | 7 | 6.4 | 15,000 | 0.4020 | 5,230 | 1.0260 | --- | --- |
| PT-PV-060B | No | 7 | 7 | 7 | 35.9 | 15,000 | 0.0220 | 4,500 | 1.0060 | 15,000 | 0.0130 |
| PT-PV-062 | Yes | 8 | 8 | 8 | 22.5 | 15,000 | 0.0330 | 4,880 | 1.0380 | --- | --- |
| PT-PV-064 | Yes | 10 | 10 | 10 | 68.5 | 15,000 | 0.0210 | 3,620 | 1.0120 | --- | --- |
| PT-PV-065 | No | --- | 6 | 6 | 29.8 | 15,000 | 0.0610 | 4,270 | 1.3560 | --- | --- |

| Pile ID | Pre-drilled Location | Pre-drill Depth (ft) | Target Embedment Depth (ft) | Actual Embedment Depth (ft) | Total Drive Time (sec.) | Max Uplift Load (lbs.) | Max Vertical Displacement at Max Uplift Load (in.) | Max Lateral Load (lbs.) | Max Lateral Deflection at Max Lateral Load (in.) | Max Compression Load (lbs.) | Max Vertical Displacement at Max Compression Load (in.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PT-PV-068 | Yes | 8 | 8 | 8 | 52.8 | 15,000 | 0.0120 | 6,000 | 0.6170 | 15,000 | 0.0300 |
| PT-PV-071 | Yes | 8 | 8 | 8 | 145.9 | 15,000 | 0.0360 | 6,000 | 0.3360 | --- | --- |
| PT-PV-072 | Yes | 10 | 10 | 10 | 16.7 | 15,000 | 0.0580 | 5,040 | 1.0010 | --- | --- |
| PT-PV-074 | Yes | 8 | 8 | 8 | 22.8 | 15,000 | 0.0400 | 5,220 | 1.0280 | --- | --- |
| PT-PV-077A | Yes | 8 | 8 | 8 | 4.8 | 6,500 | 1.0630 | 4,000 | 1.0410 | --- | --- |
| PT-PV-077B | No | --- | 8 | 8 | 29.2 | 7,000 | 0.5350 | 4,000 | 1.0410 | 15,000 | 0.0160 |
| PT-PV-079 | Yes | 10 | 10 | 10 | 76.3 | 15,000 | 0.0240 | 5,340 | 1.0680 | --- | --- |
| PT-PV-081 | Yes | 8 | 8 | 8 | 15.9 | 15,000 | 0.0430 | 4,380 | 1.0480 | --- | --- |
| PT-PV-084A | Yes | 8 | 8 | 8 | 45.7 | 15,000 | 0.0200 | 4,500 | 1.1120 | --- | --- |
| PT-PV-084B | No | --- | 8 | 5 | 39.2 | 15,000 | 0.0440 | 4,750 | 1.0300 | 15,000 | 0.0100 |
| PT-PV-086 | Yes | 10 | 10 | 10 | 50.1 | 15,000 | 0.0330 | 6,000 | 0.6670 | --- | --- |
| PT-PV-089 | Yes | 8 | 8 | 8 | 8.6 | 15,000 | 0.0370 | 5,500 | 1.0360 | --- | --- |
| PT-PV-090 | Yes | 10 | 10 | 10 | 28.3 | 15,000 | 0.0420 | 5,000 | 1.0400 | --- | --- |
| PT-PV-093A | Yes | 7 | 7 | 7 | 1.1 | 2,780 | 1.2030 | 3,180 | 1.0410 | --- | --- |
| PT-PV-093B | No | --- | 7 | 7 | 21.7 | 15,000 | 0.0530 | 5,780 | 1.1160 | --- | --- |
| PT-PV-095 | Yes | 10 | 10 | 6 | 66.6 | 15,000 | 0.0670 | 4,840 | 1.0750 | --- | --- |
| PT-PV-097A | Yes | 8 | 8 | 8 | 3.3 | 3,680 | 1.1690 | 3,240 | 1.0770 | --- | --- |
| PT-PV-097B | No | --- | 8 | 8 | 4.9 | 4,680 | 1.1190 | 3,500 | 1.0440 | 10,000 | 1.0180 |
| PT-PV-098 | No | --- | 7 | 7 | 12.5 | 15,000 | 0.2660 | 3,000 | 1.0160 | --- | --- |
| PT-PV-100 | Yes | 8 | 8 | 8 | 33.5 | 15,000 | 0.0310 | 5,680 | 1.0450 | 15,000 | 0.0160 |
| PT-PV-101A | Yes | 6 | 6 | 6 | 1.1 | 4,890 | 1.5010 | 2,840 | 1.0680 | --- | --- |
| PT-PV-101B | No | --- | 6 | 6 | 2.4 | 4,380 | 1.2440 | 2,280 | 1.0880 | --- | --- |
| PT-PV-102 | Yes | 12 | 12 | 12 | 136.7 | 15,000 | 0.0110 | 6,000 | 0.4950 | --- | --- |
| PT-PV-106A | Yes | 8 | 8 | 8 | 3.9 | 6,480 | 1.0360 | 3,890 | 1.0760 | --- | --- |
| PT-PV106B | No | --- | 8 | 8 | 18.1 | 15,000 | 0.1090 | 3,840 | 1.0520 | 15,000 | 0.0240 |
| PT-PV-107 | Yes | 10 | 10 | 10 | 107.8 | 15,000 | 0.0150 | 5,500 | 1.0620 | --- | --- |
| PT-PV-109 | Yes | 8 | 8 | 8 | 19.9 | 15,000 | 0.0690 | 4,780 | 1.0540 | --- | --- |
| PT-PV-111A | Yes | 7 | 7 | 7 | 4.6 | 1,580 | 1.0660 | 4,320 | 1.0330 | --- | --- |
| PT-PV-111B | No | --- | 7 | 7 | 12.1 | 9,740 | 1.0830 | 5,500 | 1.0180 | 15,000 | 0.0280 |
| PT-PV-112 | Yes | 10 | 10 | 10 | 11.9 | 15,000 | 0.4190 | 4,890 | 1.0610 | --- | --- |
| PT-PV-114 | Yes | 12 | 12 | 12 | 125.4 | 15,000 | 0.0280 | 6,000 | 0.9330 | 15,000 | 0.0050 |
| PT-PV-117 | Yes | 8 | 8 | 8 | 26.2 | 15,000 | 0.0230 | 5,000 | 1.0500 | --- | --- |
| PT-PV-118 | Yes | 10 | 10 | 9 | 122.5 | 15,000 | 0.0250 | 6,000 | 0.7550 | --- | --- |
| PT-PV-121 | Yes | 8 | 8 | 8 | 26.7 | 15,000 | 0.3180 | 4,350 | 1.0090 | --- | --- |
| PT-PV-122B 6.5" | Yes | 10 | 10 | 10 | 89.3 | 15,000 | 0.0400 | 6,000 | 0.9340 | --- | --- |
| PT-PV-122A | Yes | 10 | 10 | 9.5 | 36.3 | 15,000 | 0.0110 | 6,000 | 0.8420 | --- | --- |
| PT-PV-123B 6.5" | Yes | 12 | 12 | 12 | 77.6 | 15,000 | 0.0290 | 6,000 | 1.0720 | --- | --- |
| PT-PV-123A | Yes | 12 | 12 | 11 | 125.8 | 15,000 | 0.0550 | 6,000 | 0.8620 | 15,000 | 0.0170 |
| PT-PV-126B 6.5" | Yes | 8 | 8 | 8 | 14.7 | 15,000 | 0.0200 | 6,000 | 0.5970 | --- | --- |
| PT-PV-126A | Yes | 8 | 8 | 8 | 53.5 | 15,000 | 0.0320 | 6,000 | 0.5570 | --- | --- |
| PT-PV-127C 6.5" | Yes | 6 | 6 | 6 | 0.0 | 5,200 | 1.2120 | 3,780 | 1.0960 | 15,000 | 0.3290 |
| PT-PV-127A | Yes | 6 | 6 | 6 | 2.9 | 13,850 | 1.0780 | 4,000 | 1.0570 | --- | --- |
| PT-PV-127B | No | --- | 6 | 6 | 11.5 | 15,000 | 0.0570 | 4,500 | 1.0140 | --- | --- |
| PT-PV-128B 6.5" | Yes | 10 | 10 | 10 | 93.6 | 15,000 | 0.0250 | 6,000 | 0.3690 | --- | --- |
| PT-PV-128A | Yes | 10 | 10 | 10 | 91.0 | 15,000 | 0.0280 | 6,000 | 0.3720 | --- | --- |
| PT-PV-130B 6.5" | Yes | 8 | 8 | 6.5 | 76.8 | 15,000 | 0.0540 | 6,000 | 1.0910 | --- | --- |
| PT-PV-130A | Yes | 8 | 8 | 5.5 | 46.4 | 15,000 | 0.0960 | 6,000 | 0.8780 | --- | --- |
| PT-PV-132 | Yes | 8 | 8 | 8 | 84.5 | 15,000 | 0.0250 | 6,000 | 1.0290 | 15,000 | 0.0150 |
| PT-PV-134 | Yes | 10 | 10 | 10 | 53.3 | 15,000 | 0.0200 | 4,450 | 1.0150 | --- | --- |
| PT-PV-136 | Yes | 8 | 8 | 8 | 45.2 | 15,000 | 0.0280 | 4,500 | 1.0110 | --- | --- |
| PT-PV-137 | Yes | 10 | 10 | 10 | 117.6 | 15,000 | 0.0300 | 3,500 | 1.0480 | --- | --- |
| PT-PV-141 | Yes | 8 | 8 | 8 | 13.3 | 15,000 | 0.5020 | 4,380 | 1.0290 | --- | --- |

| Pile ID | Pre-drilled Location | Pre-drill Depth (ft) | Target Embedment Depth (ft) | Actual Embedment Depth (ft) | Total Drive Time (sec.) | Max Uplift Load (lbs.) | Max Vertical Displacement at Max Uplift Load (in.) | Max Lateral Load (lbs.) | Max Lateral Deflection at Max Lateral Load (in.) | Max Compression Load (lbs.) | Max Vertical Displacement at Max Compression Load (in.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PT-PV-142 | Yes | 10 | 10 | 9.5 | 133.0 | 15,000 | 0.0220 | 6,000 | 0.8240 | --- | --- |
| PT-PV-144 | Yes | 8 | 8 | 8 | 44.2 | 15,000 | 0.0250 | 2,420 | 1.0010 | 15,000 | 0.0140 |
| PT-PV-145 | Yes | 10 | 10 | 6 | 66.4 | 15,000 | 0.0330 | 4,500 | 1.0190 | --- | --- |
| PT-PV-147 | Yes | 12 | 12 | 12 | 149.7 | 15,000 | 0.0250 | 4,420 | 1.1410 | --- | --- |
| PT-PV-151 | Yes | 8 | 8 | 8 | 73.6 | 15,000 | 0.0100 | 6,000 | 0.5550 | 15,000 | 0.0180 |
| PT-PV-154 | Yes | 10 | 10 | 8.5 | 143.8 | 15,000 | 0.0220 | 6,000 | 0.3910 | --- | --- |
| PT-PV-156 | Yes | 12 | 12 | 12 | 100.8 | 15,000 | 0.0340 | 4,880 | 1.0750 | --- | --- |
| PT-PV-157A | Yes | 6 | 6 | 6 | 2.4 | 4,000 | 0.5280 | 3,670 | 1.0710 | --- | --- |
| PT-PV-157B | No | --- | 6 | 6 | 8.1 | 5,470 | 1.7790 | 3,500 | 1.0720 | 15,000 | 0.2630 |
| PT-PV-160 | Yes | 10 | 10 | 10 | 113.8 | 15,000 | 0.0300 | 5,000 | 1.0700 | --- | --- |
| PT-PV-162 | Yes | 8 | 8 | 7 | 149.1 | 15,000 | 0.0420 | 5,380 | 1.1280 | --- | --- |
| PT-PV-163 | Yes | 10 | 10 | 10 | 151.8 | 15,000 | 0.0270 | 6,000 | 0.9820 | --- | --- |
| PT-PV-164A | Yes | 6 | 6 | 6 | 4.1 | 6,380 | 1.1510 | 3,460 | 1.0460 | --- | --- |
| PT-PV-164B | No | --- | 6 | 6 | 14.3 | 15,000 | 0.9520 | 6,000 | 0.7570 | 15,000 | 0.6820 |
| PT-PV-167 | Yes | 8 | 8 | 8 | 32.0 | 15,000 | 0.0350 | 4,500 | 1.0600 | --- | --- |
| PT-PV-169 | Yes | 10 | 10 | 10 | 102.8 | 15,000 | 0.0340 | 3,940 | 1.1220 | --- | --- |
| PT-PV-172 | Yes | 8 | 8 | 8 | 41.4 | 15,000 | 0.0310 | 5,270 | 1.1190 | --- | --- |
| PT-PV-173 | Yes | 10 | 10 | 10 | 69.4 | 15,000 | 0.0330 | 3,240 | 1.0390 | --- | --- |
| PT-PV-177 | Yes | 8 | 8 | 8 | 33.6 | 15,000 | 0.0550 | 5,000 | 1.0290 | --- | --- |
| PT-PV-178 | Yes | 10 | 10 | 10 | 59.6 | 15,000 | 0.0290 | 6,000 | 0.9960 | 15,000 | 0.0090 |
| PT-PV-179 | Yes | 12 | 12 | 11 | 122.2 | 15,000 | 0.0200 | 4,500 | 1.1870 | --- | --- |
| PT-PV-181 | Yes | 8 | 8 | 8 | 53.1 | 15,000 | 0.0140 | 5,380 | 1.0090 | --- | --- |
| PT-PV-183 | Yes | 10 | 10 | 8.5 | 135.7 | 15,000 | 0.0190 | 6,000 | 0.7660 | 15,000 | 0.0250 |
| PT-PV-184 | Yes | 8 | 8 | 8 | 42.3 | 15,000 | 0.0270 | 6,000 | 1.0740 | --- | --- |
| PT-PV-188 | Yes | 8 | 8 | 8 | 33.8 | 15,000 | 0.0300 | 5,000 | 1.0330 | --- | --- |
| PT-PV-189 | Yes | 10 | 10 | 10 | 39.5 | 15,000 | 0.0310 | 4,340 | 1.0710 | --- | --- |
| PT-PV-191 | Yes | 8 | 8 | 8 | 40.7 | 15,000 | 0.0210 | 6,000 | 0.9420 | --- | --- |
| PT-PV-193 | Yes | 10 | 10 | 10 | 135.7 | 15,000 | 0.0330 | 4,280 | 1.0280 | --- | --- |
| PT-PV-195 | Yes | 8 | 8 | 8 | 35.9 | 15,000 | 0.0220 | 5,880 | 1.0980 | --- | --- |
| PT-PV-197 | Yes | 8 | 8 | 6.5 | 95.4 | 15,000 | 0.0160 | 6,000 | 0.9260 | --- | --- |
| PT-PV-198 | Yes | 10 | 10 | 10 | 51.9 | 15,000 | 0.0270 | 4,880 | 1.0610 | 15,000 | 0.0140 |
| PT-PV-203 | Yes | 8 | 8 | 8 | 43.1 | 15,000 | 0.0150 | 5,840 | 1.1190 | 15,000 | 0.0120 |
| PT-PV-204 | Yes | 10 | 10 | 10 | 67.1 | 15,000 | 0.0230 | 5,330 | 1.0050 | --- | --- |
| PT-PV-205 | Yes | 12 | 12 | 10.75 | 99.6 | 15,000 | 0.0140 | 6,000 | 1.0510 | --- | --- |
| PT-PV-206 | Yes | 8 | 8 | 8 | 24.6 | 15,000 | 0.0220 | 5,920 | 1.0370 | --- | --- |
| PT-PV-207 | Yes | 10 | 10 | 10 | 41.2 | 15,000 | 0.0210 | 5,280 | 1.0500 | 15,000 | 0.0050 |
| PT-PV-210 | Yes | 8 | 8 | 8 | 17.0 | 15,000 | 0.0480 | 4,270 | 1.0240 | --- | --- |
| PT-PV-211 | Yes | 8 | 8 | 8 | 35.8 | 15,000 | 0.0260 | 4,720 | 1.0260 | --- | --- |
| PT-PV-212 | Yes | 10 | 10 | 9.5 | 124.3 | 15,000 | 0.0160 | 6,000 | 0.8170 | --- | --- |
| PT-PV-214 | Yes | 8 | 8 | 8 | 18.7 | 15,000 | 0.0370 | 4,820 | 1.0810 | 15,000 | 0.0150 |
| PT-PV-217 | Yes | 10 | 10 | 10 | --- | 15,000 | 0.0180 | 6,000 | 0.9150 | --- | --- |
| PT-PV-221 | Yes | 8 | 8 | 8 | 109.4 | 15,000 | 0.0200 | 5,740 | 1.0350 | --- | --- |
| PT-PV-223 | Yes | 10 | 10 | 10 | 54.1 | 15,000 | 0.0160 | 5,340 | 1.0130 | 15,000 | 0.0220 |
| PT-PV-226 | Yes | 12 | 12 | 12 | 207.0 | 15,000 | 0.0440 | 6,000 | 0.9020 | --- | --- |
| PT-PV-230 | Yes | 10 | 10 | 10 | 101.0 | 15,000 | 0.0190 | 6,000 | 1.0960 | 15,000 | 0.0030 |
| PT-SB-01A | Yes | 7 | 7 | 7 | 2.1 | 8,340 | 1.0840 | 6,000 | 1.0870 | --- | --- |
| PT-SB-01B | No | --- | 7 | 7 | 6.7 | 9,880 | 1.2320 | 4,000 | 1.0850 | 15,000 | 0.4010 |
| PT-SB-02 | Yes | 12 | 12 | 10.5 | 116.3 | 15,000 | 0.0260 | 4,000 | 1.0700 | 15,000 | 0.0040 |
| PT-WTG-01A | Yes | 9 | 9 | 9 | 25.5 | 12,640 | 1.2230 | 4,230 | 1.0620 | --- | --- |
| PT-WTG-01B | No | --- | 9 | 9 | 14.3 | 15,000 | 0.5510 | 3,780 | 1.0580 | 15,000 | 0.1280 |
| PT-WTG-02 | Yes | 10 | 10 | 10 | 25.5 | 15,000 | 0.0960 | 3,500 | 1.0130 | --- | --- |
| PT-WTG-03 | Yes | 8 | 8 | 8 | 14.4 | 15,000 | 0.0300 | 4,890 | 1.1300 | --- | --- |

| Pile ID | Pre-drilled Location | Pre-drill Depth (ft) | Target Embedment Depth (ft) | Actual Embedment Depth (ft) | Total Drive Time (sec.) | Max Uplift Load (lbs.) | Max Vertical Displacement at Max Uplift Load (in.) | Max Lateral Load (lbs.) | Max Lateral Deflection at Max Lateral Load (in.) | Max Compression Load (lbs.) | Max Vertical Displacement at Max Compression Load (in.) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PT-WTG-04 | Yes | 10 | 10 | 10 | 29.8 | 15,000 | 0.0780 | 4,240 | 1.0290 | --- | --- |
| PT-WTG-05 | Yes | 8 | 8 | 7 | 106.0 | 15,000 | 0.0280 | 5,000 | 1.0240 | --- | --- |
| PT-WTG-06 | Yes | 10 | 10 | 10 | 99.0 | 15,000 | 0.0340 | 5,780 | 1.0980 | --- | --- |
| PT-WTG-07 | Yes | 8 | 8 | 8 | 259.1 | 15,000 | 0.0140 | 6,000 | 0.8980 | --- | --- |
| PT-WTG-08 | Yes | 10 | 10 | 10 | 77.8 | 15,000 | 0.0370 | 5,340 | 1.0340 | --- | --- |

Red text denotes test locations that encountered early pile refusal during installation.

# 4. Limitations

It should be noted that the findings within this Pile Load Testing Report are based on our load testing program completed between October 27th and December 10th, 2025. As indicated in our proposal, we have only provided data collection; engineering services, expressed or implied, have not been provided within this report. This report has been prepared to summarize the information gathered during our field activities, as well as to provide project-specific data to assist Tetra Tech with the design of the planned solar facility.

We sincerely appreciate the opportunity to support this project, and please feel free to contact us should you have any questions regarding the findings of this Report.

Yours Truly,

**Michael Lionikis**
EIT
Engineer IV - Geotechnical
**ANS**
Michael.Lionikis@ansgeo.com
p. 908-754-8800 m. 908-930-7832
www.ansgeo.com

ANS

ATTACHMENT A

# Investigation Location Plan

ANS

Client:

TETRA TECH

**PILE LOAD TESTING - INVESTIGATION LOCATION PLAN**

**TETRA TECH**
**SPEEDWAY SOLAR PROJECT**
**SHERMAN COUNTY, OREGON**

## Legend

- Pile Load Testing Locations
- Pile Load Testing SB Locations
- Pile Load Testing WTG Locations
- Parcel Boundaries

0 7,000 14,000 ft

**Absolute Scale: 1 inch = 7,000 feet**
**Scale at 11" x 17" AS SHOWN**

N

Prepared by: Sarah Ambrozak
Date: December 16, 2025
Drawing Number: ILP-1 Rev.0

ANS

Client:

TETRA TECH

# PILE LOAD TESTING - INVESTIGATION LOCATION PLAN

**TETRA TECH**
**SPEEDWAY SOLAR PROJECT**
**SHERMAN COUNTY, OREGON**

## Legend

- Pile Load Testing Locations
- Pile Load Testing SB Locations
- Pile Load Testing WTG Locations
- Parcel Boundaries

0 3,000 6,000 ft

**Absolute Scale: 1 inch = 3,000 feet**
**Scale at 11" x 17" AS SHOWN**

N

Prepared by: Sarah Ambrozak
Date: December 16, 2025
Drawing Number: ILP-1 Rev.1

ANS

Client:

TETRA TECH

# PILE LOAD TESTING - INVESTIGATION LOCATION PLAN

**TETRA TECH**
**SPEEDWAY SOLAR PROJECT**
**SHERMAN COUNTY, OREGON**

## Legend

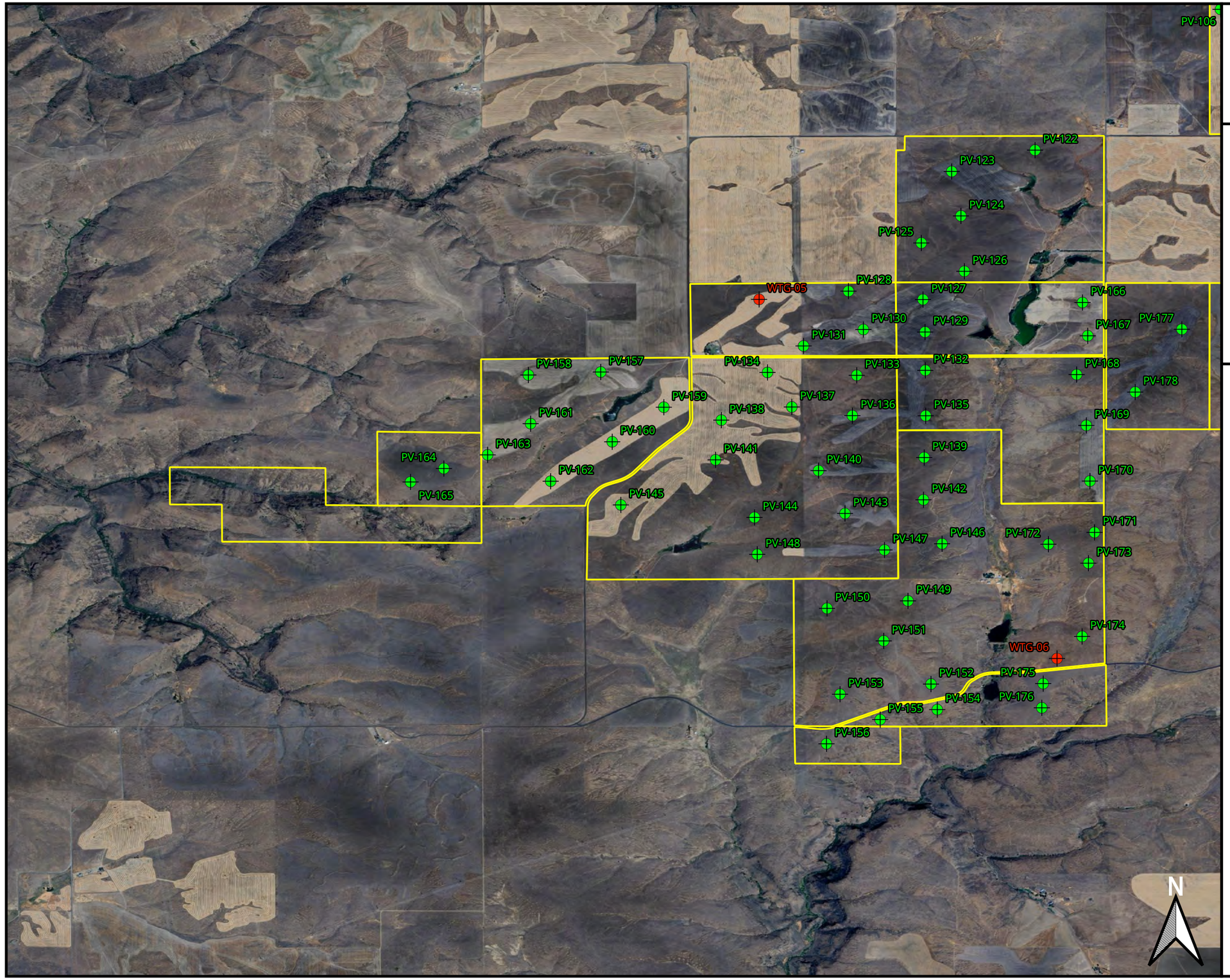
- Pile Load Testing Locations
- Pile Load Testing SB Locations
- Pile Load Testing WTG Locations
- Parcel Boundaries

0 3,000 6,000 ft

**Absolute Scale: 1 inch = 3,000 feet**
**Scale at 11" x 17" AS SHOWN**

N

Prepared by: Sarah Ambrozak
Date: December 16, 2025
Drawing Number: ILP-1 Rev.1




ANS

Client:

TETRA TECH

# PILE LOAD TESTING - INVESTIGATION LOCATION PLAN

**TETRA TECH**
**SPEEDWAY SOLAR PROJECT**
**SHERMAN COUNTY, OREGON**

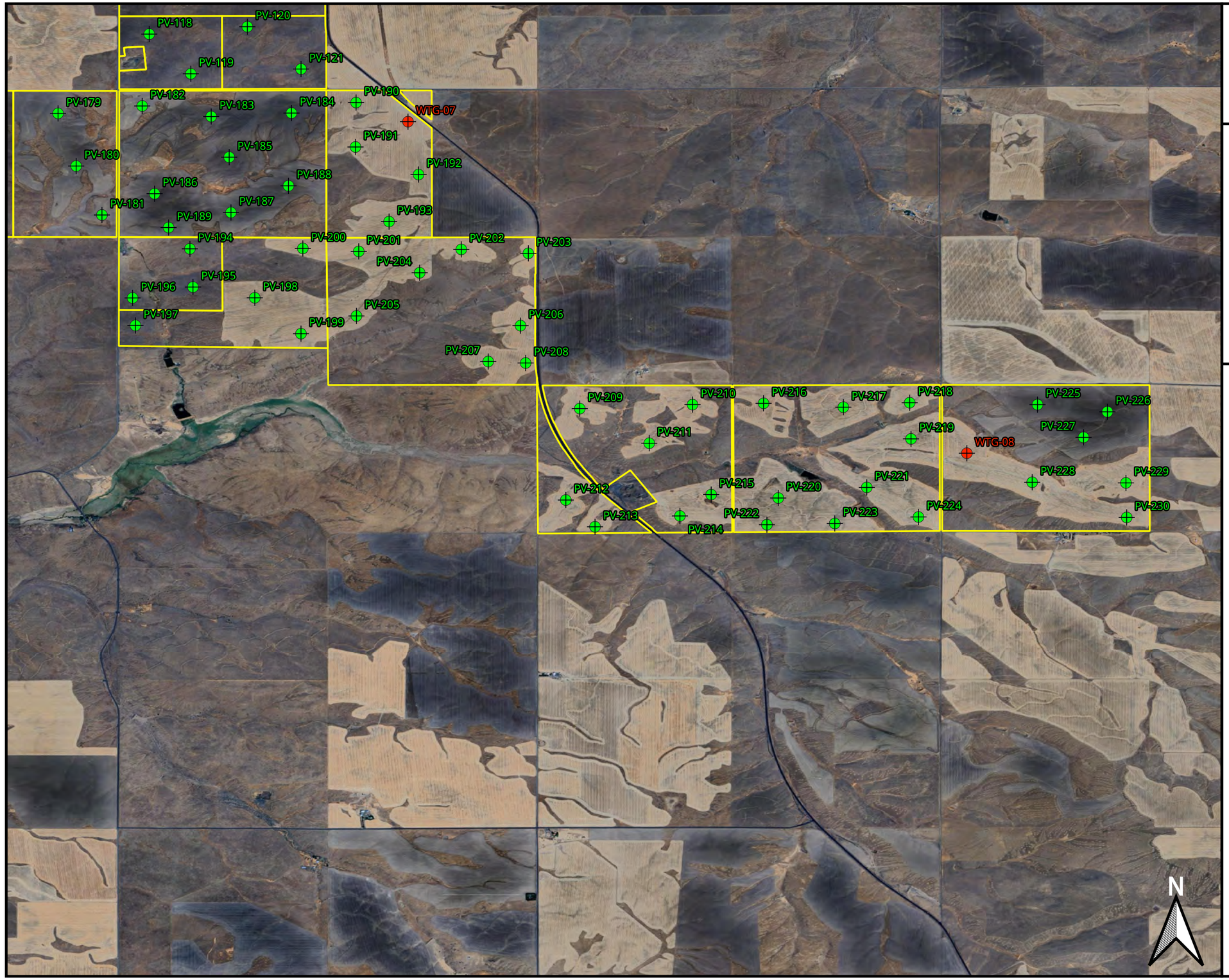
## Legend

- Pile Load Testing Locations
- Pile Load Testing SB Locations
- Pile Load Testing WTG Locations
- Parcel Boundaries

0 3,000 6,000 ft

**Absolute Scale: 1 inch = 3,000 feet**
**Scale at 11" x 17" AS SHOWN**

Prepared by: Sarah Ambrozak
Date: December 16, 2025
Drawing Number: ILP-1 Rev.1




ANS

Client:

TETRA TECH

# PILE LOAD TESTING - INVESTIGATION LOCATION PLAN

**TETRA TECH**
**SPEEDWAY SOLAR PROJECT**
**SHERMAN COUNTY, OREGON**

## Legend

- Pile Load Testing Locations
- Pile Load Testing SB Locations
- Pile Load Testing WTG Locations
- Parcel Boundaries

0 3,000 6,000 ft

**Absolute Scale: 1 inch = 3,000 feet**
**Scale at 11" x 17" AS SHOWN**

Prepared by: Sarah Ambrozak
Date: December 16, 2025
Drawing Number: ILP-1 Rev.1

ANS

ATTACHMENT B

# Pile Load Testing Logs

# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-001A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 6.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 3.35 |
| Location: | 45.43099, -120.71349 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 2.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 0.5 |
| 7 | 0.75 |
| 8 | 2.1 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 3.35 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 2,000 | 2,000 | 0.0280 | 0.0260 | 0.0270 |
| 1 | 3,000 | 3,000 | 0.0540 | 0.0500 | 0.0520 |
| 1 | 4,000 | 4,000 | 0.1140 | 0.1120 | 0.1130 |
| 1 | 5,000 | 5,000 | 0.1980 | 0.2020 | 0.2000 |
| 1 | 6,000 | 6,000 | 0.4700 | 0.4720 | 0.4710 |
| 1 | 7,000 | 6,420 | 1.0620 | 1.0700 | 1.0660 |
| 1 | 0 | 0 | 1.0300 | 1.0320 | 1.0310 |

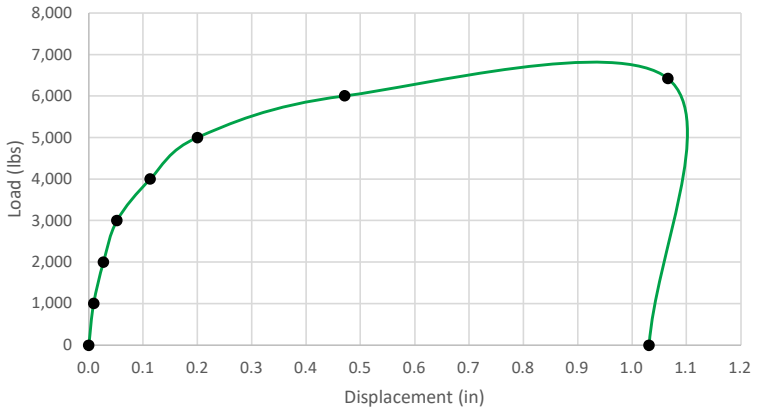
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0660 | 0.0660 | 0.0660 |
| 1 | 1,000 | 1,000 | 0.1900 | 0.1820 | 0.1860 |
| 1 | 1,500 | 1,500 | 0.2420 | 0.2320 | 0.2370 |
| 1 | 2,000 | 2,000 | 0.4040 | 0.3920 | 0.3980 |
| 1 | 2,500 | 2,500 | 0.5080 | 0.4960 | 0.5020 |
| 1 | 3,000 | 3,000 | 0.5980 | 0.5900 | 0.5940 |
| 1 | 3,500 | 3,500 | 0.7780 | 0.7760 | 0.7770 |
| 1 | 4,000 | 3,920 | 1.1440 | 1.1440 | 1.1440 |
| 1 | 0 | 0 | 0.4280 | 0.4440 | 0.4360 |

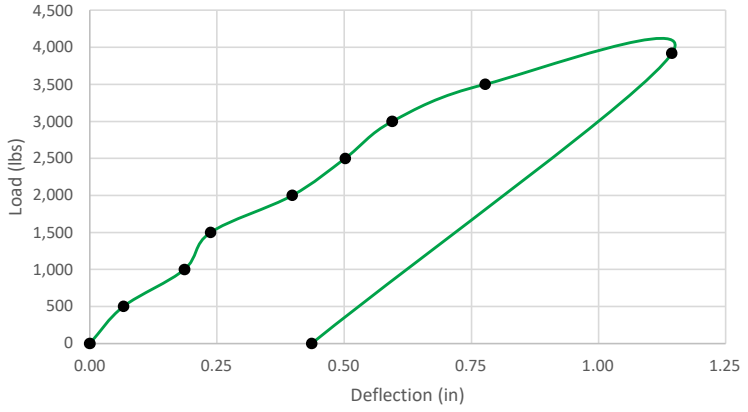
**Field Notes**

Rock encountered at 7 feet BGS during pre-drilling.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-001B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 5.89 |
| Location: | 45.43099, -120.71349 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.42 |
| 5 | 0.8 |
| 6 | 1.24 |
| 7 | 1.62 |
| 8 | 1.81 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 5.89 |

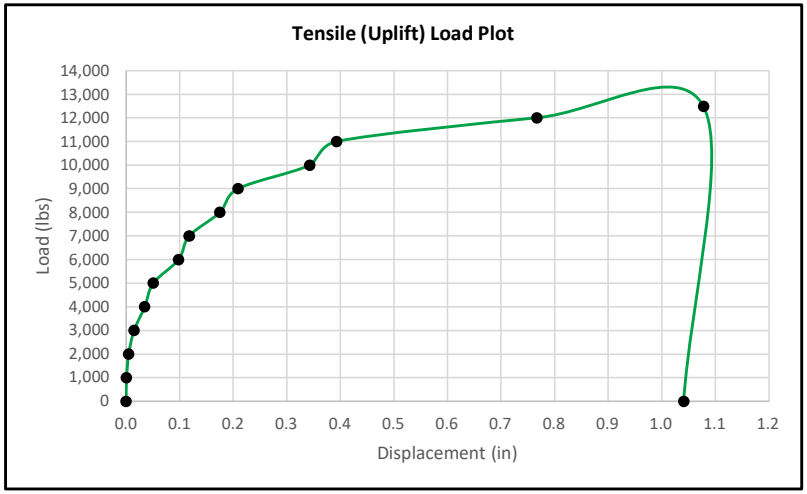
**Field Notes**

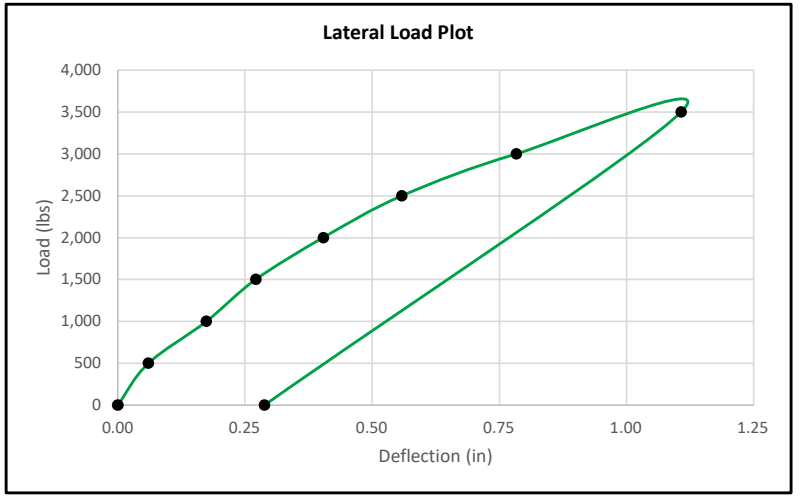
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 4,000 | 4,000 | 0.0360 | 0.0340 | 0.0350 |
| 1 | 5,000 | 5,000 | 0.0500 | 0.0520 | 0.0510 |
| 1 | 6,000 | 6,000 | 0.1000 | 0.0960 | 0.0980 |
| 1 | 7,000 | 7,000 | 0.1200 | 0.1160 | 0.1180 |
| 1 | 8,000 | 8,000 | 0.1580 | 0.1920 | 0.1750 |
| 1 | 9,000 | 9,000 | 0.2060 | 0.2120 | 0.2090 |
| 1 | 10,000 | 10,000 | 0.3420 | 0.3440 | 0.3430 |
| 1 | 11,000 | 11,000 | 0.3920 | 0.3940 | 0.3930 |
| 1 | 12,000 | 12,000 | 0.7880 | 0.7460 | 0.7670 |
| 1 | 13,000 | 12,480 | 1.0760 | 1.0800 | 1.0780 |
| 1 | 0 | 0 | 1.0440 | 1.0380 | 1.0410 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0660 | 0.0540 | 0.0600 |
| 1 | 1,000 | 1,000 | 0.1840 | 0.1640 | 0.1740 |
| 1 | 1,500 | 1,500 | 0.2800 | 0.2620 | 0.2710 |
| 1 | 2,000 | 2,000 | 0.4100 | 0.3980 | 0.4040 |
| 1 | 2,500 | 2,500 | 0.5640 | 0.5520 | 0.5580 |
| 1 | 3,000 | 3,000 | 0.7860 | 0.7800 | 0.7830 |
| 1 | 3,500 | 3,500 | 1.1120 | 1.1020 | 1.1070 |
| 1 | 0 | 0 | 0.2900 | 0.2860 | 0.2880 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-001B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 5.9 |
| Location: | 45.43099, -120.71349 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.3 |

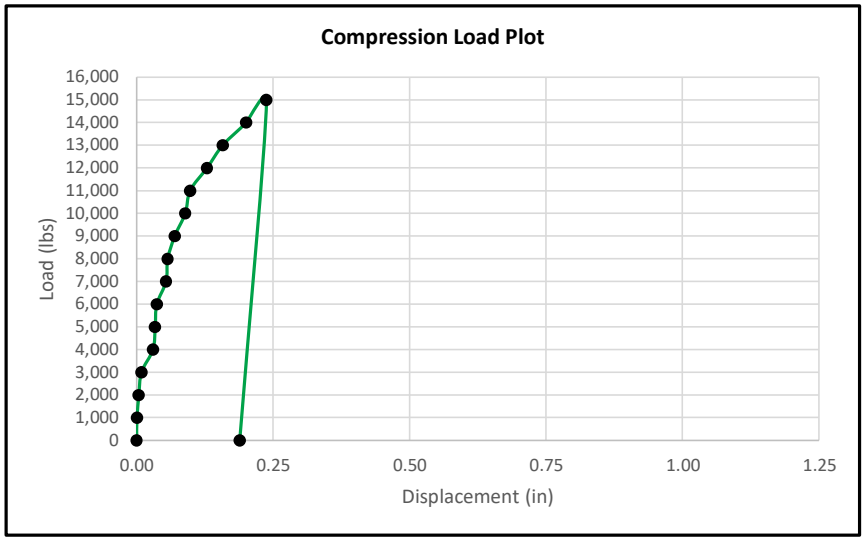
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.42 |
| 5 | 0.8 |
| 6 | 1.24 |
| 7 | 1.62 |
| 8 | 1.81 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 5.89 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 4,000 | 4,000 | 0.0320 | 0.0280 | 0.0300 |
| 1 | 5,000 | 5,000 | 0.0380 | 0.0300 | 0.0340 |
| 1 | 6,000 | 6,000 | 0.0420 | 0.0320 | 0.0370 |
| 1 | 7,000 | 7,000 | 0.0580 | 0.0500 | 0.0540 |
| 1 | 8,000 | 8,000 | 0.0620 | 0.0520 | 0.0570 |
| 1 | 9,000 | 9,000 | 0.0720 | 0.0680 | 0.0700 |
| 1 | 10,000 | 10,000 | 0.0920 | 0.0860 | 0.0890 |
| 1 | 11,000 | 11,000 | 0.1000 | 0.0960 | 0.0980 |
| 1 | 12,000 | 12,000 | 0.1320 | 0.1260 | 0.1290 |
| 1 | 13,000 | 13,000 | 0.1600 | 0.1560 | 0.1580 |
| 1 | 14,000 | 14,000 | 0.2060 | 0.1960 | 0.2010 |
| 1 | 15,000 | 15,000 | 0.2400 | 0.2360 | 0.2380 |
| 1 | 0 | 0 | 0.1960 | 0.1820 | 0.1890 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-002 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 11.09 |
| Location: | 45.42872, -120.70951 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.67 |
| 5 | 1.31 |
| 6 | 1.93 |
| 7 | 7.18 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 11.09 |

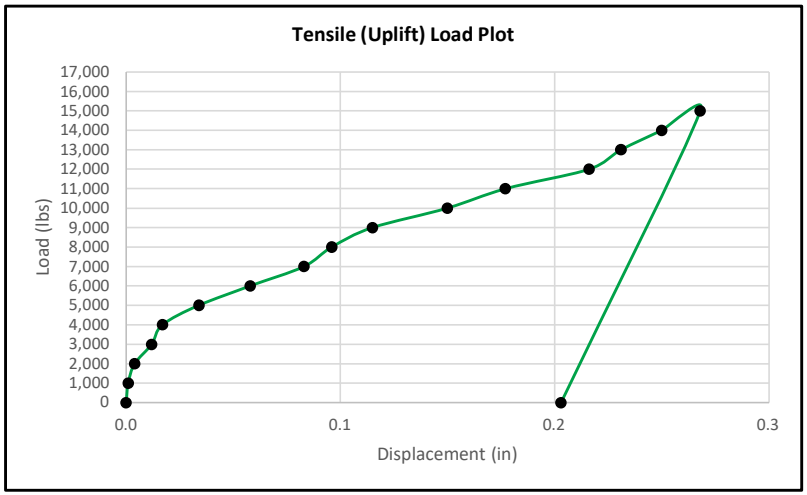
**Field Notes**

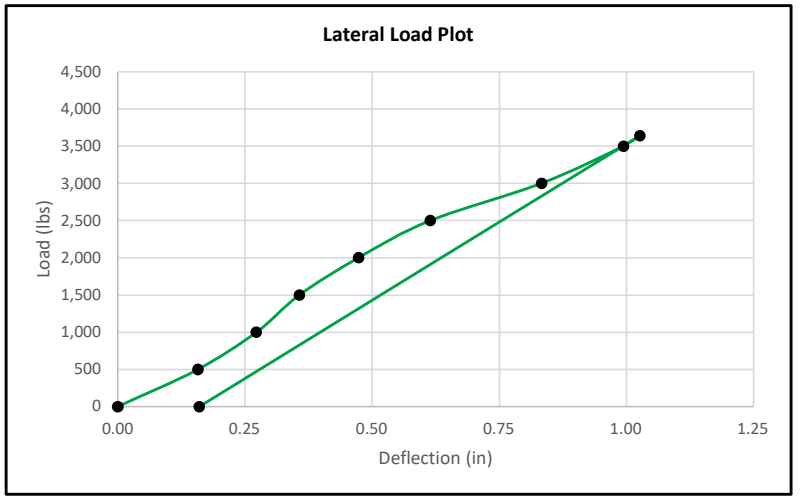
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 4,000 | 4,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 5,000 | 5,000 | 0.0360 | 0.0320 | 0.0340 |
| 1 | 6,000 | 6,000 | 0.0600 | 0.0560 | 0.0580 |
| 1 | 7,000 | 7,000 | 0.0860 | 0.0800 | 0.0830 |
| 1 | 8,000 | 8,000 | 0.1000 | 0.0920 | 0.0960 |
| 1 | 9,000 | 9,000 | 0.1160 | 0.1140 | 0.1150 |
| 1 | 10,000 | 10,000 | 0.1520 | 0.1480 | 0.1500 |
| 1 | 11,000 | 11,000 | 0.1780 | 0.1760 | 0.1770 |
| 1 | 12,000 | 12,000 | 0.2180 | 0.2140 | 0.2160 |
| 1 | 13,000 | 13,000 | 0.2300 | 0.2320 | 0.2310 |
| 1 | 14,000 | 14,000 | 0.2480 | 0.2520 | 0.2500 |
| 1 | 15,000 | 15,000 | 0.2660 | 0.2700 | 0.2680 |
| 1 | 0 | 0 | 0.2060 | 0.2000 | 0.2030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1560 | 0.1580 | 0.1570 |
| 1 | 1,000 | 1,000 | 0.2700 | 0.2740 | 0.2720 |
| 1 | 1,500 | 1,500 | 0.3560 | 0.3580 | 0.3570 |
| 1 | 2,000 | 2,000 | 0.4740 | 0.4720 | 0.4730 |
| 1 | 2,500 | 2,500 | 0.6140 | 0.6140 | 0.6140 |
| 1 | 3,000 | 3,000 | 0.8340 | 0.8320 | 0.8330 |
| 1 | 3,500 | 3,500 | 0.9960 | 0.9920 | 0.9940 |
| 1 | 4,000 | 3,640 | 1.0280 | 1.0240 | 1.0260 |
| 1 | 0 | 0 | 0.1580 | 0.1620 | 0.1600 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-004 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 10.468 |
| Location: | 45.42083, -120.70951 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.048 |
| 6 | 1.31 |
| 7 | 1.93 |
| 8 | 7.18 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 10.468 |

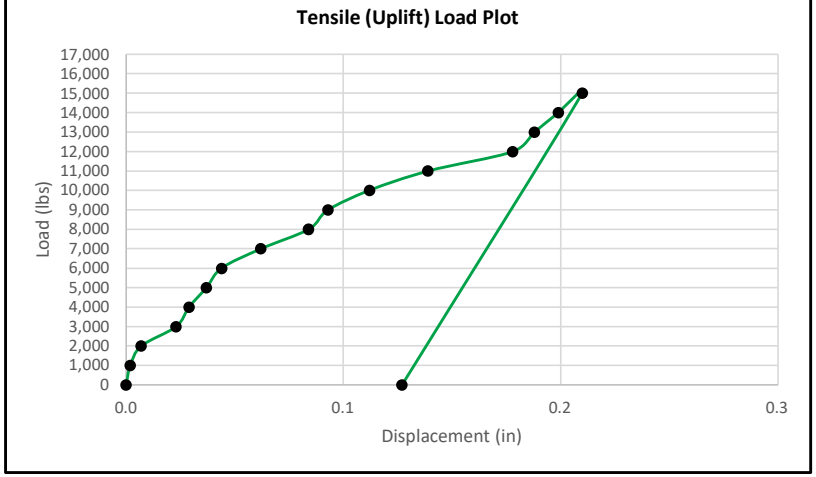
**Field Notes**

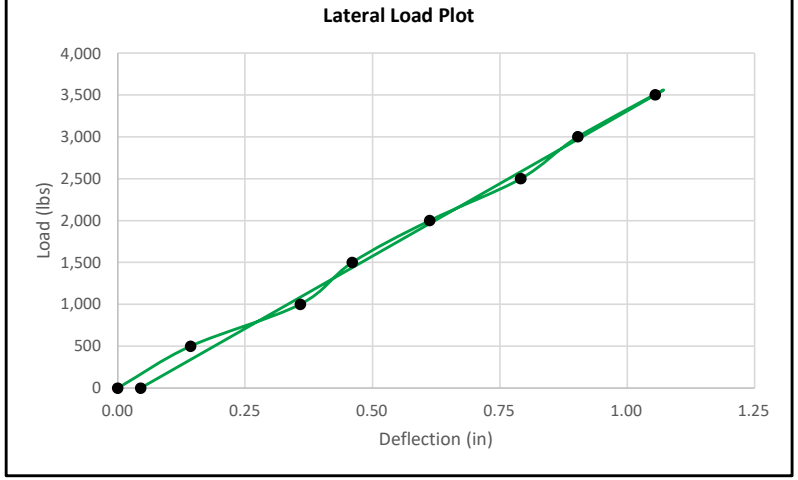
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 4,000 | 4,000 | 0.0240 | 0.0340 | 0.0290 |
| 1 | 5,000 | 5,000 | 0.0320 | 0.0420 | 0.0370 |
| 1 | 6,000 | 6,000 | 0.0380 | 0.0500 | 0.0440 |
| 1 | 7,000 | 7,000 | 0.0520 | 0.0720 | 0.0620 |
| 1 | 8,000 | 8,000 | 0.0760 | 0.0920 | 0.0840 |
| 1 | 9,000 | 9,000 | 0.0860 | 0.1000 | 0.0930 |
| 1 | 10,000 | 10,000 | 0.1020 | 0.1220 | 0.1120 |
| 1 | 11,000 | 11,000 | 0.1280 | 0.1500 | 0.1390 |
| 1 | 12,000 | 12,000 | 0.1640 | 0.1920 | 0.1780 |
| 1 | 13,000 | 13,000 | 0.1760 | 0.2000 | 0.1880 |
| 1 | 14,000 | 14,000 | 0.1880 | 0.2100 | 0.1990 |
| 1 | 15,000 | 15,000 | 0.2000 | 0.2200 | 0.2100 |
| 1 | 0 | 0 | 0.1260 | 0.1280 | 0.1270 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1400 | 0.1460 | 0.1430 |
| 1 | 1,000 | 1,000 | 0.3500 | 0.3660 | 0.3580 |
| 1 | 1,500 | 1,500 | 0.4540 | 0.4660 | 0.4600 |
| 1 | 2,000 | 2,000 | 0.6060 | 0.6180 | 0.6120 |
| 1 | 2,500 | 2,500 | 0.7840 | 0.7980 | 0.7910 |
| 1 | 3,000 | 3,000 | 0.8940 | 0.9120 | 0.9030 |
| 1 | 3,500 | 3,500 | 1.0440 | 1.0660 | 1.0550 |
| 1 | 0 | 0 | 0.0460 | 0.0440 | 0.0450 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-005A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 10.97 |
| Location: | 45.42209, -120.70164 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.8 |
| 5 | 1.52 |
| 6 | 1.2 |
| 7 | 3.21 |
| 8 | 3.24 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 10.97 |

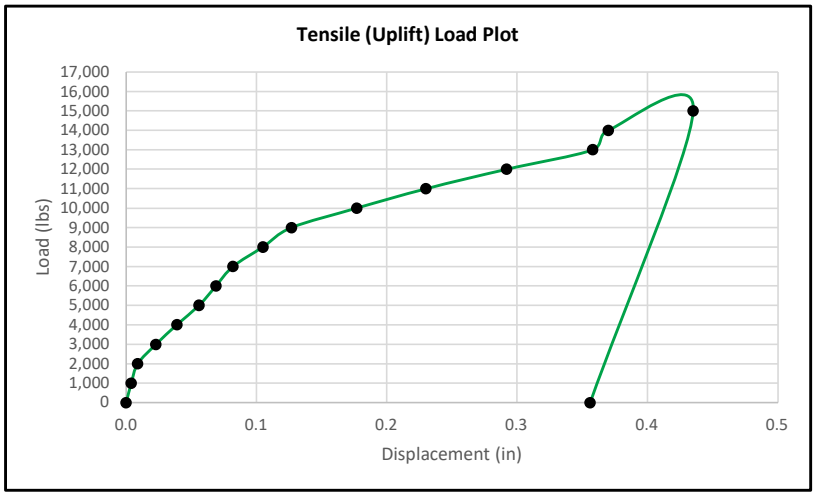
**Field Notes**

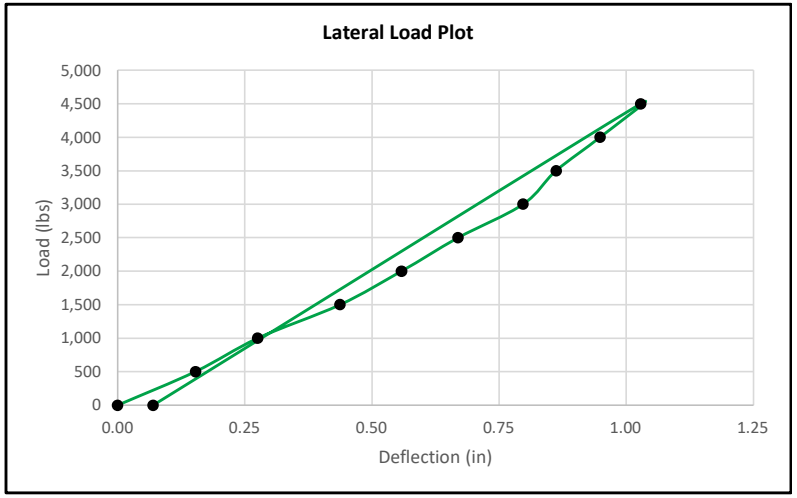
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 4,000 | 4,000 | 0.0440 | 0.0340 | 0.0390 |
| 1 | 5,000 | 5,000 | 0.0620 | 0.0500 | 0.0560 |
| 1 | 6,000 | 6,000 | 0.0760 | 0.0620 | 0.0690 |
| 1 | 7,000 | 7,000 | 0.0920 | 0.0720 | 0.0820 |
| 1 | 8,000 | 8,000 | 0.1180 | 0.0920 | 0.1050 |
| 1 | 9,000 | 9,000 | 0.1400 | 0.1140 | 0.1270 |
| 1 | 10,000 | 10,000 | 0.1740 | 0.1800 | 0.1770 |
| 1 | 11,000 | 11,000 | 0.2260 | 0.2340 | 0.2300 |
| 1 | 12,000 | 12,000 | 0.2840 | 0.3000 | 0.2920 |
| 1 | 13,000 | 13,000 | 0.3440 | 0.3720 | 0.3580 |
| 1 | 14,000 | 14,000 | 0.3520 | 0.3880 | 0.3700 |
| 1 | 15,000 | 15,000 | 0.4140 | 0.4560 | 0.4350 |
| 1 | 0 | 0 | 0.3560 | 0.3560 | 0.3560 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1540 | 0.1520 | 0.1530 |
| 1 | 1,000 | 1,000 | 0.2800 | 0.2700 | 0.2750 |
| 1 | 1,500 | 1,500 | 0.4440 | 0.4300 | 0.4370 |
| 1 | 2,000 | 2,000 | 0.5660 | 0.5500 | 0.5580 |
| 1 | 2,500 | 2,500 | 0.6780 | 0.6600 | 0.6690 |
| 1 | 3,000 | 3,000 | 0.8100 | 0.7840 | 0.7970 |
| 1 | 3,500 | 3,500 | 0.8760 | 0.8480 | 0.8620 |
| 1 | 4,000 | 4,000 | 0.9640 | 0.9320 | 0.9480 |
| 1 | 4,500 | 4,500 | 1.0440 | 1.0120 | 1.0280 |
| 1 | 0 | 0 | 0.0780 | 0.0620 | 0.0700 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8 | Pile ID: | PT-PV-005A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 11.0 |
| Location: | 45.42209, -120.70164 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.2 |

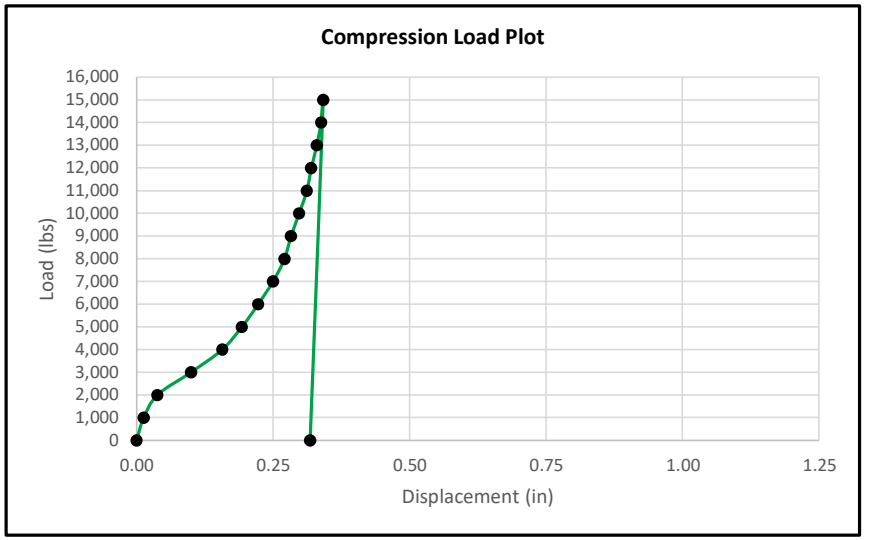
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.8 |
| 5 | 1.52 |
| 6 | 1.2 |
| 7 | 3.21 |
| 8 | 3.24 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 10.97 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 2,000 | 2,000 | 0.0400 | 0.0360 | 0.0380 |
| 1 | 3,000 | 3,000 | 0.1000 | 0.1000 | 0.1000 |
| 1 | 4,000 | 4,000 | 0.1580 | 0.1560 | 0.1570 |
| 1 | 5,000 | 5,000 | 0.1940 | 0.1920 | 0.1930 |
| 1 | 6,000 | 6,000 | 0.2240 | 0.2220 | 0.2230 |
| 1 | 7,000 | 7,000 | 0.2520 | 0.2480 | 0.2500 |
| 1 | 8,000 | 8,000 | 0.2740 | 0.2680 | 0.2710 |
| 1 | 9,000 | 9,000 | 0.2860 | 0.2800 | 0.2830 |
| 1 | 10,000 | 10,000 | 0.3020 | 0.2940 | 0.2980 |
| 1 | 11,000 | 11,000 | 0.3160 | 0.3080 | 0.3120 |
| 1 | 12,000 | 12,000 | 0.3240 | 0.3160 | 0.3200 |
| 1 | 13,000 | 13,000 | 0.3340 | 0.3260 | 0.3300 |
| 1 | 14,000 | 14,000 | 0.3380 | 0.3380 | 0.3380 |
| 1 | 15,000 | 15,000 | 0.3460 | 0.3380 | 0.3420 |
| 1 | 0 | 0 | 0.3180 | 0.3180 | 0.3180 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-005B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 21.31 |
| Location: | 45.42209, -120.70164 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.33 |
| 5 | 0.59 |
| 6 | 1.22 |
| 7 | 1.35 |
| 8 | 1.04 |
| 9 | 3.58 |
| 10 | 4.28 |
| 11 | 4.04 |
| 12 | 4.88 |
| Total Time (s) = | 21.31 |

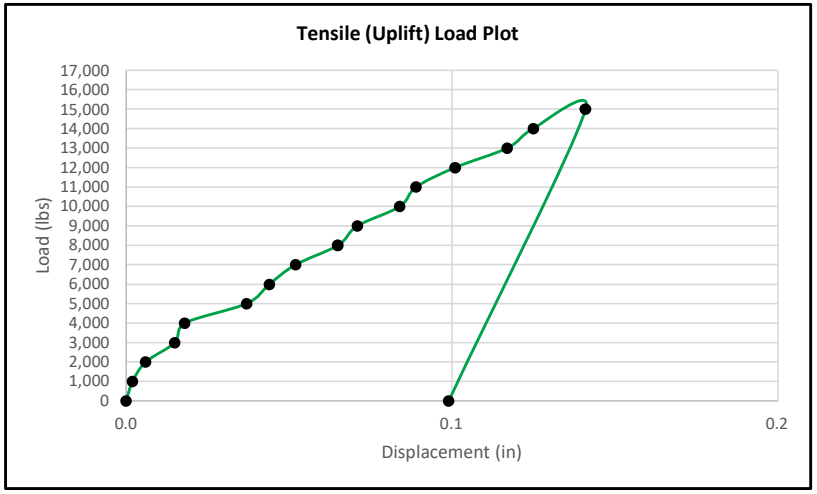
**Field Notes**

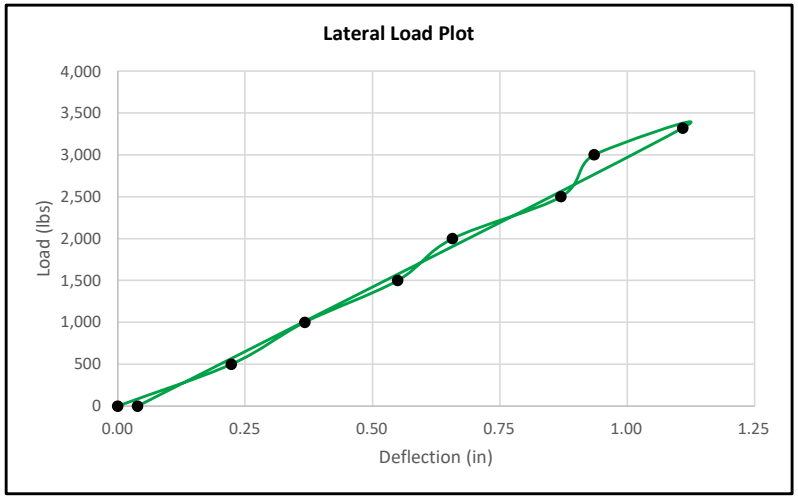
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 4,000 | 4,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 5,000 | 5,000 | 0.0400 | 0.0340 | 0.0370 |
| 1 | 6,000 | 6,000 | 0.0480 | 0.0400 | 0.0440 |
| 1 | 7,000 | 7,000 | 0.0560 | 0.0480 | 0.0520 |
| 1 | 8,000 | 8,000 | 0.0700 | 0.0600 | 0.0650 |
| 1 | 9,000 | 9,000 | 0.0760 | 0.0660 | 0.0710 |
| 1 | 10,000 | 10,000 | 0.0900 | 0.0780 | 0.0840 |
| 1 | 11,000 | 11,000 | 0.0960 | 0.0820 | 0.0890 |
| 1 | 12,000 | 12,000 | 0.1060 | 0.0960 | 0.1010 |
| 1 | 13,000 | 13,000 | 0.1180 | 0.1160 | 0.1170 |
| 1 | 14,000 | 14,000 | 0.1200 | 0.1300 | 0.1250 |
| 1 | 15,000 | 15,000 | 0.1360 | 0.1460 | 0.1410 |
| 1 | 0 | 0 | 0.1000 | 0.0980 | 0.0990 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.2360 | 0.2100 | 0.2230 |
| 1 | 1,000 | 1,000 | 0.3780 | 0.3560 | 0.3670 |
| 1 | 1,500 | 1,500 | 0.5600 | 0.5380 | 0.5490 |
| 1 | 2,000 | 2,000 | 0.6680 | 0.6460 | 0.6570 |
| 1 | 2,500 | 2,500 | 0.8800 | 0.8600 | 0.8700 |
| 1 | 3,000 | 3,000 | 0.9440 | 0.9260 | 0.9350 |
| 1 | 3,500 | 3,320 | 1.1160 | 1.1020 | 1.1090 |
| 1 | 0 | 0 | 0.0420 | 0.0360 | 0.0390 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12 | Pile ID: | PT-PV-005B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 21.3 |
| Location: | 45.42209, -120.70164 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.5 |

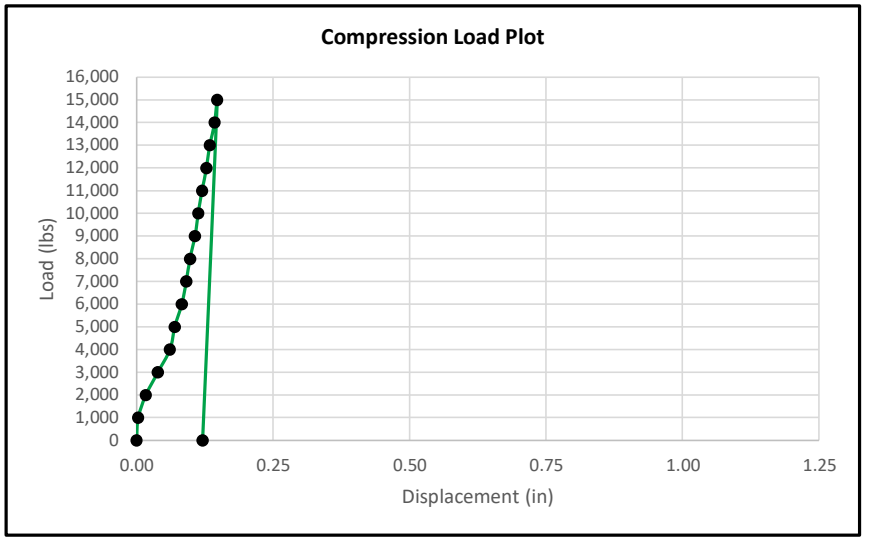
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.33 |
| 5 | 0.59 |
| 6 | 1.22 |
| 7 | 1.35 |
| 8 | 1.04 |
| 9 | 3.58 |
| 10 | 4.28 |
| 11 | 4.04 |
| 12 | 4.88 |
| Total Time (s) = | 21.31 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 3,000 | 3,000 | 0.0400 | 0.0380 | 0.0390 |
| 1 | 4,000 | 4,000 | 0.0640 | 0.0580 | 0.0610 |
| 1 | 5,000 | 5,000 | 0.0720 | 0.0680 | 0.0700 |
| 1 | 6,000 | 6,000 | 0.0860 | 0.0800 | 0.0830 |
| 1 | 7,000 | 7,000 | 0.0940 | 0.0880 | 0.0910 |
| 1 | 8,000 | 8,000 | 0.1020 | 0.0940 | 0.0980 |
| 1 | 9,000 | 9,000 | 0.1100 | 0.1040 | 0.1070 |
| 1 | 10,000 | 10,000 | 0.1140 | 0.1120 | 0.1130 |
| 1 | 11,000 | 11,000 | 0.1220 | 0.1180 | 0.1200 |
| 1 | 12,000 | 12,000 | 0.1300 | 0.1260 | 0.1280 |
| 1 | 13,000 | 13,000 | 0.1360 | 0.1320 | 0.1340 |
| 1 | 14,000 | 14,000 | 0.1440 | 0.1420 | 0.1430 |
| 1 | 15,000 | 15,000 | 0.1480 | 0.1480 | 0.1480 |
| 1 | 0 | 0 | 0.1220 | 0.1200 | 0.1210 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-007A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 5.65 |
| Location: | 45.41582, -120.68994 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 1.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.22 |
| 5 | 1.42 |
| 6 | 1.21 |
| 7 | 1.35 |
| 8 | 1.45 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 5.65 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 3,000 | 3,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 4,000 | 4,000 | 0.0460 | 0.0560 | 0.0510 |
| 1 | 5,000 | 5,000 | 0.2540 | 0.2340 | 0.2440 |
| 1 | 6,000 | 5,640 | 1.2940 | 1.2880 | 1.2910 |
| 1 | 0 | 0 | 1.2600 | 1.2640 | 1.2620 |

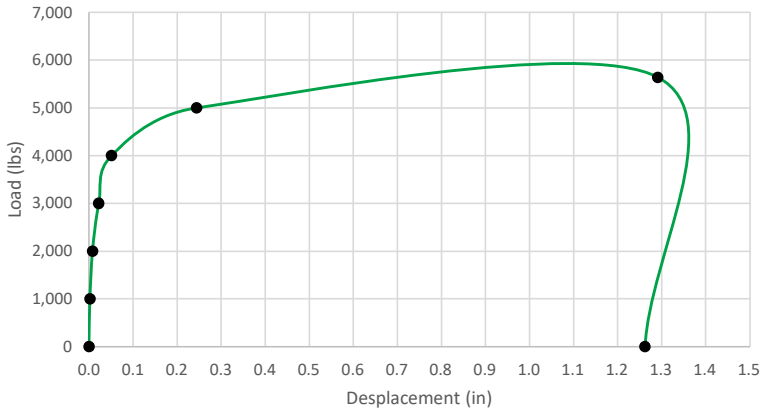
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1460 | 0.1380 | 0.1420 |
| 1 | 1,000 | 1,000 | 0.3400 | 0.3320 | 0.3360 |
| 1 | 1,500 | 1,500 | 0.4800 | 0.4800 | 0.4800 |
| 1 | 2,000 | 2,000 | 0.5900 | 0.5980 | 0.5940 |
| 1 | 2,500 | 2,500 | 0.6700 | 0.6900 | 0.6800 |
| 1 | 3,000 | 3,000 | 0.9000 | 0.8940 | 0.8970 |
| 1 | 3,500 | 3,500 | 1.1020 | 1.0940 | 1.0980 |
| 1 | 0 | 0 | 0.0720 | 0.0780 | 0.0750 |

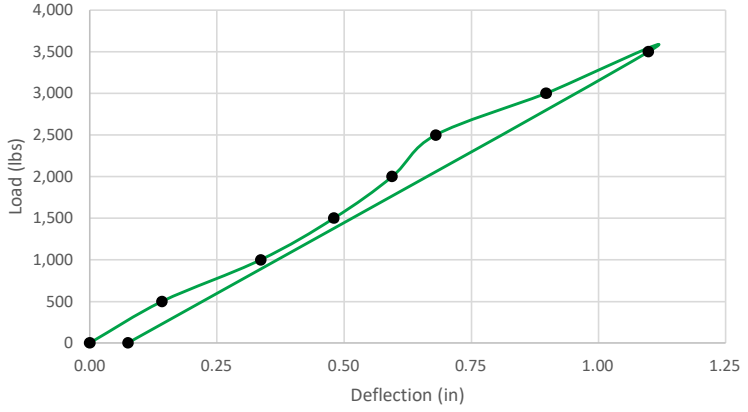
**Field Notes**

Rock encountered at 7.5 feet BGS during pre-drilling.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-007B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.47 |
| Location: | 45.41582, -120.68994 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.68 |
| 5 | 1.58 |
| 6 | 1.35 |
| 7 | 3.11 |
| 8 | 6.75 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.47 |

**Field Notes**

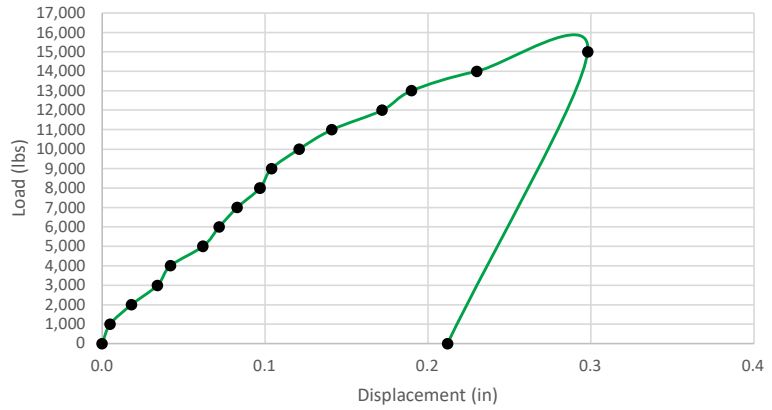
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 3,000 | 3,000 | 0.0300 | 0.0380 | 0.0340 |
| 1 | 4,000 | 4,000 | 0.0360 | 0.0480 | 0.0420 |
| 1 | 5,000 | 5,000 | 0.0540 | 0.0700 | 0.0620 |
| 1 | 6,000 | 6,000 | 0.0640 | 0.0800 | 0.0720 |
| 1 | 7,000 | 7,000 | 0.0740 | 0.0920 | 0.0830 |
| 1 | 8,000 | 8,000 | 0.0900 | 0.1040 | 0.0970 |
| 1 | 9,000 | 9,000 | 0.1000 | 0.1080 | 0.1040 |
| 1 | 10,000 | 10,000 | 0.1280 | 0.1140 | 0.1210 |
| 1 | 11,000 | 11,000 | 0.1460 | 0.1360 | 0.1410 |
| 1 | 12,000 | 12,000 | 0.1780 | 0.1660 | 0.1720 |
| 1 | 13,000 | 13,000 | 0.1980 | 0.1820 | 0.1900 |
| 1 | 14,000 | 14,000 | 0.2380 | 0.2220 | 0.2300 |
| 1 | 15,000 | 15,000 | 0.3080 | 0.2880 | 0.2980 |
| 1 | 0 | 0 | 0.2220 | 0.2020 | 0.2120 |

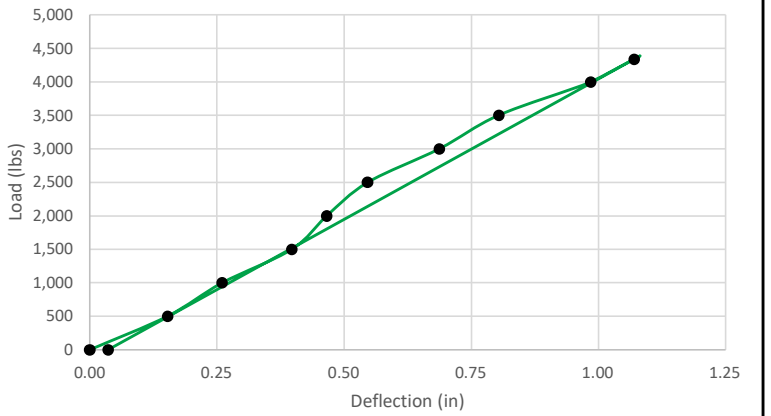
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1620 | 0.1440 | 0.1530 |
| 1 | 1,000 | 1,000 | 0.2660 | 0.2540 | 0.2600 |
| 1 | 1,500 | 1,500 | 0.4040 | 0.3900 | 0.3970 |
| 1 | 2,000 | 2,000 | 0.4700 | 0.4620 | 0.4660 |
| 1 | 2,500 | 2,500 | 0.5540 | 0.5380 | 0.5460 |
| 1 | 3,000 | 3,000 | 0.6980 | 0.6760 | 0.6870 |
| 1 | 3,500 | 3,500 | 0.8160 | 0.7920 | 0.8040 |
| 1 | 4,000 | 4,000 | 0.9980 | 0.9720 | 0.9850 |
| 1 | 4,500 | 4,340 | 1.0800 | 1.0600 | 1.0700 |
| 1 | 0 | 0 | 0.0340 | 0.0380 | 0.0360 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8 | Pile ID: | PT-PV-007B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.5 |
| Location: | 45.41582, -120.68994 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.9 |

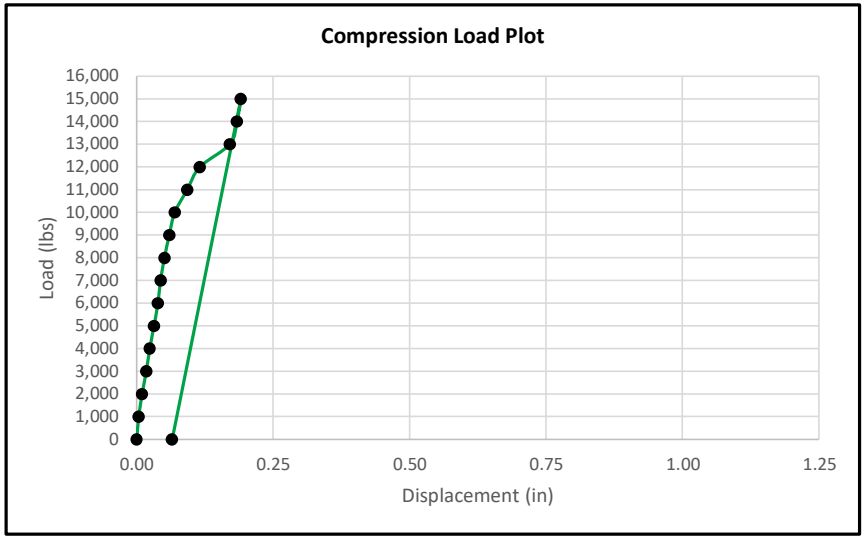
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.68 |
| 5 | 1.58 |
| 6 | 1.35 |
| 7 | 3.11 |
| 8 | 6.75 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.47 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 3,000 | 3,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 4,000 | 4,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 5,000 | 5,000 | 0.0300 | 0.0340 | 0.0320 |
| 1 | 6,000 | 6,000 | 0.0360 | 0.0420 | 0.0390 |
| 1 | 7,000 | 7,000 | 0.0400 | 0.0480 | 0.0440 |
| 1 | 8,000 | 8,000 | 0.0460 | 0.0560 | 0.0510 |
| 1 | 9,000 | 9,000 | 0.0520 | 0.0680 | 0.0600 |
| 1 | 10,000 | 10,000 | 0.0580 | 0.0820 | 0.0700 |
| 1 | 11,000 | 11,000 | 0.0740 | 0.1120 | 0.0930 |
| 1 | 12,000 | 12,000 | 0.0840 | 0.1480 | 0.1160 |
| 1 | 13,000 | 13,000 | 0.1000 | 0.2420 | 0.1710 |
| 1 | 14,000 | 14,000 | 0.1140 | 0.2540 | 0.1840 |
| 1 | 15,000 | 15,000 | 0.1220 | 0.2600 | 0.1910 |
| 1 | 0 | 0 | 0.0320 | 0.0980 | 0.0650 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-PV-009 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 9.41 |
| Location: | 45.42320, -120.67403 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 2.04 |
| 7 | 3.45 |
| 8 | 1.93 |
| 9 | 1.99 |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 9.41 |

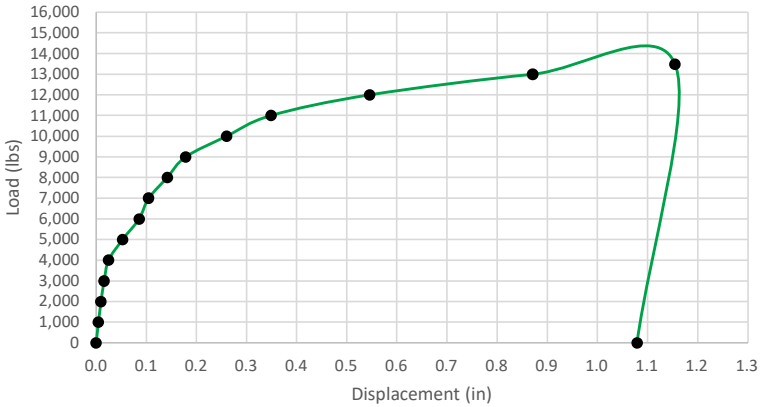
**Field Notes**

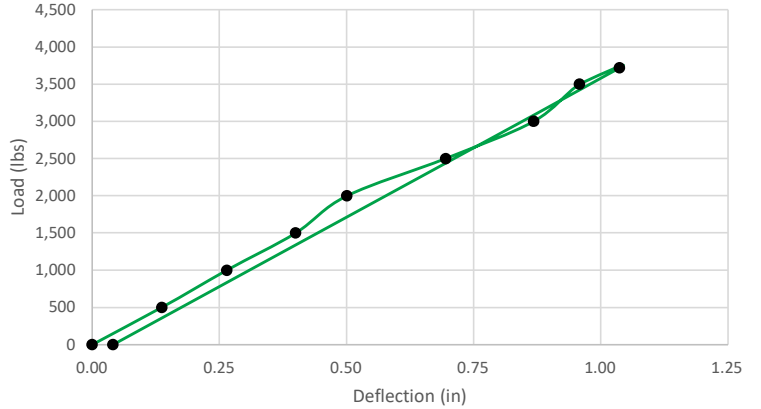
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 3,000 | 3,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 4,000 | 4,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 5,000 | 5,000 | 0.0540 | 0.0520 | 0.0530 |
| 1 | 6,000 | 6,000 | 0.0880 | 0.0840 | 0.0860 |
| 1 | 7,000 | 7,000 | 0.1080 | 0.1020 | 0.1050 |
| 1 | 8,000 | 8,000 | 0.1460 | 0.1380 | 0.1420 |
| 1 | 9,000 | 9,000 | 0.1840 | 0.1740 | 0.1790 |
| 1 | 10,000 | 10,000 | 0.2660 | 0.2560 | 0.2610 |
| 1 | 11,000 | 11,000 | 0.3560 | 0.3420 | 0.3490 |
| 1 | 12,000 | 12,000 | 0.5540 | 0.5380 | 0.5460 |
| 1 | 13,000 | 13,000 | 0.8800 | 0.8620 | 0.8710 |
| 1 | 14,000 | 13,480 | 1.1640 | 1.1460 | 1.1550 |
| 1 | 0 | 0 | 1.0800 | 1.0780 | 1.0790 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1260 | 0.1480 | 0.1370 |
| 1 | 1,000 | 1,000 | 0.2500 | 0.2800 | 0.2650 |
| 1 | 1,500 | 1,500 | 0.3840 | 0.4160 | 0.4000 |
| 1 | 2,000 | 2,000 | 0.4840 | 0.5180 | 0.5010 |
| 1 | 2,500 | 2,500 | 0.6780 | 0.7120 | 0.6950 |
| 1 | 3,000 | 3,000 | 0.8500 | 0.8860 | 0.8680 |
| 1 | 3,500 | 3,500 | 0.9400 | 0.9760 | 0.9580 |
| 1 | 4,000 | 3,720 | 1.0180 | 1.0560 | 1.0370 |
| 1 | 0 | 0 | 0.0460 | 0.0360 | 0.0410 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9 | Pile ID: | PT-PV-009 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 9.4 |
| Location: | 45.42320, -120.67403 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.4 |

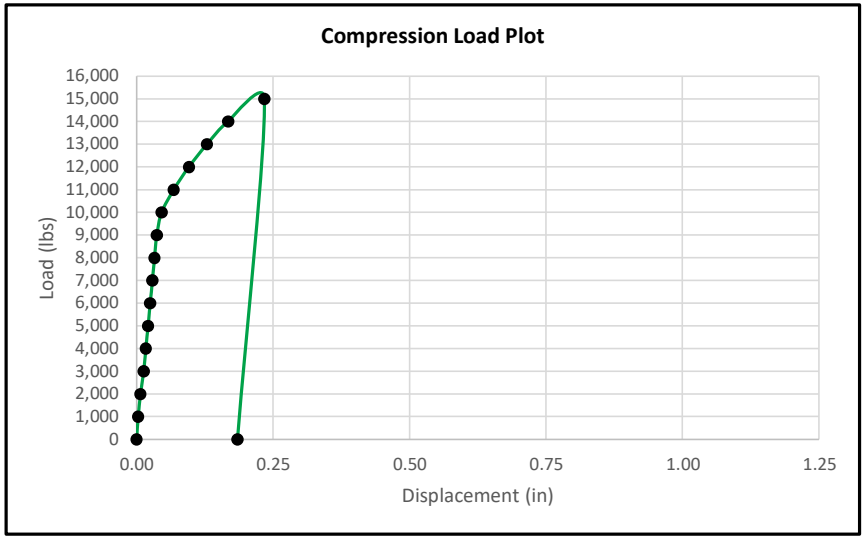
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 2.04 |
| 7 | 3.45 |
| 8 | 1.93 |
| 9 | 1.99 |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 9.41 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 4,000 | 4,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 5,000 | 5,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 6,000 | 6,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 7,000 | 7,000 | 0.0280 | 0.0300 | 0.0290 |
| 1 | 8,000 | 8,000 | 0.0320 | 0.0340 | 0.0330 |
| 1 | 9,000 | 9,000 | 0.0360 | 0.0380 | 0.0370 |
| 1 | 10,000 | 10,000 | 0.0440 | 0.0480 | 0.0460 |
| 1 | 11,000 | 11,000 | 0.0660 | 0.0700 | 0.0680 |
| 1 | 12,000 | 12,000 | 0.0940 | 0.0980 | 0.0960 |
| 1 | 13,000 | 13,000 | 0.1260 | 0.1320 | 0.1290 |
| 1 | 14,000 | 14,000 | 0.1640 | 0.1720 | 0.1680 |
| 1 | 15,000 | 15,000 | 0.2300 | 0.2380 | 0.2340 |
| 1 | 0 | 0 | 0.1840 | 0.1860 | 0.1850 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-010 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.44 |
| Location: | 45.42007, -120.66974 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.93 |
| 3 | 2.77 |
| 4 | 1.32 |
| 5 | 1.65 |
| 6 | 2.45 |
| 7 | 2.8 |
| 8 | 2.52 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.44 |

**Field Notes**

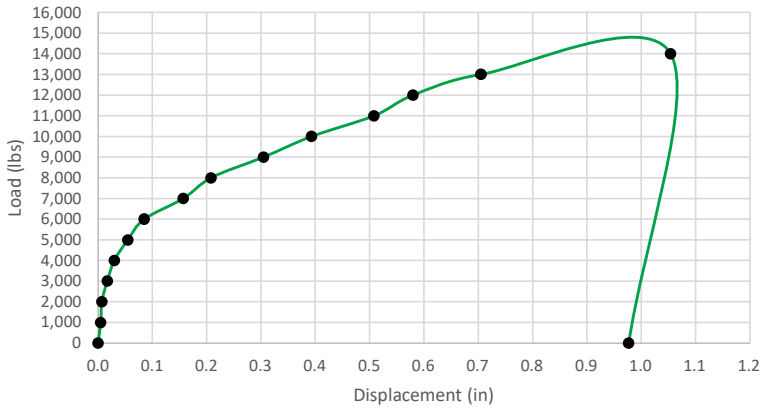
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 4,000 | 4,000 | 0.0320 | 0.0280 | 0.0300 |
| 1 | 5,000 | 5,000 | 0.0580 | 0.0520 | 0.0550 |
| 1 | 6,000 | 6,000 | 0.0880 | 0.0820 | 0.0850 |
| 1 | 7,000 | 7,000 | 0.1620 | 0.1520 | 0.1570 |
| 1 | 8,000 | 8,000 | 0.2100 | 0.2060 | 0.2080 |
| 1 | 9,000 | 9,000 | 0.3060 | 0.3040 | 0.3050 |
| 1 | 10,000 | 10,000 | 0.3940 | 0.3920 | 0.3930 |
| 1 | 11,000 | 11,000 | 0.5080 | 0.5080 | 0.5080 |
| 1 | 12,000 | 12,000 | 0.5800 | 0.5800 | 0.5800 |
| 1 | 13,000 | 13,000 | 0.7060 | 0.7040 | 0.7050 |
| 1 | 14,000 | 14,000 | 1.0520 | 1.0560 | 1.0540 |
| 1 | 0 | 0 | 0.9720 | 0.9820 | 0.9770 |

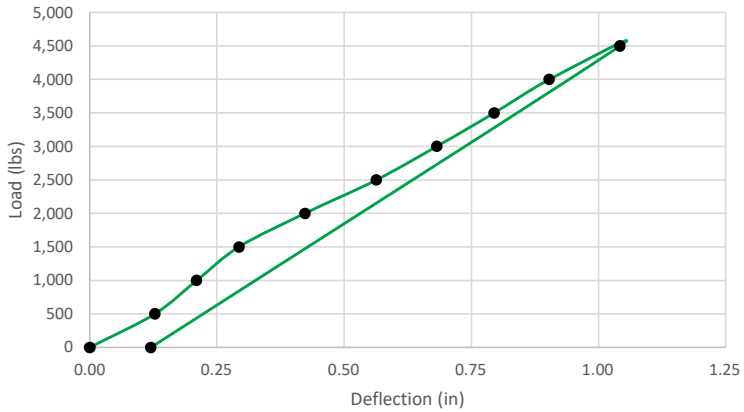
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1360 | 0.1200 | 0.1280 |
| 1 | 1,000 | 1,000 | 0.2200 | 0.2000 | 0.2100 |
| 1 | 1,500 | 1,500 | 0.3020 | 0.2840 | 0.2930 |
| 1 | 2,000 | 2,000 | 0.4340 | 0.4120 | 0.4230 |
| 1 | 2,500 | 2,500 | 0.5740 | 0.5520 | 0.5630 |
| 1 | 3,000 | 3,000 | 0.6920 | 0.6720 | 0.6820 |
| 1 | 3,500 | 3,500 | 0.8040 | 0.7860 | 0.7950 |
| 1 | 4,000 | 4,000 | 0.9120 | 0.8940 | 0.9030 |
| 1 | 4,500 | 4,500 | 1.0500 | 1.0340 | 1.0420 |
| 1 | 0 | 0 | 0.1200 | 0.1200 | 0.1200 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8 | Pile ID: | PT-PV-010 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.4 |
| Location: | 45.42007, -120.66974 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.1 |

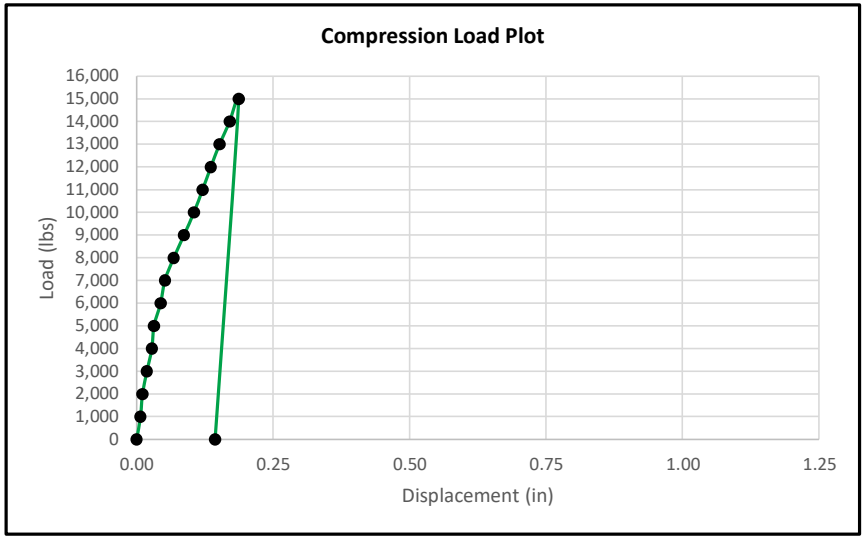
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.93 |
| 3 | 2.77 |
| 4 | 1.32 |
| 5 | 1.65 |
| 6 | 2.45 |
| 7 | 2.8 |
| 8 | 2.52 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.44 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 2,000 | 2,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 3,000 | 3,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 4,000 | 4,000 | 0.0320 | 0.0240 | 0.0280 |
| 1 | 5,000 | 5,000 | 0.0360 | 0.0280 | 0.0320 |
| 1 | 6,000 | 6,000 | 0.0500 | 0.0380 | 0.0440 |
| 1 | 7,000 | 7,000 | 0.0540 | 0.0500 | 0.0520 |
| 1 | 8,000 | 8,000 | 0.0640 | 0.0720 | 0.0680 |
| 1 | 9,000 | 9,000 | 0.0800 | 0.0940 | 0.0870 |
| 1 | 10,000 | 10,000 | 0.0980 | 0.1120 | 0.1050 |
| 1 | 11,000 | 11,000 | 0.1120 | 0.1300 | 0.1210 |
| 1 | 12,000 | 12,000 | 0.1260 | 0.1460 | 0.1360 |
| 1 | 13,000 | 13,000 | 0.1420 | 0.1620 | 0.1520 |
| 1 | 14,000 | 14,000 | 0.1600 | 0.1820 | 0.1710 |
| 1 | 15,000 | 15,000 | 0.1780 | 0.1960 | 0.1870 |
| 1 | 0 | 0 | 0.1440 | 0.1440 | 0.1440 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-011A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 6.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 2.61 |
| Location: | 45.41604, -120.67907 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 1.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | 0.21 |
| 8 | 2.4 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 2.61 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 5,000 | 5,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 6,000 | 6,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 7,000 | 7,000 | 0.0400 | 0.0460 | 0.0430 |
| 1 | 8,000 | 8,000 | 0.0820 | 0.0880 | 0.0850 |
| 1 | 9,000 | 9,000 | 0.1160 | 0.1240 | 0.1200 |
| 1 | 10,000 | 9,680 | 1.3060 | 1.3180 | 1.3120 |
| 1 | 0 | 0 | 1.2880 | 1.2900 | 1.2890 |

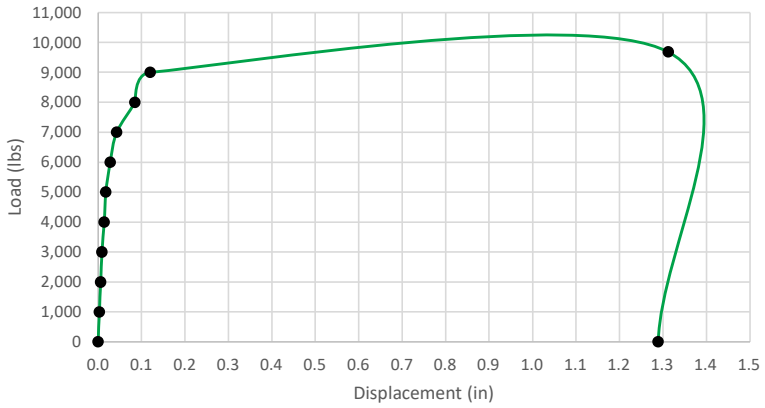
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0900 | 0.1000 | 0.0950 |
| 1 | 1,000 | 1,000 | 0.1840 | 0.1880 | 0.1860 |
| 1 | 1,500 | 1,500 | 0.3020 | 0.3060 | 0.3040 |
| 1 | 2,000 | 2,000 | 0.3780 | 0.3820 | 0.3800 |
| 1 | 2,500 | 2,500 | 0.4600 | 0.4640 | 0.4620 |
| 1 | 3,000 | 3,000 | 0.6400 | 0.6440 | 0.6420 |
| 1 | 3,500 | 3,500 | 0.8580 | 0.8580 | 0.8580 |
| 1 | 4,000 | 4,000 | 0.9940 | 0.9960 | 0.9950 |
| 1 | 4,500 | 4,300 | 1.1160 | 1.1160 | 1.1160 |
| 1 | 0 | 0 | 0.1160 | 0.1180 | 0.1170 |

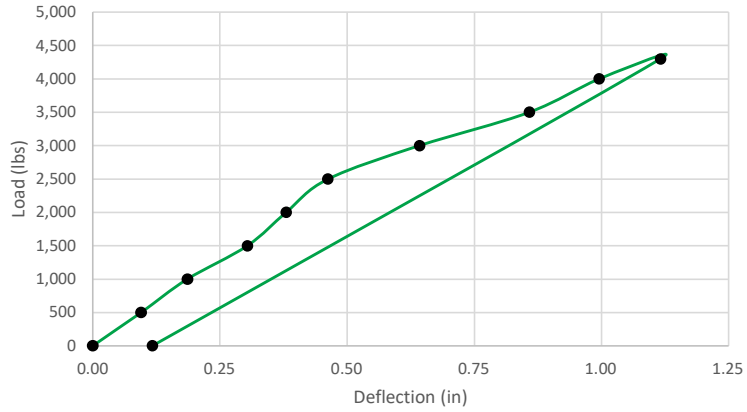
**Field Notes**

Rock encountered at 7 feet during pre-drilling.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-011B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 29.33 |
| Location: | 45.41604, -120.67907 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.28 |
| 2 | 0.83 |
| 3 | 1.05 |
| 4 | 1.04 |
| 5 | 1.6 |
| 6 | 2 |
| 7 | 2.98 |
| 8 | 19.55 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 29.33 |

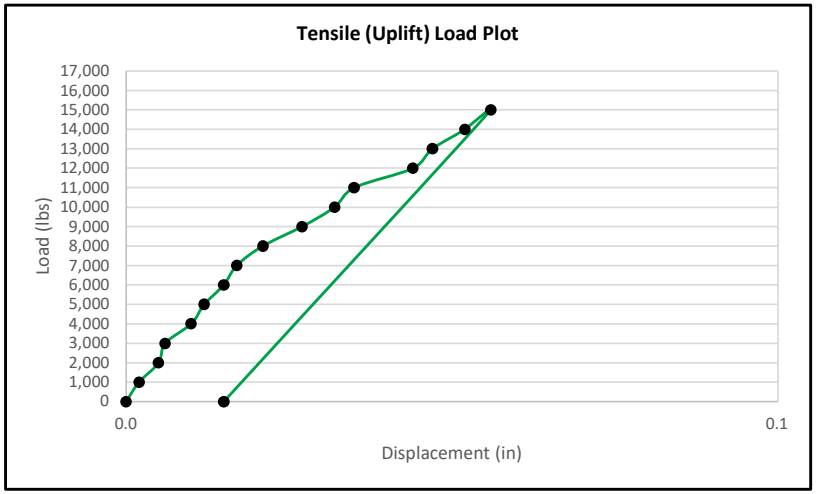
**Field Notes**

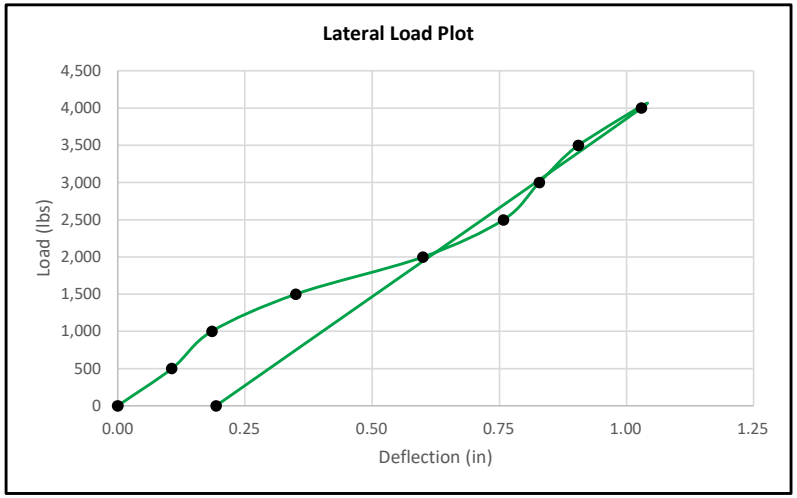
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0340 | 0.0270 |
| 1 | 10,000 | 10,000 | 0.0240 | 0.0400 | 0.0320 |
| 1 | 11,000 | 11,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 12,000 | 12,000 | 0.0360 | 0.0520 | 0.0440 |
| 1 | 13,000 | 13,000 | 0.0380 | 0.0560 | 0.0470 |
| 1 | 14,000 | 14,000 | 0.0440 | 0.0600 | 0.0520 |
| 1 | 15,000 | 15,000 | 0.0480 | 0.0640 | 0.0560 |
| 1 | 0 | 0 | 0.0120 | 0.0180 | 0.0150 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1020 | 0.1100 | 0.1060 |
| 1 | 1,000 | 1,000 | 0.1820 | 0.1880 | 0.1850 |
| 1 | 1,500 | 1,500 | 0.3440 | 0.3560 | 0.3500 |
| 1 | 2,000 | 2,000 | 0.5920 | 0.6080 | 0.6000 |
| 1 | 2,500 | 2,500 | 0.7480 | 0.7680 | 0.7580 |
| 1 | 3,000 | 3,000 | 0.8200 | 0.8380 | 0.8290 |
| 1 | 3,500 | 3,500 | 0.8960 | 0.9140 | 0.9050 |
| 1 | 4,000 | 4,000 | 1.0180 | 1.0400 | 1.0290 |
| 1 | 0 | 0 | 0.1920 | 0.1940 | 0.1930 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-015A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 6.06 |
| Location: | 45.40798, -120.69237 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 1.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.32 |
| 5 | 0.74 |
| 6 | 1.93 |
| 7 | 3.07 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 6.06 |

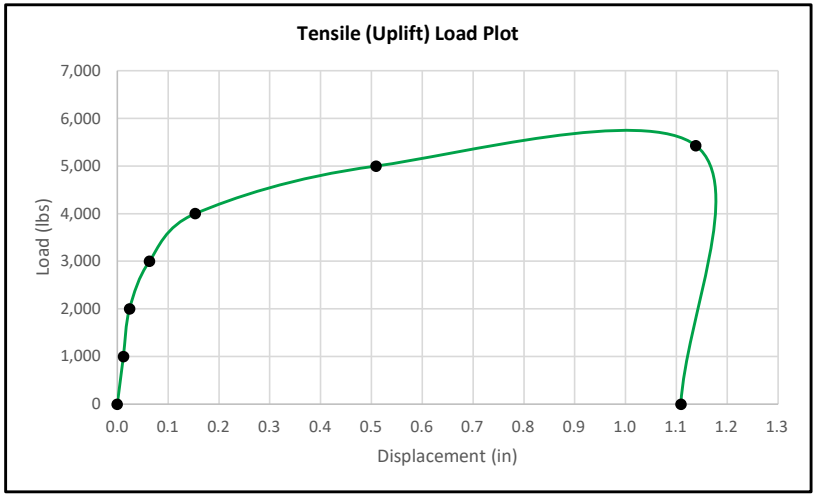
**Field Notes**

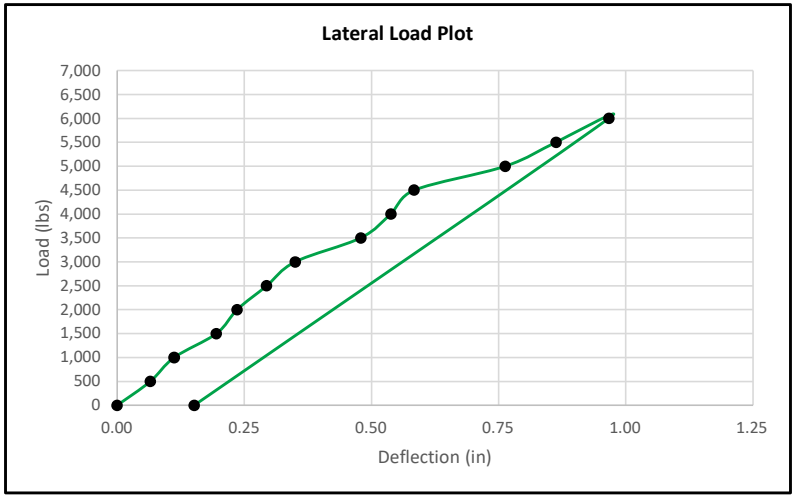
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 2,000 | 2,000 | 0.0240 | 0.0240 | 0.0240 |
| 1 | 3,000 | 3,000 | 0.0620 | 0.0640 | 0.0630 |
| 1 | 4,000 | 4,000 | 0.1500 | 0.1560 | 0.1530 |
| 1 | 5,000 | 5,000 | 0.5040 | 0.5140 | 0.5090 |
| 1 | 6,000 | 5,430 | 1.1340 | 1.1420 | 1.1380 |
| 1 | 0 | 0 | 1.1080 | 1.1100 | 1.1090 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0660 | 0.0650 |
| 1 | 1,000 | 1,000 | 0.1140 | 0.1100 | 0.1120 |
| 1 | 1,500 | 1,500 | 0.1940 | 0.1960 | 0.1950 |
| 1 | 2,000 | 2,000 | 0.2360 | 0.2360 | 0.2360 |
| 1 | 2,500 | 2,500 | 0.2940 | 0.2940 | 0.2940 |
| 1 | 3,000 | 3,000 | 0.3500 | 0.3500 | 0.3500 |
| 1 | 3,500 | 3,500 | 0.4780 | 0.4800 | 0.4790 |
| 1 | 4,000 | 4,000 | 0.5380 | 0.5380 | 0.5380 |
| 1 | 4,500 | 4,500 | 0.5840 | 0.5840 | 0.5840 |
| 1 | 5,000 | 5,000 | 0.7600 | 0.7660 | 0.7630 |
| 1 | 5,500 | 5,500 | 0.8600 | 0.8660 | 0.8630 |
| 1 | 6,000 | 6,000 | 0.9640 | 0.9700 | 0.9670 |
| 1 | 0 | 0 | 0.1540 | 0.1500 | 0.1520 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-015B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 19.48 |
| Location: | 45.40798, -120.69237 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 6.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.37 |
| 6 | 4.65 |
| 7 | 13.46 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 19.48 |

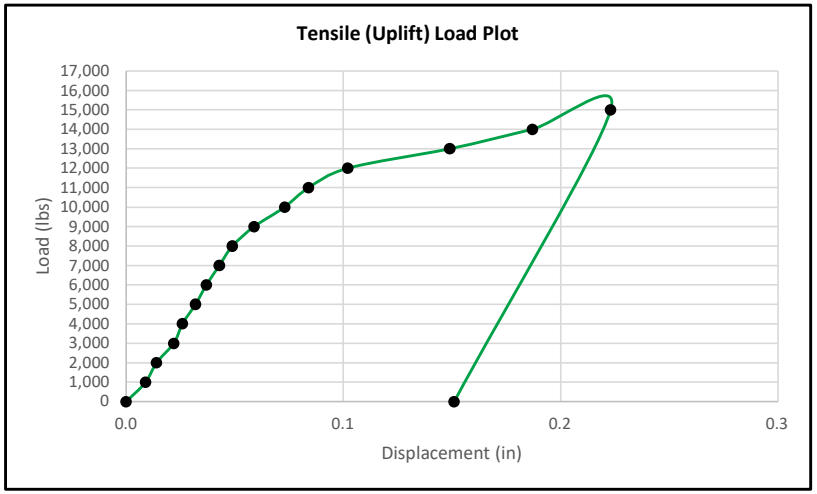
**Field Notes**

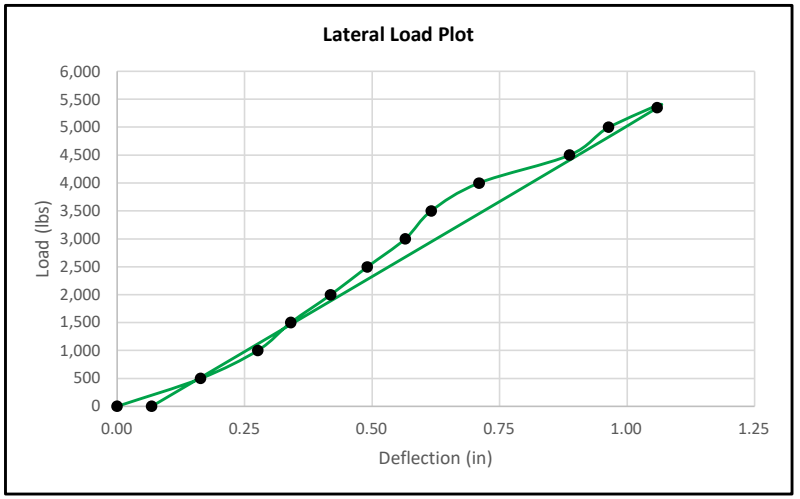
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 2,000 | 2,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 3,000 | 3,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 4,000 | 4,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 5,000 | 5,000 | 0.0340 | 0.0300 | 0.0320 |
| 1 | 6,000 | 6,000 | 0.0380 | 0.0360 | 0.0370 |
| 1 | 7,000 | 7,000 | 0.0440 | 0.0420 | 0.0430 |
| 1 | 8,000 | 8,000 | 0.0500 | 0.0480 | 0.0490 |
| 1 | 9,000 | 9,000 | 0.0600 | 0.0580 | 0.0590 |
| 1 | 10,000 | 10,000 | 0.0740 | 0.0720 | 0.0730 |
| 1 | 11,000 | 11,000 | 0.0840 | 0.0840 | 0.0840 |
| 1 | 12,000 | 12,000 | 0.1020 | 0.1020 | 0.1020 |
| 1 | 13,000 | 13,000 | 0.1480 | 0.1500 | 0.1490 |
| 1 | 14,000 | 14,000 | 0.1860 | 0.1880 | 0.1870 |
| 1 | 15,000 | 15,000 | 0.2220 | 0.2240 | 0.2230 |
| 1 | 0 | 0 | 0.1520 | 0.1500 | 0.1510 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1640 | 0.1640 | 0.1640 |
| 1 | 1,000 | 1,000 | 0.2760 | 0.2760 | 0.2760 |
| 1 | 1,500 | 1,500 | 0.3400 | 0.3420 | 0.3410 |
| 1 | 2,000 | 2,000 | 0.4180 | 0.4200 | 0.4190 |
| 1 | 2,500 | 2,500 | 0.4900 | 0.4920 | 0.4910 |
| 1 | 3,000 | 3,000 | 0.5640 | 0.5660 | 0.5650 |
| 1 | 3,500 | 3,500 | 0.6140 | 0.6180 | 0.6160 |
| 1 | 4,000 | 4,000 | 0.7080 | 0.7120 | 0.7100 |
| 1 | 4,500 | 4,500 | 0.8840 | 0.8900 | 0.8870 |
| 1 | 5,000 | 5,000 | 0.9600 | 0.9680 | 0.9640 |
| 1 | 5,500 | 5,350 | 1.0540 | 1.0640 | 1.0590 |
| 1 | 0 | 0 | 0.0740 | 0.0620 | 0.0680 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-017A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 16.8 |
| Location: | 45.40769, -120.67510 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.11 |
| 5 | 2.52 |
| 6 | 3.34 |
| 7 | 4.09 |
| 8 | 4.7 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 16.76 |

**Field Notes**

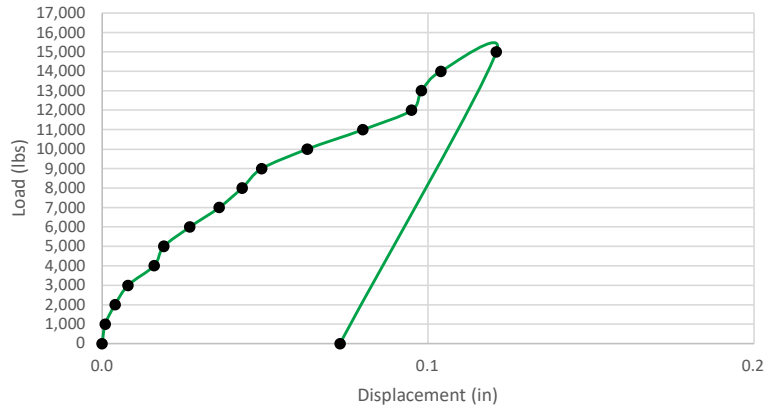
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 5,000 | 5,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 6,000 | 6,000 | 0.0260 | 0.0280 | 0.0270 |
| 1 | 7,000 | 7,000 | 0.0340 | 0.0380 | 0.0360 |
| 1 | 8,000 | 8,000 | 0.0400 | 0.0460 | 0.0430 |
| 1 | 9,000 | 9,000 | 0.0460 | 0.0520 | 0.0490 |
| 1 | 10,000 | 10,000 | 0.0600 | 0.0660 | 0.0630 |
| 1 | 11,000 | 11,000 | 0.0760 | 0.0840 | 0.0800 |
| 1 | 12,000 | 12,000 | 0.0900 | 0.1000 | 0.0950 |
| 1 | 13,000 | 13,000 | 0.0940 | 0.1020 | 0.0980 |
| 1 | 14,000 | 14,000 | 0.0980 | 0.1100 | 0.1040 |
| 1 | 15,000 | 15,000 | 0.1160 | 0.1260 | 0.1210 |
| 1 | 0 | 0 | 0.0700 | 0.0760 | 0.0730 |

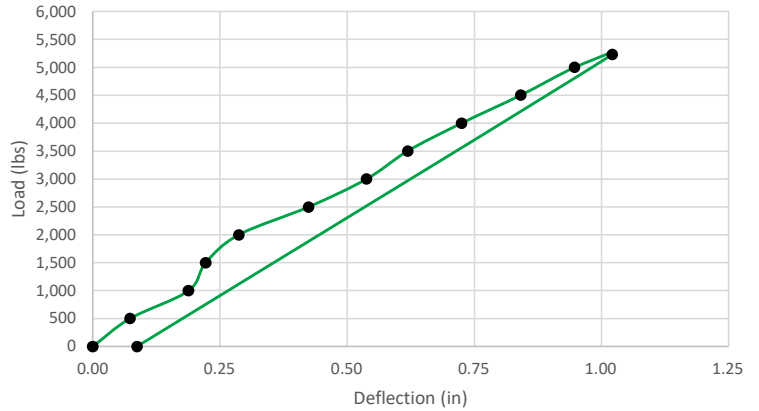
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0740 | 0.0720 | 0.0730 |
| 1 | 1,000 | 1,000 | 0.1900 | 0.1860 | 0.1880 |
| 1 | 1,500 | 1,500 | 0.2260 | 0.2180 | 0.2220 |
| 1 | 2,000 | 2,000 | 0.2900 | 0.2840 | 0.2870 |
| 1 | 2,500 | 2,500 | 0.4280 | 0.4200 | 0.4240 |
| 1 | 3,000 | 3,000 | 0.5400 | 0.5360 | 0.5380 |
| 1 | 3,500 | 3,500 | 0.6220 | 0.6160 | 0.6190 |
| 1 | 4,000 | 4,000 | 0.7280 | 0.7220 | 0.7250 |
| 1 | 4,500 | 4,500 | 0.8440 | 0.8380 | 0.8410 |
| 1 | 5,000 | 5,000 | 0.9740 | 0.9200 | 0.9470 |
| 1 | 5,500 | 5,230 | 1.0240 | 1.0180 | 1.0210 |
| 1 | 0 | 0 | 0.0880 | 0.0860 | 0.0870 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-017A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 16.8 |
| Location: | 45.40769, -120.67510 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.4 |

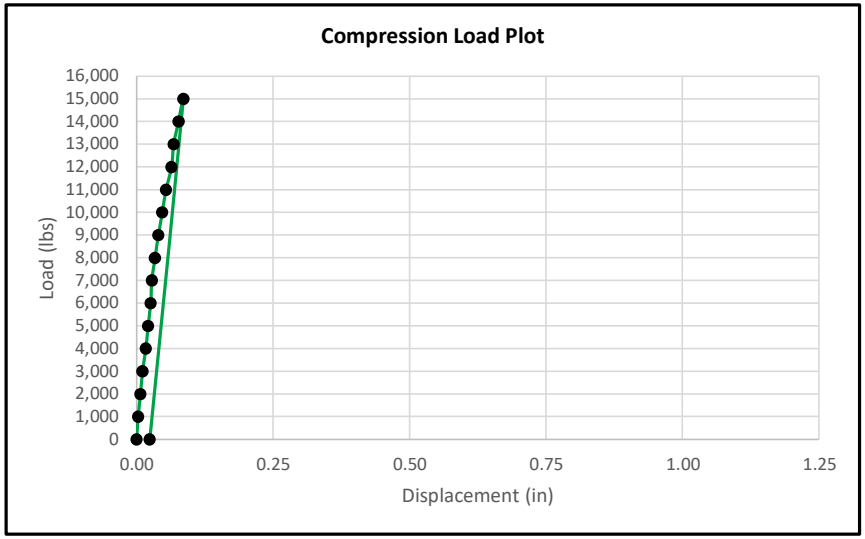
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 2.11 |
| 6 | 2.52 |
| 7 | 3.34 |
| 8 | 4.09 |
| 9 | 4.7 |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 16.76 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 4,000 | 4,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 5,000 | 5,000 | 0.0220 | 0.0200 | 0.0210 |
| 1 | 6,000 | 6,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 7,000 | 7,000 | 0.0300 | 0.0260 | 0.0280 |
| 1 | 8,000 | 8,000 | 0.0360 | 0.0320 | 0.0340 |
| 1 | 9,000 | 9,000 | 0.0420 | 0.0380 | 0.0400 |
| 1 | 10,000 | 10,000 | 0.0500 | 0.0440 | 0.0470 |
| 1 | 11,000 | 11,000 | 0.0580 | 0.0500 | 0.0540 |
| 1 | 12,000 | 12,000 | 0.0680 | 0.0600 | 0.0640 |
| 1 | 13,000 | 13,000 | 0.0720 | 0.0640 | 0.0680 |
| 1 | 14,000 | 14,000 | 0.0820 | 0.0720 | 0.0770 |
| 1 | 15,000 | 15,000 | 0.0900 | 0.0820 | 0.0860 |
| 1 | 0 | 0 | 0.0240 | 0.0240 | 0.0240 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-017B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 51.9 |
| Location: | 45.40769, -120.67510 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 5.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.52 |
| 5 | 2.57 |
| 6 | 3.26 |
| 7 | 3.57 |
| 8 | 7.57 |
| 9 | 8.16 |
| 10 | 6.79 |
| 11 | 7.56 |
| 12 | 10.94 |
| Total Time (s) = | 51.94 |

**Field Notes**

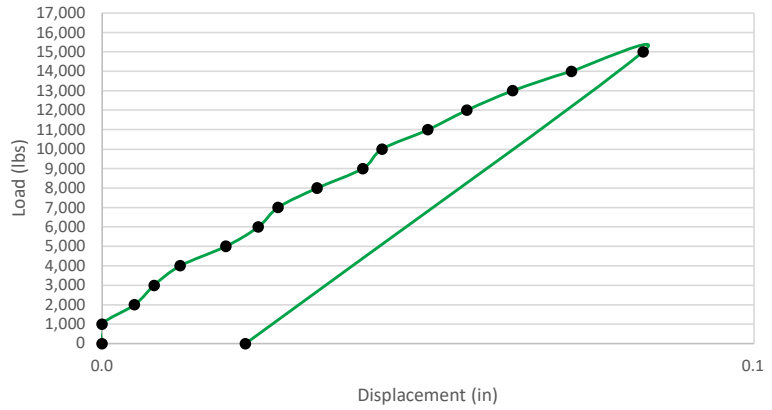
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 6,000 | 6,000 | 0.0260 | 0.0220 | 0.0240 |
| 1 | 7,000 | 7,000 | 0.0300 | 0.0240 | 0.0270 |
| 1 | 8,000 | 8,000 | 0.0360 | 0.0300 | 0.0330 |
| 1 | 9,000 | 9,000 | 0.0440 | 0.0360 | 0.0400 |
| 1 | 10,000 | 10,000 | 0.0460 | 0.0400 | 0.0430 |
| 1 | 11,000 | 11,000 | 0.0540 | 0.0460 | 0.0500 |
| 1 | 12,000 | 12,000 | 0.0600 | 0.0520 | 0.0560 |
| 1 | 13,000 | 13,000 | 0.0660 | 0.0600 | 0.0630 |
| 1 | 14,000 | 14,000 | 0.0760 | 0.0680 | 0.0720 |
| 1 | 15,000 | 15,000 | 0.0860 | 0.0800 | 0.0830 |
| 1 | 0 | 0 | 0.0200 | 0.0240 | 0.0220 |

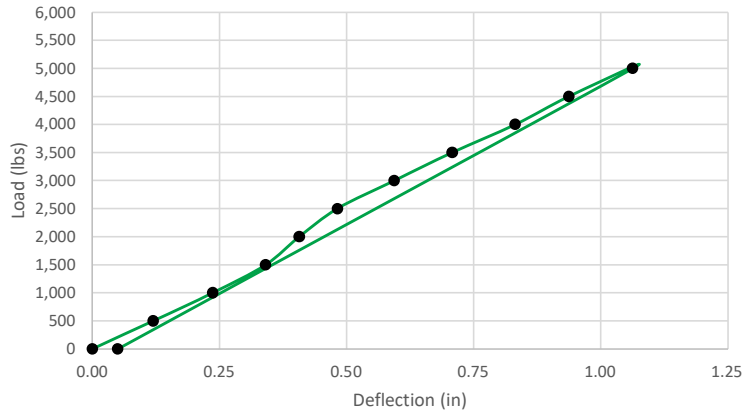
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1240 | 0.1160 | 0.1200 |
| 1 | 1,000 | 1,000 | 0.2400 | 0.2340 | 0.2370 |
| 1 | 1,500 | 1,500 | 0.3440 | 0.3380 | 0.3410 |
| 1 | 2,000 | 2,000 | 0.4080 | 0.4060 | 0.4070 |
| 1 | 2,500 | 2,500 | 0.4820 | 0.4820 | 0.4820 |
| 1 | 3,000 | 3,000 | 0.5940 | 0.5940 | 0.5940 |
| 1 | 3,500 | 3,500 | 0.7080 | 0.7080 | 0.7080 |
| 1 | 4,000 | 4,000 | 0.8320 | 0.8320 | 0.8320 |
| 1 | 4,500 | 4,500 | 0.9400 | 0.9340 | 0.9370 |
| 1 | 5,000 | 5,000 | 1.0660 | 1.0600 | 1.0630 |
| 1 | 0 | 0 | 0.0540 | 0.0460 | 0.0500 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12 | Pile ID: | PT-PV-017B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 51.9 |
| Location: | 45.40769, -120.67510 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 5.8 |

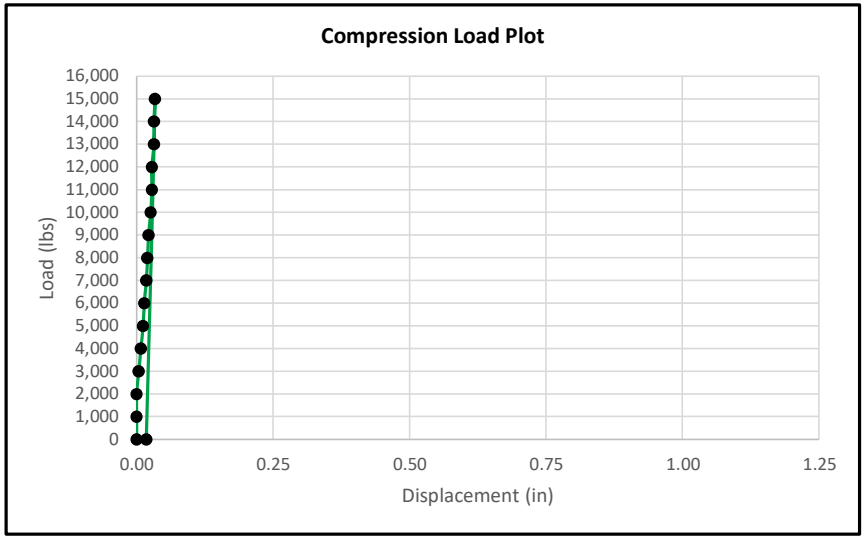
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.52 |
| 5 | 2.57 |
| 6 | 3.26 |
| 7 | 3.57 |
| 8 | 7.57 |
| 9 | 8.16 |
| 10 | 6.79 |
| 11 | 7.56 |
| 12 | 10.94 |
| Total Time (s) = | 51.94 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 1,000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 2,000 | 0.0020 | 0.0000 |
| 1 | 3,000 | 3,000 | 3,000 | 0.0060 | 0.0040 |
| 1 | 4,000 | 4,000 | 4,000 | 0.0120 | 0.0080 |
| 1 | 5,000 | 5,000 | 5,000 | 0.0160 | 0.0120 |
| 1 | 6,000 | 6,000 | 6,000 | 0.0180 | 0.0140 |
| 1 | 7,000 | 7,000 | 7,000 | 0.0220 | 0.0180 |
| 1 | 8,000 | 8,000 | 8,000 | 0.0240 | 0.0200 |
| 1 | 9,000 | 9,000 | 9,000 | 0.0260 | 0.0220 |
| 1 | 10,000 | 10,000 | 10,000 | 0.0300 | 0.0260 |
| 1 | 11,000 | 11,000 | 11,000 | 0.0320 | 0.0280 |
| 1 | 12,000 | 12,000 | 12,000 | 0.0340 | 0.0280 |
| 1 | 13,000 | 13,000 | 13,000 | 0.0360 | 0.0320 |
| 1 | 14,000 | 14,000 | 14,000 | 0.0380 | 0.0320 |
| 1 | 15,000 | 15,000 | 15,000 | 0.0400 | 0.0340 |
| 1 | 0 | 0 | 0 | 0.0180 | 0.0180 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-019 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 7.8 |
| Location: | 45.40440, -120.68281 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.85 |
| 6 | 1.56 |
| 7 | 1.94 |
| 8 | 2.45 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 7.8 |

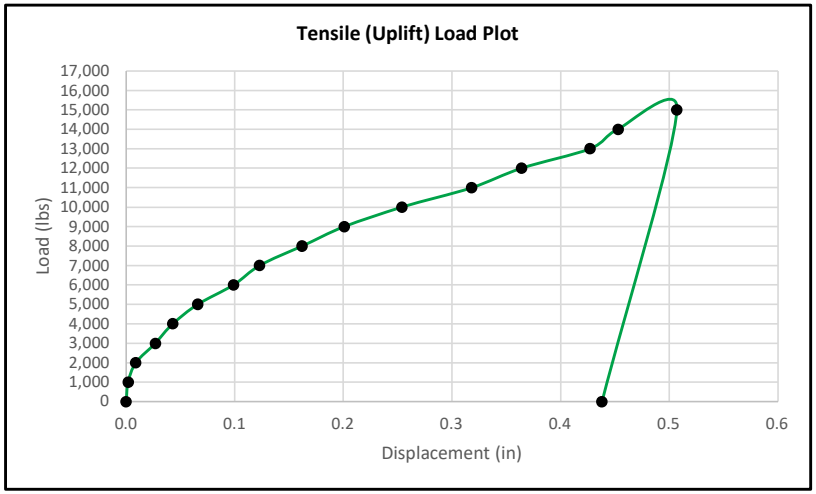
**Field Notes**

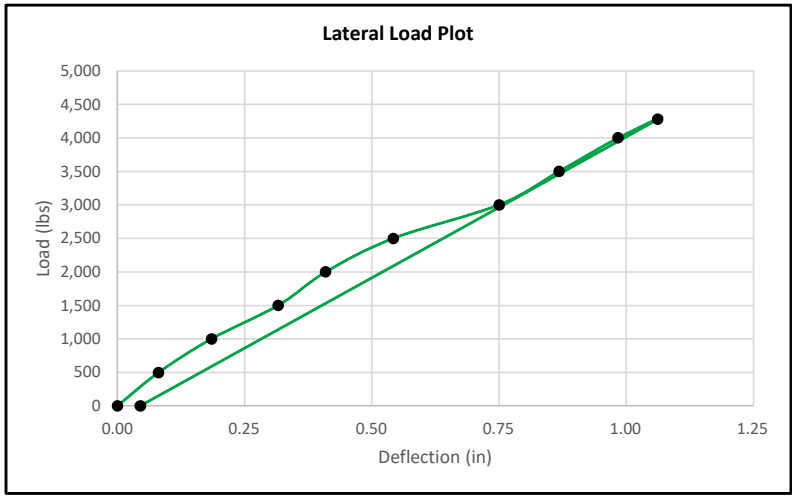
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0240 | 0.0300 | 0.0270 |
| 1 | 4,000 | 4,000 | 0.0380 | 0.0480 | 0.0430 |
| 1 | 5,000 | 5,000 | 0.0600 | 0.0720 | 0.0660 |
| 1 | 6,000 | 6,000 | 0.0920 | 0.1060 | 0.0990 |
| 1 | 7,000 | 7,000 | 0.1140 | 0.1320 | 0.1230 |
| 1 | 8,000 | 8,000 | 0.1520 | 0.1720 | 0.1620 |
| 1 | 9,000 | 9,000 | 0.1900 | 0.2120 | 0.2010 |
| 1 | 10,000 | 10,000 | 0.2400 | 0.2680 | 0.2540 |
| 1 | 11,000 | 11,000 | 0.3040 | 0.3320 | 0.3180 |
| 1 | 12,000 | 12,000 | 0.3500 | 0.3780 | 0.3640 |
| 1 | 13,000 | 13,000 | 0.4120 | 0.4420 | 0.4270 |
| 1 | 14,000 | 14,000 | 0.4380 | 0.4680 | 0.4530 |
| 1 | 15,000 | 15,000 | 0.4920 | 0.5220 | 0.5070 |
| 1 | 0 | 0 | 0.4340 | 0.4420 | 0.4380 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0880 | 0.0740 | 0.0810 |
| 1 | 1,000 | 1,000 | 0.1940 | 0.1760 | 0.1850 |
| 1 | 1,500 | 1,500 | 0.3260 | 0.3060 | 0.3160 |
| 1 | 2,000 | 2,000 | 0.4200 | 0.3980 | 0.4090 |
| 1 | 2,500 | 2,500 | 0.5540 | 0.5300 | 0.5420 |
| 1 | 3,000 | 3,000 | 0.7640 | 0.7360 | 0.7500 |
| 1 | 3,500 | 3,500 | 0.8800 | 0.8560 | 0.8680 |
| 1 | 4,000 | 4,000 | 0.9980 | 0.9700 | 0.9840 |
| 1 | 4,500 | 4,280 | 1.0760 | 1.0480 | 1.0620 |
| 1 | 0 | 0 | 0.0420 | 0.0480 | 0.0450 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-021 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 14.91 |
| Location: | 45.40794, -120.66522 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 3.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.81 |
| 6 | 2.42 |
| 7 | 3.22 |
| 8 | 8.46 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.91 |

**Field Notes**

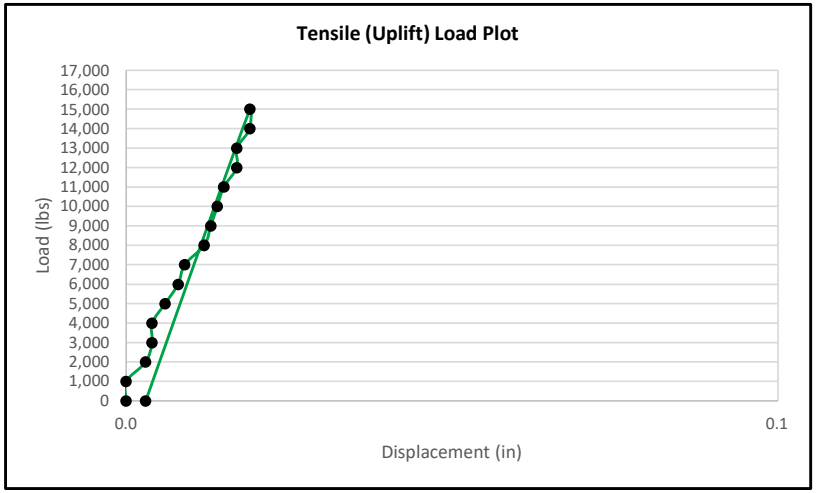
Rock encountered at 5 feet BGS during pre-drilling.

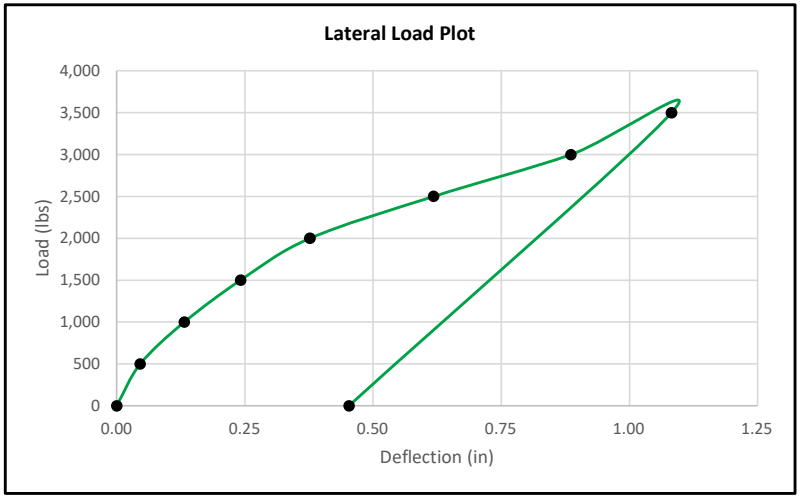
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0500 | 0.0420 | 0.0460 |
| 1 | 1,000 | 1,000 | 0.1380 | 0.1260 | 0.1320 |
| 1 | 1,500 | 1,500 | 0.2520 | 0.2320 | 0.2420 |
| 1 | 2,000 | 2,000 | 0.3900 | 0.3640 | 0.3770 |
| 1 | 2,500 | 2,500 | 0.6320 | 0.6040 | 0.6180 |
| 1 | 3,000 | 3,000 | 0.9000 | 0.8720 | 0.8860 |
| 1 | 3,500 | 3,500 | 1.0980 | 1.0660 | 1.0820 |
| 1 | 0 | 0 | 0.4480 | 0.4580 | 0.4530 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-022 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 29.08 |
| Location: | 45.40722, -120.65878 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 11.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.91 |
| 6 | 5.66 |
| 7 | 22.51 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 29.08 |

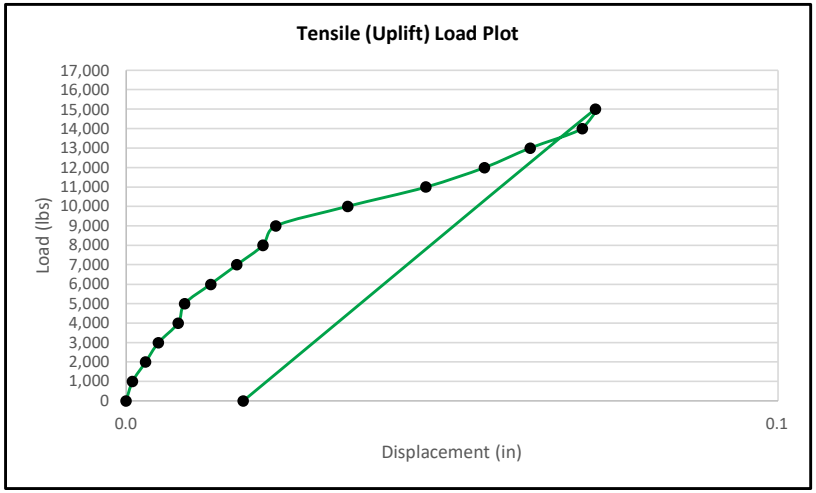
**Field Notes**

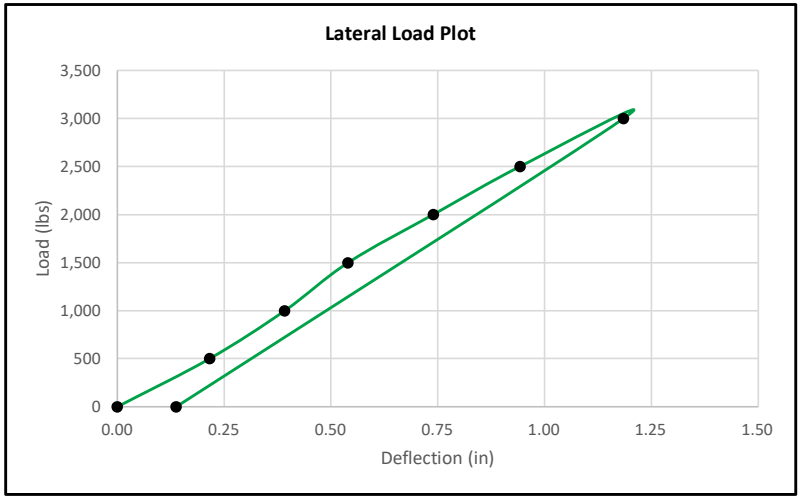
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 10,000 | 10,000 | 0.0300 | 0.0380 | 0.0340 |
| 1 | 11,000 | 11,000 | 0.0480 | 0.0440 | 0.0460 |
| 1 | 12,000 | 12,000 | 0.0580 | 0.0520 | 0.0550 |
| 1 | 13,000 | 13,000 | 0.0600 | 0.0640 | 0.0620 |
| 1 | 14,000 | 14,000 | 0.0740 | 0.0660 | 0.0700 |
| 1 | 15,000 | 15,000 | 0.0760 | 0.0680 | 0.0720 |
| 1 | 0 | 0 | 0.0180 | 0.0180 | 0.0180 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.2360 | 0.1960 | 0.2160 |
| 1 | 1,000 | 1,000 | 0.4180 | 0.3660 | 0.3920 |
| 1 | 1,500 | 1,500 | 0.5680 | 0.5120 | 0.5400 |
| 1 | 2,000 | 2,000 | 0.7700 | 0.7100 | 0.7400 |
| 1 | 2,500 | 2,500 | 0.9760 | 0.9100 | 0.9430 |
| 1 | 3,000 | 3,000 | 1.2220 | 1.1480 | 1.1850 |
| 1 | 0 | 0 | 0.1300 | 0.1460 | 0.1380 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7 | Pile ID: | PT-PV-022 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 29.1 |
| Location: | 45.40110, -120.67373 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 11.6 |

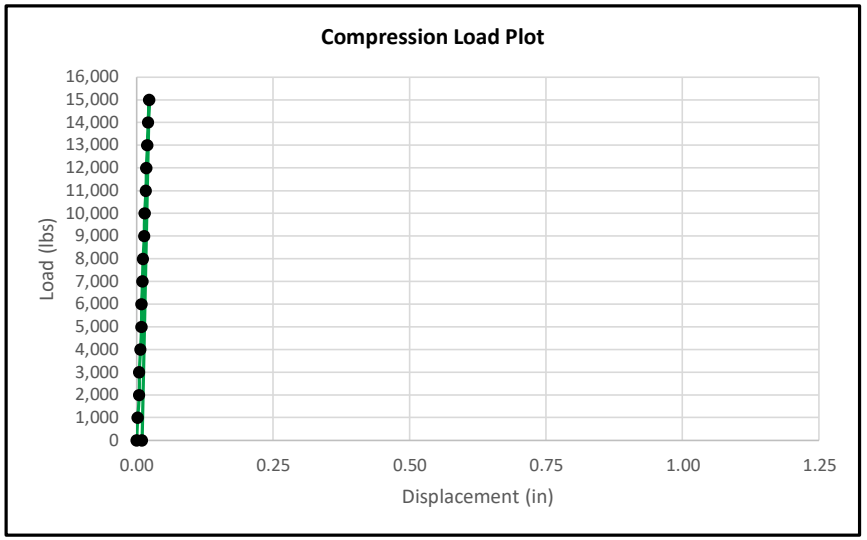
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.91 |
| 6 | 5.66 |
| 7 | 22.51 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 29.08 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0240 | 0.0230 |
| 1 | 0 | 0 | 0.0080 | 0.0120 | 0.0100 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.5 | Pile ID: | PT-PV-025A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 48.09 |
| Location: | 45.40105 , -120.67390 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 8.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.79 |
| 3 | 1.39 |
| 4 | 1.81 |
| 5 | 1.86 |
| 6 | 7.83 |
| 7 | 34.41 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 48.09 |

**Field Notes**

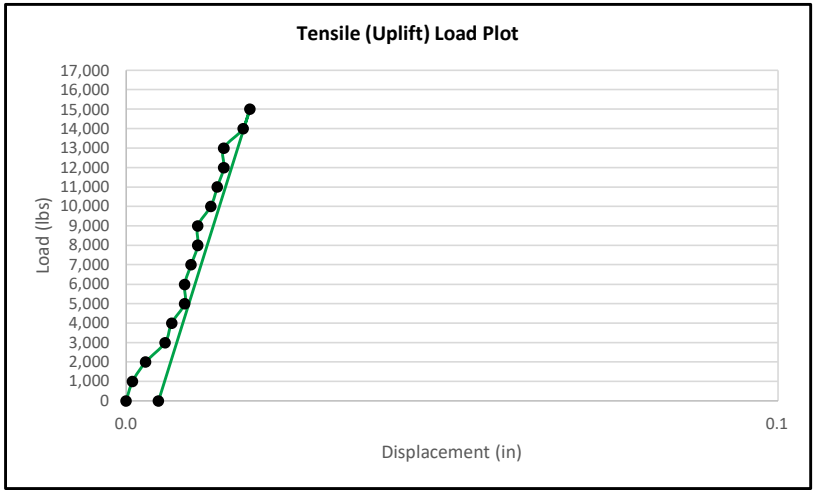
Pile refusal encountered at 6.5 feet BGS

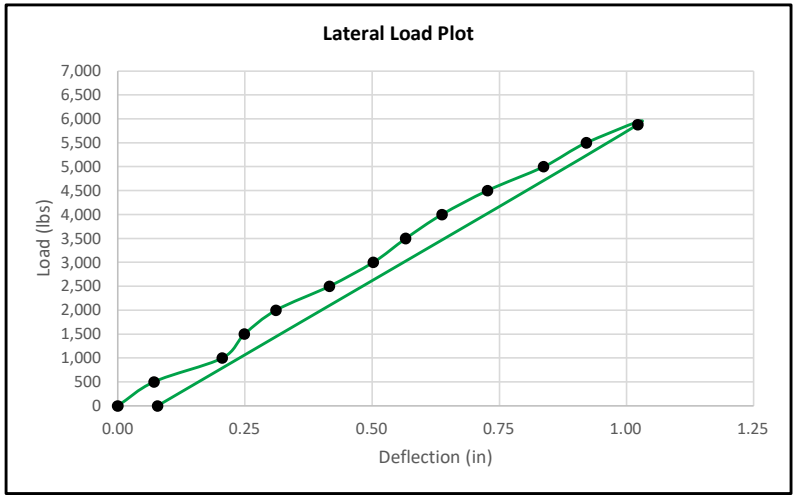
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0100 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 0 | 0 | 0.0040 | 0.0060 | 0.0050 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0780 | 0.0710 |
| 1 | 1,000 | 1,000 | 0.1940 | 0.2160 | 0.2050 |
| 1 | 1,500 | 1,500 | 0.2360 | 0.2620 | 0.2490 |
| 1 | 2,000 | 2,000 | 0.2960 | 0.3260 | 0.3110 |
| 1 | 2,500 | 2,500 | 0.4040 | 0.4280 | 0.4160 |
| 1 | 3,000 | 3,000 | 0.4900 | 0.5140 | 0.5020 |
| 1 | 3,500 | 3,500 | 0.5540 | 0.5780 | 0.5660 |
| 1 | 4,000 | 4,000 | 0.6240 | 0.6500 | 0.6370 |
| 1 | 4,500 | 4,500 | 0.7140 | 0.7400 | 0.7270 |
| 1 | 5,000 | 5,000 | 0.8220 | 0.8520 | 0.8370 |
| 1 | 5,500 | 5,500 | 0.9080 | 0.9340 | 0.9210 |
| 1 | 6,000 | 5,880 | 1.0100 | 1.0340 | 1.0220 |
| 1 | 0 | 0 | 0.0800 | 0.0760 | 0.0780 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.5 | Pile ID: | PT-PV-025 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 48.1 |
| Location: | 45.40105 , -120.67390 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 8.7 |

**Embedment Data**

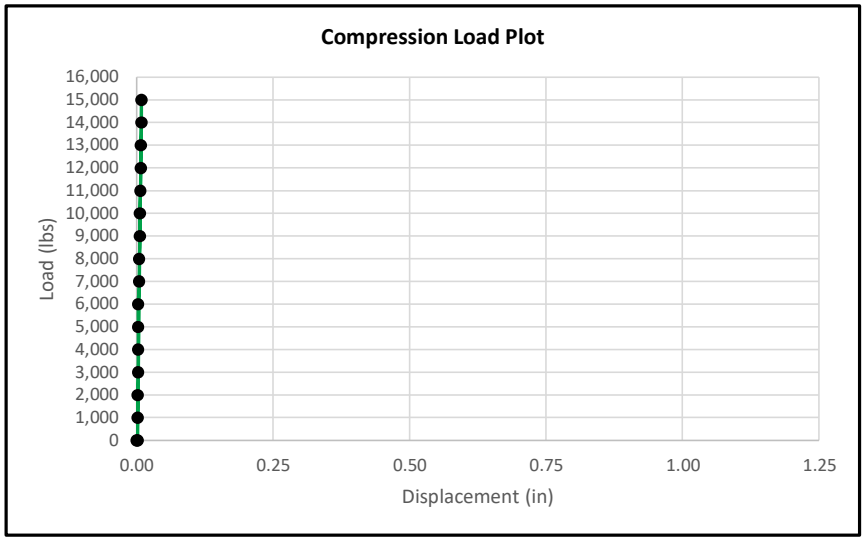
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.79 |
| 3 | 1.39 |
| 4 | 1.81 |
| 5 | 1.86 |
| 6 | 7.83 |
| 7 | 34.41 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 48.09 |

**Field Notes**

Pile refusal encountered at 6.5 feet

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 9,000 | 9,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 10,000 | 10,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 11,000 | 11,000 | 0.0040 | 0.0100 | 0.0070 |
| 1 | 12,000 | 12,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 13,000 | 13,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 14,000 | 14,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 15,000 | 15,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-028A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 7.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 2.4 |
| Location: | 45.39694, -120.65986 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 2.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | 2.43 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 2.43 |

**Tensile (Uplift) Testing**

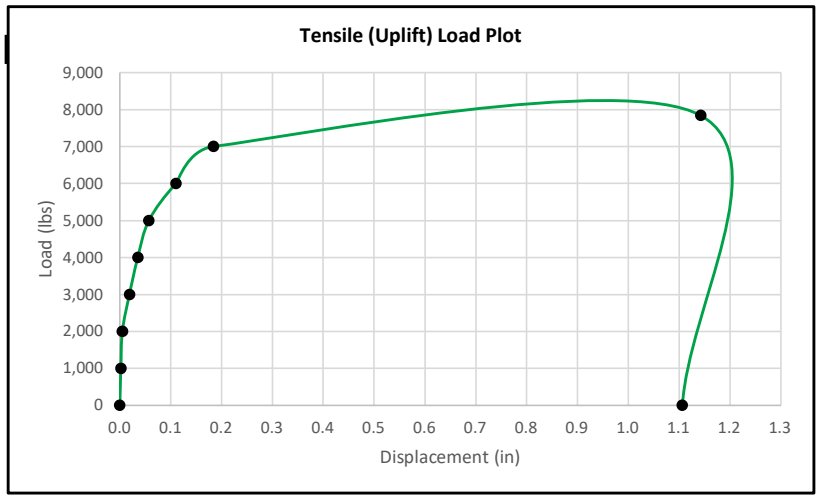
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 4,000 | 4,000 | 0.0320 | 0.0380 | 0.0350 |
| 1 | 5,000 | 5,000 | 0.0520 | 0.0620 | 0.0570 |
| 1 | 6,000 | 6,000 | 0.1040 | 0.1160 | 0.1100 |
| 1 | 7,000 | 7,000 | 0.1780 | 0.1900 | 0.1840 |
| 1 | 8,000 | 7,840 | 1.1340 | 1.1500 | 1.1420 |
| 1 | 0 | 0 | 1.1040 | 1.1080 | 1.1060 |

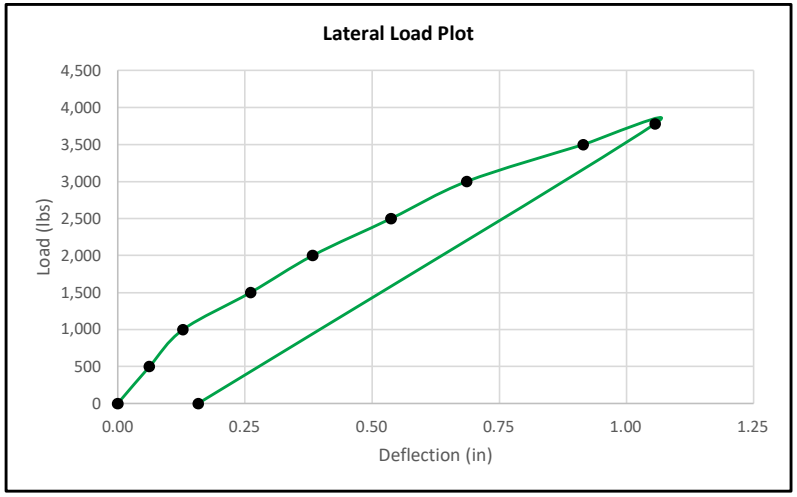
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0600 | 0.0640 | 0.0620 |
| 1 | 1,000 | 1,000 | 0.1240 | 0.1320 | 0.1280 |
| 1 | 1,500 | 1,500 | 0.2540 | 0.2680 | 0.2610 |
| 1 | 2,000 | 2,000 | 0.3740 | 0.3920 | 0.3830 |
| 1 | 2,500 | 2,500 | 0.5240 | 0.5500 | 0.5370 |
| 1 | 3,000 | 3,000 | 0.6720 | 0.7000 | 0.6860 |
| 1 | 3,500 | 3,500 | 0.9000 | 0.9300 | 0.9150 |
| 1 | 4,000 | 3,780 | 1.0380 | 1.0740 | 1.0560 |
| 1 | 0 | 0 | 0.1500 | 0.1660 | 0.1580 |

**Field Notes**

Rock encountered at 7.5 feet BGS during pre-drilling.



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-028B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14 |
| Location: | 45.39694, -120.65986 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.33 |
| 6 | 1.19 |
| 7 | 3.98 |
| 8 | 7.5 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14 |

**Field Notes**

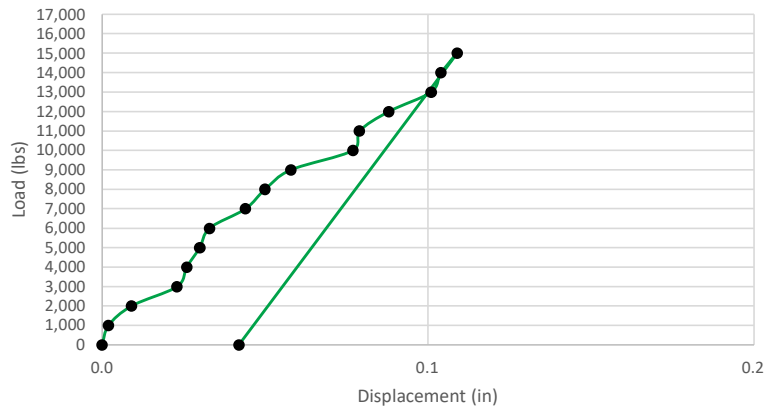
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 4,000 | 4,000 | 0.0260 | 0.0260 | 0.0260 |
| 1 | 5,000 | 5,000 | 0.0300 | 0.0300 | 0.0300 |
| 1 | 6,000 | 6,000 | 0.0340 | 0.0320 | 0.0330 |
| 1 | 7,000 | 7,000 | 0.0440 | 0.0440 | 0.0440 |
| 1 | 8,000 | 8,000 | 0.0500 | 0.0500 | 0.0500 |
| 1 | 9,000 | 9,000 | 0.0600 | 0.0560 | 0.0580 |
| 1 | 10,000 | 10,000 | 0.0800 | 0.0740 | 0.0770 |
| 1 | 11,000 | 11,000 | 0.0820 | 0.0760 | 0.0790 |
| 1 | 12,000 | 12,000 | 0.0940 | 0.0820 | 0.0880 |
| 1 | 13,000 | 13,000 | 0.1060 | 0.0960 | 0.1010 |
| 1 | 14,000 | 14,000 | 0.1100 | 0.0980 | 0.1040 |
| 1 | 15,000 | 15,000 | 0.1140 | 0.1040 | 0.1090 |
| 1 | 0 | 0 | 0.0440 | 0.0400 | 0.0420 |

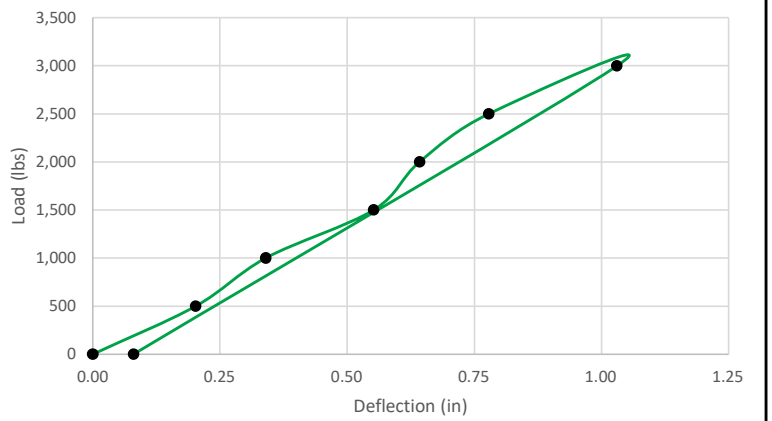
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.2100 | 0.1940 | 0.2020 |
| 1 | 1,000 | 1,000 | 0.3500 | 0.3300 | 0.3400 |
| 1 | 1,500 | 1,500 | 0.5640 | 0.5400 | 0.5520 |
| 1 | 2,000 | 2,000 | 0.6540 | 0.6300 | 0.6420 |
| 1 | 2,500 | 2,500 | 0.7900 | 0.7660 | 0.7780 |
| 1 | 3,000 | 3,000 | 1.0420 | 1.0180 | 1.0300 |
| 1 | 0 | 0 | 0.0800 | 0.0800 | 0.0800 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-029 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 11.34 |
| Location: | 45.39385, -120.68097 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.8 |
| 3 | 1.76 |
| 4 | 2.11 |
| 5 | 1.71 |
| 6 | 1.38 |
| 7 | 1.79 |
| 8 | 1.79 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 11.34 |

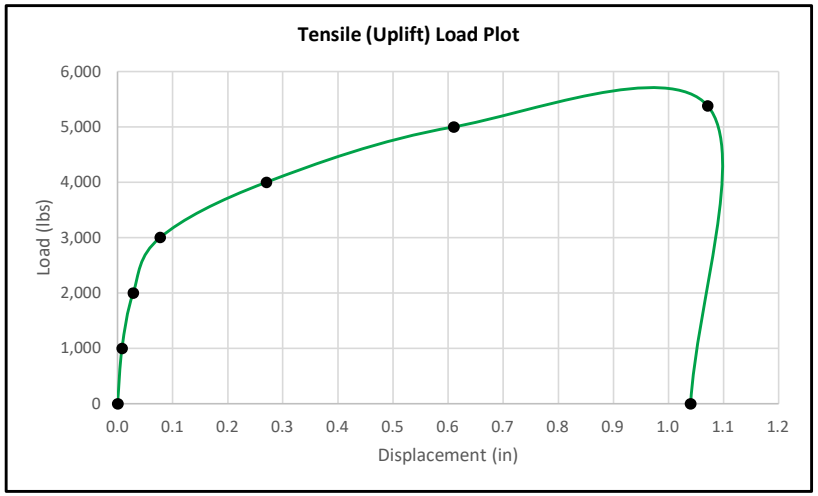
**Tensile (Uplift) Testing**

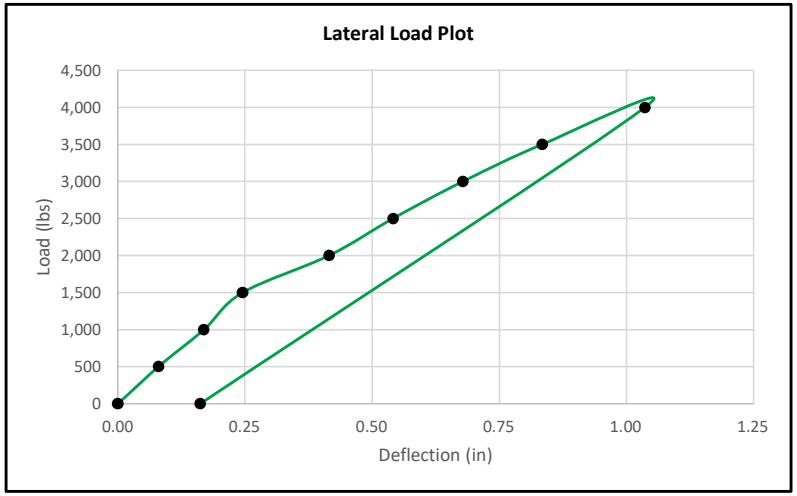
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 2,000 | 2,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 3,000 | 3,000 | 0.0740 | 0.0800 | 0.0770 |
| 1 | 4,000 | 4,000 | 0.2640 | 0.2760 | 0.2700 |
| 1 | 5,000 | 5,000 | 0.6060 | 0.6140 | 0.6100 |
| 1 | 6,000 | 5,380 | 1.0700 | 1.0720 | 1.0710 |
| 1 | 0 | 0 | 1.0380 | 1.0420 | 1.0400 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0880 | 0.0720 | 0.0800 |
| 1 | 1,000 | 1,000 | 0.1800 | 0.1580 | 0.1690 |
| 1 | 1,500 | 1,500 | 0.2560 | 0.2340 | 0.2450 |
| 1 | 2,000 | 2,000 | 0.4260 | 0.4040 | 0.4150 |
| 1 | 2,500 | 2,500 | 0.5520 | 0.5300 | 0.5410 |
| 1 | 3,000 | 3,000 | 0.6880 | 0.6680 | 0.6780 |
| 1 | 3,500 | 3,500 | 0.8440 | 0.8240 | 0.8340 |
| 1 | 4,000 | 4,000 | 1.0460 | 1.0260 | 1.0360 |
| 1 | 0 | 0 | 0.1660 | 0.1580 | 0.1620 |

**Field Notes**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8 | Pile ID: | PT-PV-029 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 11.3 |
| Location: | 45.39186, -120.67160 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.6 |

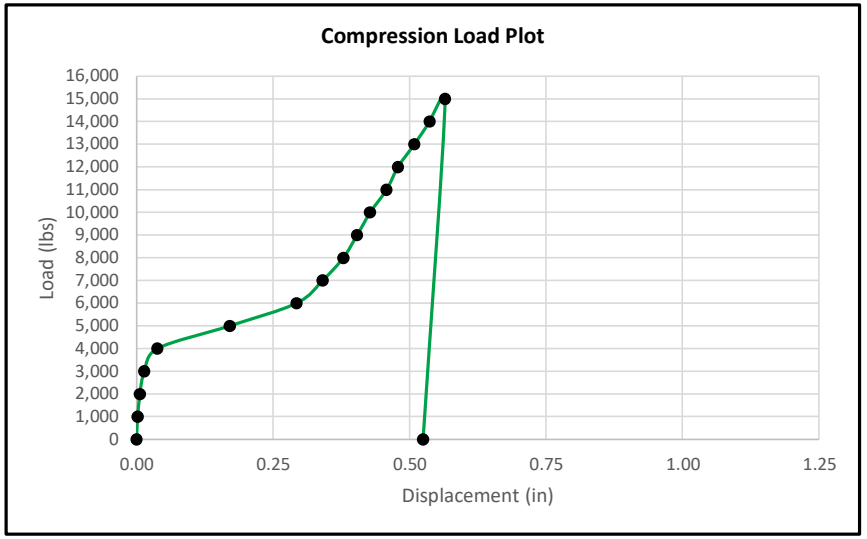
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.8 |
| 3 | 1.76 |
| 4 | 2.11 |
| 5 | 1.71 |
| 6 | 1.38 |
| 7 | 1.79 |
| 8 | 1.79 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 11.34 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 4,000 | 4,000 | 0.0380 | 0.0380 | 0.0380 |
| 1 | 5,000 | 5,000 | 0.1720 | 0.1700 | 0.1710 |
| 1 | 6,000 | 6,000 | 0.2940 | 0.2920 | 0.2930 |
| 1 | 7,000 | 7,000 | 0.3420 | 0.3400 | 0.3410 |
| 1 | 8,000 | 8,000 | 0.3800 | 0.3780 | 0.3790 |
| 1 | 9,000 | 9,000 | 0.4040 | 0.4040 | 0.4040 |
| 1 | 10,000 | 10,000 | 0.4280 | 0.4280 | 0.4280 |
| 1 | 11,000 | 11,000 | 0.4600 | 0.4560 | 0.4580 |
| 1 | 12,000 | 12,000 | 0.4800 | 0.4780 | 0.4790 |
| 1 | 13,000 | 13,000 | 0.5100 | 0.5080 | 0.5090 |
| 1 | 14,000 | 14,000 | 0.5380 | 0.5360 | 0.5370 |
| 1 | 15,000 | 15,000 | 0.5660 | 0.5640 | 0.5650 |
| 1 | 0 | 0 | 0.5260 | 0.5240 | 0.5250 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-030A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 6.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 6.7 |
| Location: | 45.39185 , -120.67156 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 6.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | 6.67 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 6.67 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 2,000 | 2,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 3,000 | 3,000 | 0.0340 | 0.0380 | 0.0360 |
| 1 | 4,000 | 4,000 | 0.0620 | 0.0680 | 0.0650 |
| 1 | 5,000 | 5,000 | 0.1080 | 0.1200 | 0.1140 |
| 1 | 6,000 | 6,000 | 0.1500 | 0.1620 | 0.1560 |
| 1 | 7,000 | 7,000 | 0.2500 | 0.2700 | 0.2600 |
| 1 | 8,000 | 7,490 | 1.1080 | 1.1220 | 1.1150 |
| 1 | 0 | 0 | 1.0720 | 1.0820 | 1.0770 |

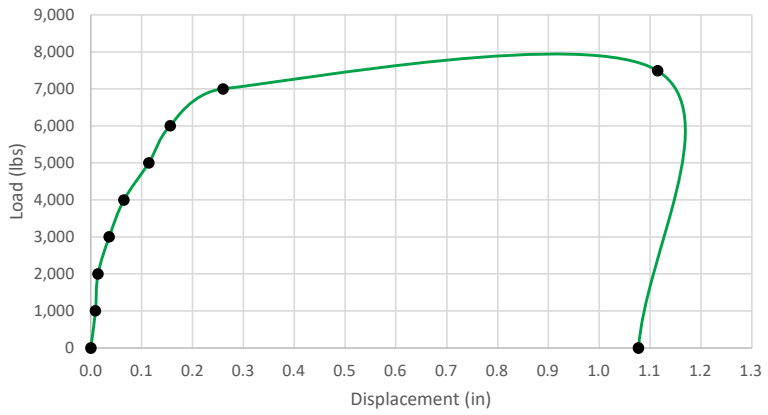
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1160 | 0.1140 | 0.1150 |
| 1 | 1,000 | 1,000 | 0.1820 | 0.1820 | 0.1820 |
| 1 | 1,500 | 1,500 | 0.2660 | 0.2680 | 0.2670 |
| 1 | 2,000 | 2,000 | 0.4360 | 0.4400 | 0.4380 |
| 1 | 2,500 | 2,500 | 0.5140 | 0.5180 | 0.5160 |
| 1 | 3,000 | 3,000 | 0.6220 | 0.6300 | 0.6260 |
| 1 | 3,500 | 3,500 | 0.7420 | 0.7520 | 0.7470 |
| 1 | 4,000 | 4,000 | 0.8700 | 0.8820 | 0.8760 |
| 1 | 4,500 | 4,380 | 1.0380 | 1.0540 | 1.0460 |
| 1 | 0 | 0 | 0.1900 | 0.2260 | 0.2080 |

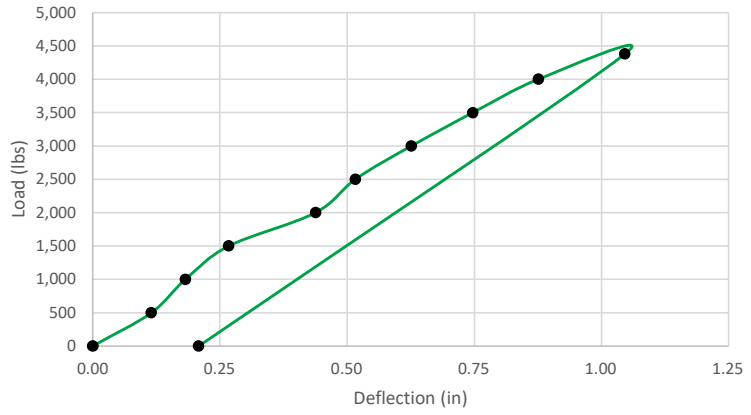
**Field Notes**

Rock encountered at 6.5 feet BGS during pre-drilling.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-030B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.3 |
| Location: | 45.39186, -120.67160 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.29 |
| 2 | 1.19 |
| 3 | 1.47 |
| 4 | 1.42 |
| 5 | 3.17 |
| 6 | 2.75 |
| 7 | 3.96 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.25 |

**Field Notes**

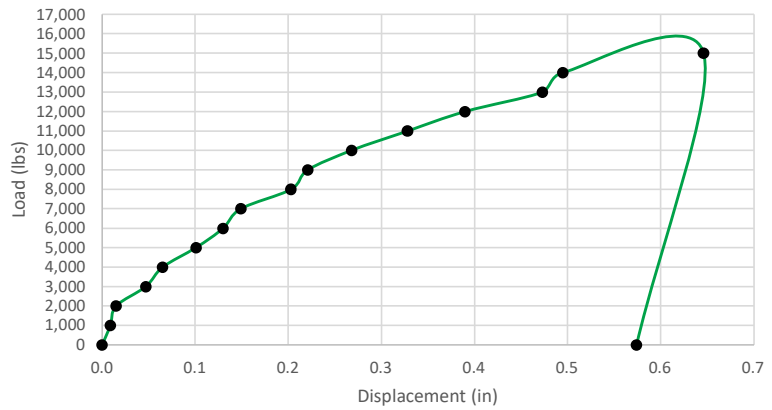
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 2,000 | 2,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 3,000 | 3,000 | 0.0480 | 0.0460 | 0.0470 |
| 1 | 4,000 | 4,000 | 0.0640 | 0.0662 | 0.0651 |
| 1 | 5,000 | 5,000 | 0.1020 | 0.1000 | 0.1010 |
| 1 | 6,000 | 6,000 | 0.1300 | 0.1300 | 0.1300 |
| 1 | 7,000 | 7,000 | 0.1480 | 0.1500 | 0.1490 |
| 1 | 8,000 | 8,000 | 0.2020 | 0.2040 | 0.2030 |
| 1 | 9,000 | 9,000 | 0.2200 | 0.2220 | 0.2210 |
| 1 | 10,000 | 10,000 | 0.2660 | 0.2700 | 0.2680 |
| 1 | 11,000 | 11,000 | 0.3260 | 0.3300 | 0.3280 |
| 1 | 12,000 | 12,000 | 0.3860 | 0.3940 | 0.3900 |
| 1 | 13,000 | 13,000 | 0.4700 | 0.4760 | 0.4730 |
| 1 | 14,000 | 14,000 | 0.4920 | 0.4980 | 0.4950 |
| 1 | 15,000 | 15,000 | 0.6420 | 0.6500 | 0.6460 |
| 1 | 0 | 0 | 0.5720 | 0.5760 | 0.5740 |

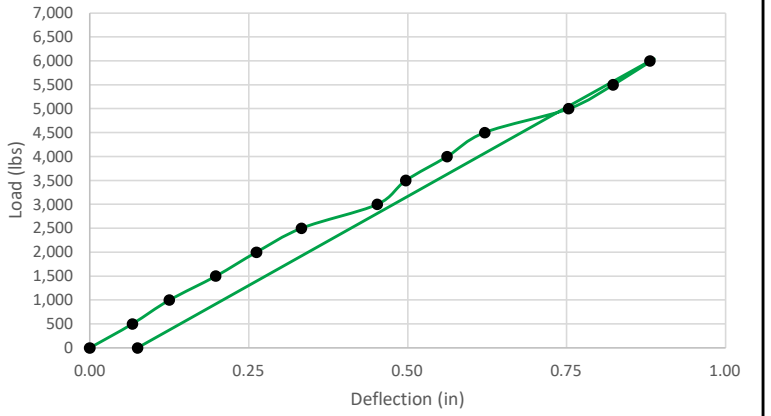
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0620 | 0.0720 | 0.0670 |
| 1 | 1,000 | 1,000 | 0.1200 | 0.1300 | 0.1250 |
| 1 | 1,500 | 1,500 | 0.1920 | 0.2040 | 0.1980 |
| 1 | 2,000 | 2,000 | 0.2560 | 0.2680 | 0.2620 |
| 1 | 2,500 | 2,500 | 0.3260 | 0.3400 | 0.3330 |
| 1 | 3,000 | 3,000 | 0.4440 | 0.4600 | 0.4520 |
| 1 | 3,500 | 3,500 | 0.4880 | 0.5060 | 0.4970 |
| 1 | 4,000 | 4,000 | 0.5520 | 0.5720 | 0.5620 |
| 1 | 4,500 | 4,500 | 0.6100 | 0.6320 | 0.6210 |
| 1 | 5,000 | 5,000 | 0.7400 | 0.7660 | 0.7530 |
| 1 | 5,500 | 5,500 | 0.8080 | 0.8380 | 0.8230 |
| 1 | 6,000 | 6,000 | 0.8660 | 0.8960 | 0.8810 |
| 1 | 0 | 0 | 0.0700 | 0.0800 | 0.0750 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-031A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 1.3 |
| Location: | 45.38956, -120.67979 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 0.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 0.45 |
| 7 | 0.89 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 1.34 |

**Field Notes**

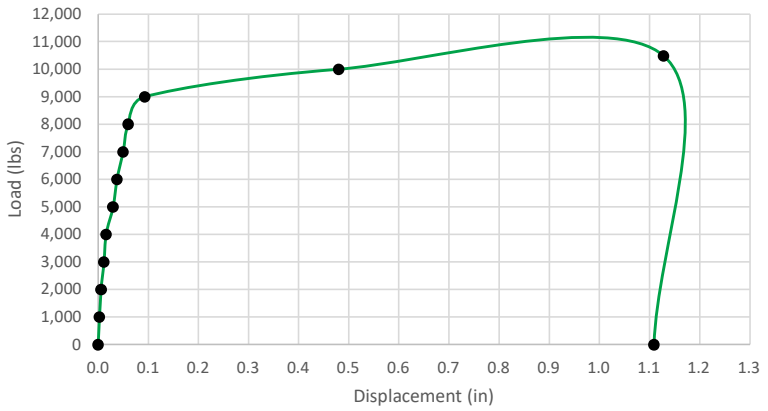
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 5,000 | 5,000 | 0.0280 | 0.0320 | 0.0300 |
| 1 | 6,000 | 6,000 | 0.0360 | 0.0400 | 0.0380 |
| 1 | 7,000 | 7,000 | 0.0480 | 0.0520 | 0.0500 |
| 1 | 8,000 | 8,000 | 0.0580 | 0.0620 | 0.0600 |
| 1 | 9,000 | 9,000 | 0.0920 | 0.0940 | 0.0930 |
| 1 | 10,000 | 10,000 | 0.4800 | 0.4800 | 0.4800 |
| 1 | 11,000 | 10,480 | 1.1280 | 1.1280 | 1.1280 |
| 1 | 0 | 0 | 1.1100 | 1.1080 | 1.1090 |

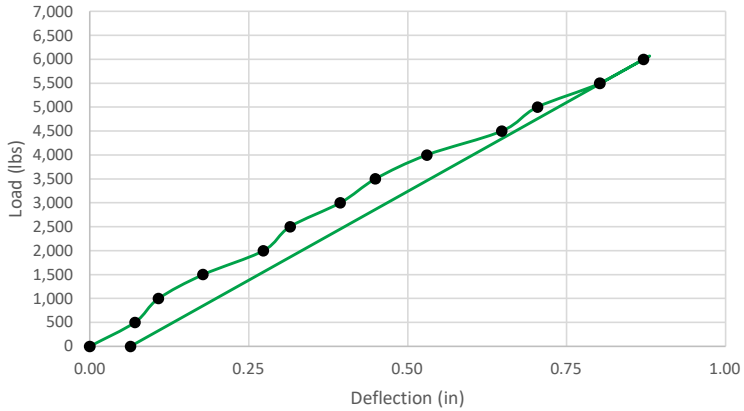
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0740 | 0.0680 | 0.0710 |
| 1 | 1,000 | 1,000 | 0.1120 | 0.1040 | 0.1080 |
| 1 | 1,500 | 1,500 | 0.1820 | 0.1740 | 0.1780 |
| 1 | 2,000 | 2,000 | 0.2780 | 0.2680 | 0.2730 |
| 1 | 2,500 | 2,500 | 0.3200 | 0.3100 | 0.3150 |
| 1 | 3,000 | 3,000 | 0.4000 | 0.3880 | 0.3940 |
| 1 | 3,500 | 3,500 | 0.4540 | 0.4440 | 0.4490 |
| 1 | 4,000 | 4,000 | 0.5360 | 0.5240 | 0.5300 |
| 1 | 4,500 | 4,500 | 0.6540 | 0.6420 | 0.6480 |
| 1 | 5,000 | 5,000 | 0.7120 | 0.6960 | 0.7040 |
| 1 | 5,500 | 5,500 | 0.8100 | 0.7940 | 0.8020 |
| 1 | 6,000 | 6,000 | 0.8800 | 0.8620 | 0.8710 |
| 1 | 0 | 0 | 0.0740 | 0.0540 | 0.0640 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-031B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.5 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 7.0 |
| Location: | 45.38956, -120.67979 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.48 |
| 4 | 1.24 |
| 5 | 1.68 |
| 6 | 1.61 |
| 7 | 2.02 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 7.03 |

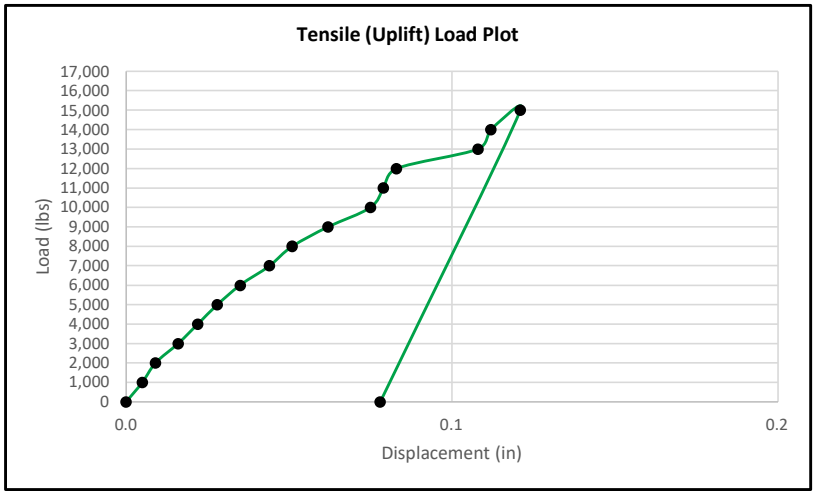
**Field Notes**

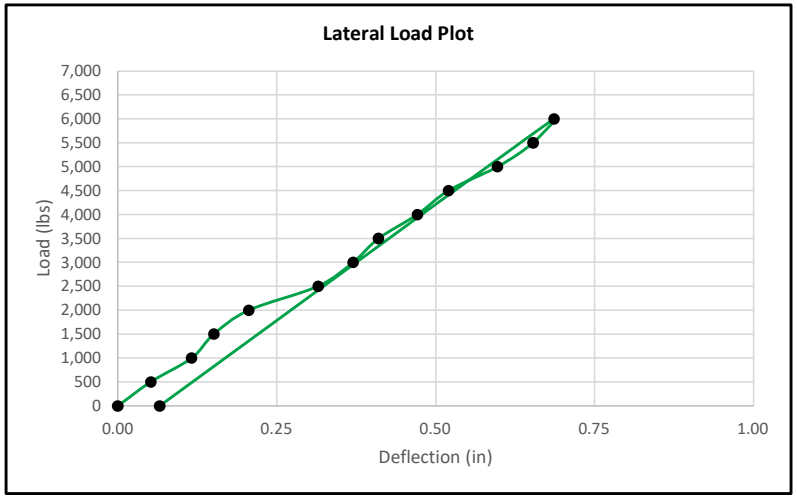
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 4,000 | 4,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 5,000 | 5,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 6,000 | 6,000 | 0.0320 | 0.0380 | 0.0350 |
| 1 | 7,000 | 7,000 | 0.0420 | 0.0460 | 0.0440 |
| 1 | 8,000 | 8,000 | 0.0480 | 0.0540 | 0.0510 |
| 1 | 9,000 | 9,000 | 0.0600 | 0.0640 | 0.0620 |
| 1 | 10,000 | 10,000 | 0.0740 | 0.0760 | 0.0750 |
| 1 | 11,000 | 11,000 | 0.0780 | 0.0800 | 0.0790 |
| 1 | 12,000 | 12,000 | 0.0820 | 0.0840 | 0.0830 |
| 1 | 13,000 | 13,000 | 0.1080 | 0.1080 | 0.1080 |
| 1 | 14,000 | 14,000 | 0.1120 | 0.1120 | 0.1120 |
| 1 | 15,000 | 15,000 | 0.1220 | 0.1200 | 0.1210 |
| 1 | 0 | 0 | 0.0780 | 0.0780 | 0.0780 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0520 | 0.0520 | 0.0520 |
| 1 | 1,000 | 1,000 | 0.1160 | 0.1160 | 0.1160 |
| 1 | 1,500 | 1,500 | 0.1520 | 0.1500 | 0.1510 |
| 1 | 2,000 | 2,000 | 0.2080 | 0.2040 | 0.2060 |
| 1 | 2,500 | 2,500 | 0.3180 | 0.3120 | 0.3150 |
| 1 | 3,000 | 3,000 | 0.3740 | 0.3660 | 0.3700 |
| 1 | 3,500 | 3,500 | 0.4140 | 0.4060 | 0.4100 |
| 1 | 4,000 | 4,000 | 0.4760 | 0.4660 | 0.4710 |
| 1 | 4,500 | 4,500 | 0.5260 | 0.5140 | 0.5200 |
| 1 | 5,000 | 5,000 | 0.6020 | 0.5920 | 0.5970 |
| 1 | 5,500 | 5,500 | 0.6580 | 0.6480 | 0.6530 |
| 1 | 6,000 | 6,000 | 0.6920 | 0.6800 | 0.6860 |
| 1 | 0 | 0 | 0.0660 | 0.0660 | 0.0660 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-031B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.5 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 7.0 |
| Location: | 45.38956, -120.67979 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.3 |

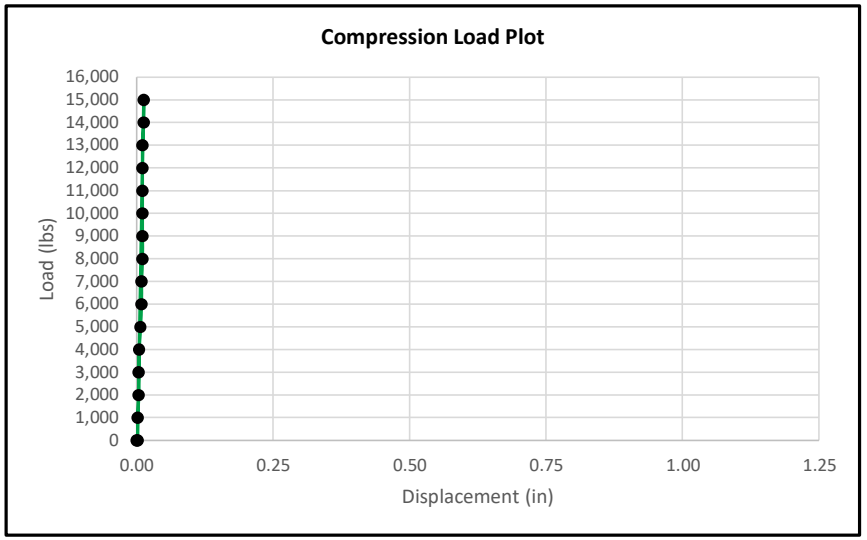
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.48 |
| 4 | 1.24 |
| 5 | 1.68 |
| 6 | 1.61 |
| 7 | 2.02 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 7.03 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 14,000 | 14,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-034 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 16.3 |
| Location: | 45.38654, -120.68485 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.14 |
| 2 | 0.79 |
| 3 | 1.69 |
| 4 | 3.11 |
| 5 | 3.36 |
| 6 | 3.46 |
| 7 | 3.74 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 16.29 |

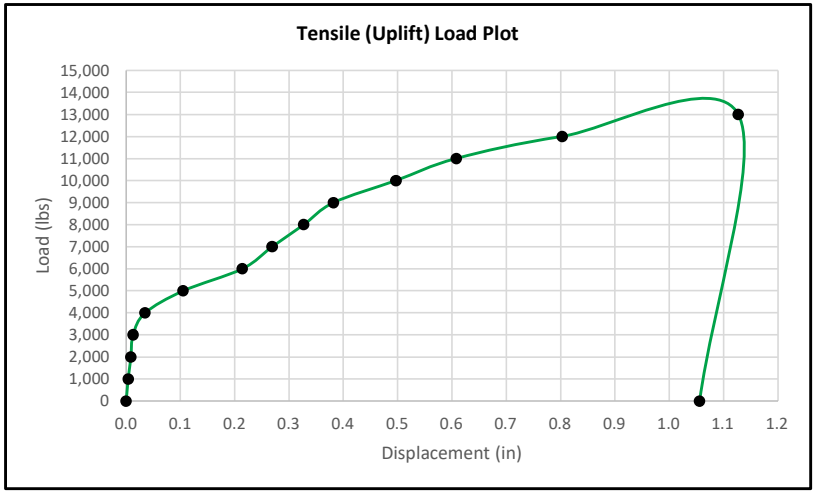
**Field Notes**

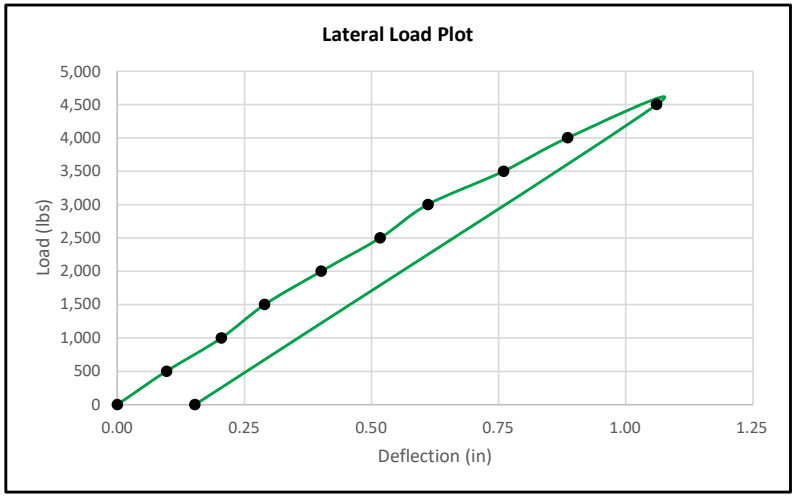
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 4,000 | 4,000 | 0.0360 | 0.0340 | 0.0350 |
| 1 | 5,000 | 5,000 | 0.1060 | 0.1040 | 0.1050 |
| 1 | 6,000 | 6,000 | 0.2140 | 0.2140 | 0.2140 |
| 1 | 7,000 | 7,000 | 0.2680 | 0.2700 | 0.2690 |
| 1 | 8,000 | 8,000 | 0.3260 | 0.3280 | 0.3270 |
| 1 | 9,000 | 9,000 | 0.3800 | 0.3840 | 0.3820 |
| 1 | 10,000 | 10,000 | 0.4940 | 0.5000 | 0.4970 |
| 1 | 11,000 | 11,000 | 0.6040 | 0.6120 | 0.6080 |
| 1 | 12,000 | 12,000 | 0.7980 | 0.8080 | 0.8030 |
| 1 | 13,000 | 13,000 | 1.1220 | 1.1320 | 1.1270 |
| 1 | 0 | 0 | 1.0480 | 1.0640 | 1.0560 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0920 | 0.1020 | 0.0970 |
| 1 | 1,000 | 1,000 | 0.1980 | 0.2120 | 0.2050 |
| 1 | 1,500 | 1,500 | 0.2820 | 0.2980 | 0.2900 |
| 1 | 2,000 | 2,000 | 0.3920 | 0.4100 | 0.4010 |
| 1 | 2,500 | 2,500 | 0.5060 | 0.5280 | 0.5170 |
| 1 | 3,000 | 3,000 | 0.6000 | 0.6220 | 0.6110 |
| 1 | 3,500 | 3,500 | 0.7480 | 0.7720 | 0.7600 |
| 1 | 4,000 | 4,000 | 0.8720 | 0.9000 | 0.8860 |
| 1 | 4,500 | 4,500 | 1.0460 | 1.0760 | 1.0610 |
| 1 | 0 | 0 | 0.1440 | 0.1620 | 0.1530 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-035 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 81.4 |
| Location: | 45.38248, -120.67955 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 13.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 2.23 |
| 4 | 9.18 |
| 5 | 11 |
| 6 | 12.01 |
| 7 | 19.27 |
| 8 | 27.75 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 81.44 |

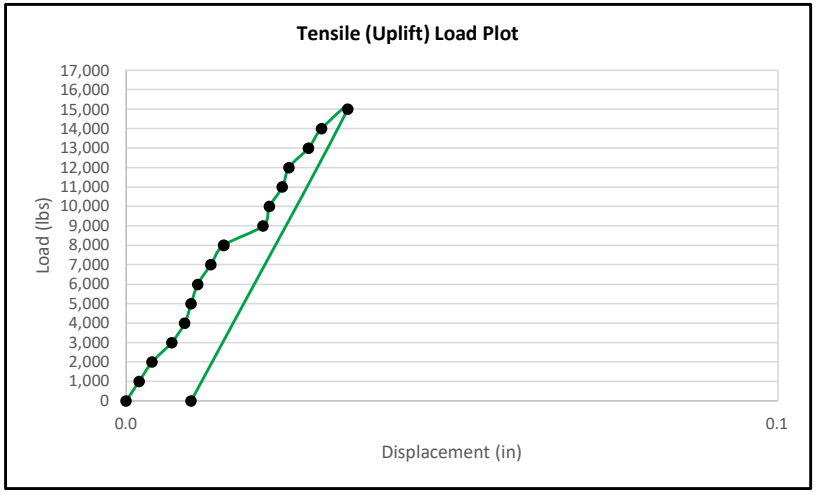
**Field Notes**

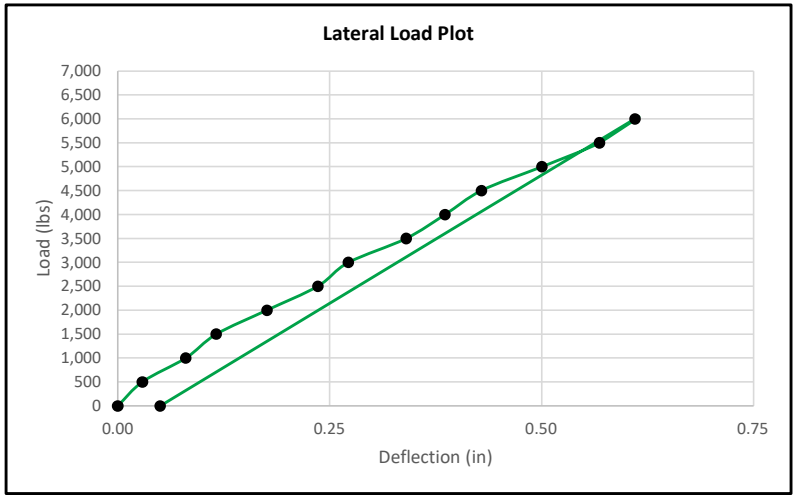
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0260 | 0.0220 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0280 | 0.0240 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0340 | 0.0280 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0360 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0420 | 0.0340 |
| 1 | 0 | 0 | 0.0100 | 0.0100 | 0.0100 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0260 | 0.0320 | 0.0290 |
| 1 | 1,000 | 1,000 | 0.0800 | 0.0800 | 0.0800 |
| 1 | 1,500 | 1,500 | 0.1160 | 0.1160 | 0.1160 |
| 1 | 2,000 | 2,000 | 0.1760 | 0.1760 | 0.1760 |
| 1 | 2,500 | 2,500 | 0.2360 | 0.2360 | 0.2360 |
| 1 | 3,000 | 3,000 | 0.2720 | 0.2720 | 0.2720 |
| 1 | 3,500 | 3,500 | 0.3440 | 0.3360 | 0.3400 |
| 1 | 4,000 | 4,000 | 0.3900 | 0.3820 | 0.3860 |
| 1 | 4,500 | 4,500 | 0.4320 | 0.4260 | 0.4290 |
| 1 | 5,000 | 5,000 | 0.5020 | 0.4980 | 0.5000 |
| 1 | 5,500 | 5,500 | 0.5660 | 0.5700 | 0.5680 |
| 1 | 6,000 | 6,000 | 0.6040 | 0.6160 | 0.6100 |
| 1 | 0 | 0 | 0.0500 | 0.0500 | 0.0500 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-PV-036 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.5 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 137.1 |
| Location: | 45.38628, -120.67500 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 18.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.31 |
| 3 | 7.02 |
| 4 | 8.41 |
| 5 | 14.75 |
| 6 | 15.32 |
| 7 | 26.75 |
| 8 | 29.87 |
| 9 | 33.68 |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 137.11 |

**Field Notes**

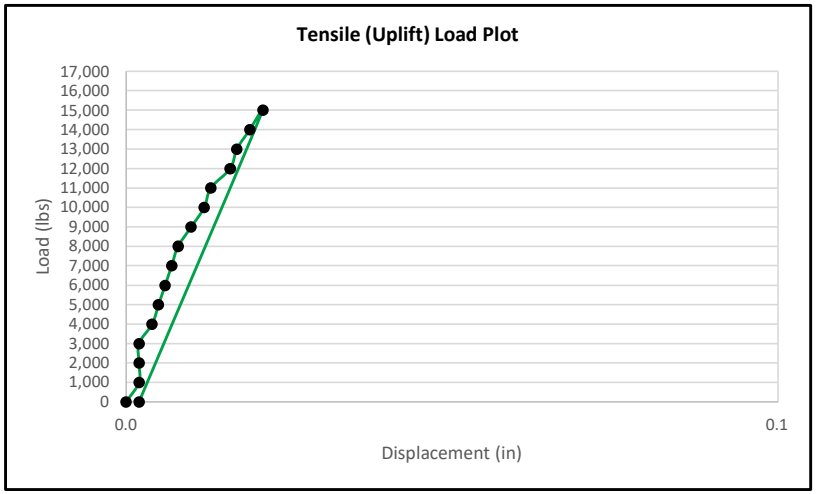
Pile refusal encountered at 9 feet BGS

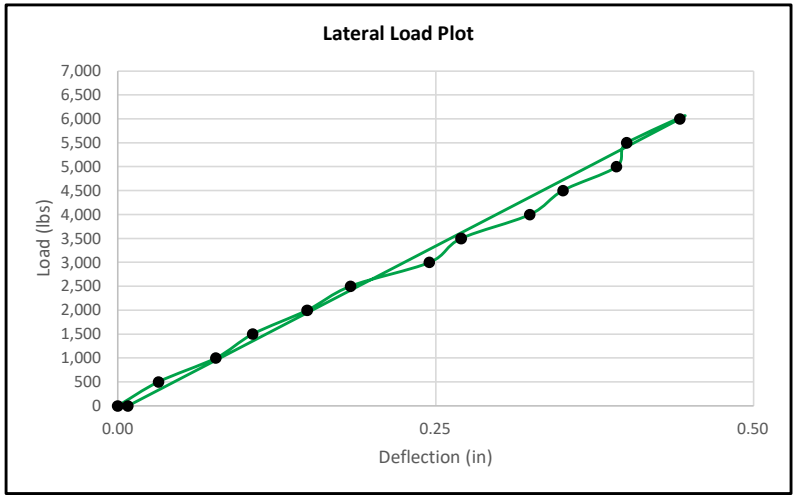
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 14,000 | 14,000 | 0.0140 | 0.0240 | 0.0190 |
| 1 | 15,000 | 15,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0320 | 0.0320 | 0.0320 |
| 1 | 1,000 | 1,000 | 0.0780 | 0.0760 | 0.0770 |
| 1 | 1,500 | 1,500 | 0.1060 | 0.1060 | 0.1060 |
| 1 | 2,000 | 2,000 | 0.1500 | 0.1480 | 0.1490 |
| 1 | 2,500 | 2,500 | 0.1860 | 0.1800 | 0.1830 |
| 1 | 3,000 | 3,000 | 0.2480 | 0.2420 | 0.2450 |
| 1 | 3,500 | 3,500 | 0.2720 | 0.2680 | 0.2700 |
| 1 | 4,000 | 4,000 | 0.3280 | 0.3200 | 0.3240 |
| 1 | 4,500 | 4,500 | 0.3520 | 0.3480 | 0.3500 |
| 1 | 5,000 | 5,000 | 0.3960 | 0.3880 | 0.3920 |
| 1 | 5,500 | 5,500 | 0.4020 | 0.3980 | 0.4000 |
| 1 | 6,000 | 6,000 | 0.4440 | 0.4400 | 0.4420 |
| 1 | 0 | 0 | 0.0060 | 0.0100 | 0.0080 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-040 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 25.9 |
| Location: | 45.38324, -120.66434 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 5.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1 |
| 5 | 3.67 |
| 6 | 4.38 |
| 7 | 6.34 |
| 8 | 10.5 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 25.89 |

**Field Notes**

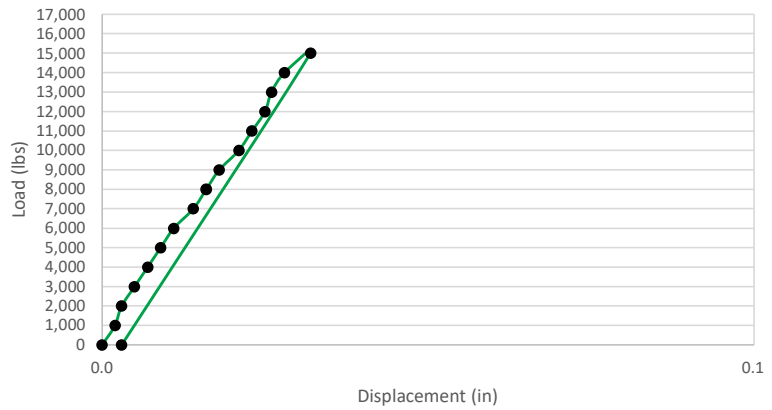
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0240 | 0.0230 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0280 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0340 | 0.0320 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

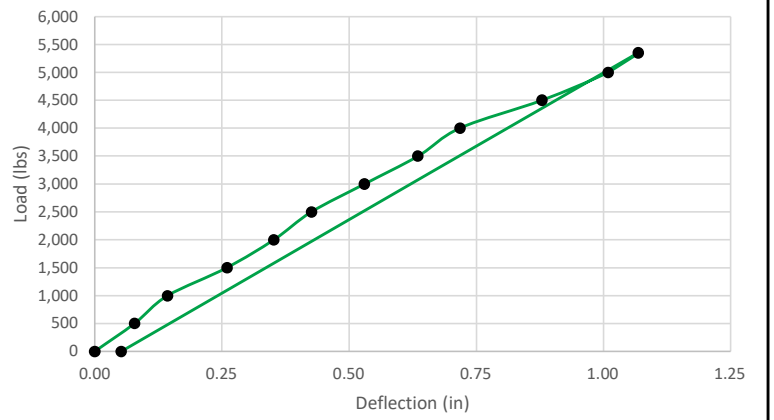
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0820 | 0.0740 | 0.0780 |
| 1 | 1,000 | 1,000 | 0.1500 | 0.1360 | 0.1430 |
| 1 | 1,500 | 1,500 | 0.2720 | 0.2480 | 0.2600 |
| 1 | 2,000 | 2,000 | 0.3660 | 0.3380 | 0.3520 |
| 1 | 2,500 | 2,500 | 0.4420 | 0.4100 | 0.4260 |
| 1 | 3,000 | 3,000 | 0.5500 | 0.5100 | 0.5300 |
| 1 | 3,500 | 3,500 | 0.6560 | 0.6140 | 0.6350 |
| 1 | 4,000 | 4,000 | 0.7440 | 0.6920 | 0.7180 |
| 1 | 4,500 | 4,500 | 0.9000 | 0.8580 | 0.8790 |
| 1 | 5,000 | 5,000 | 1.0360 | 0.9820 | 1.0090 |
| 1 | 5,500 | 5,350 | 1.0940 | 1.0420 | 1.0680 |
| 1 | 0 | 0 | 0.0620 | 0.0420 | 0.0520 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-043 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 37.4 |
| Location: | 45.37529, -120.69223 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 3.97 |
| 4 | 1.39 |
| 5 | 3.13 |
| 6 | 5.41 |
| 7 | 11.05 |
| 8 | 12.49 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 37.44 |

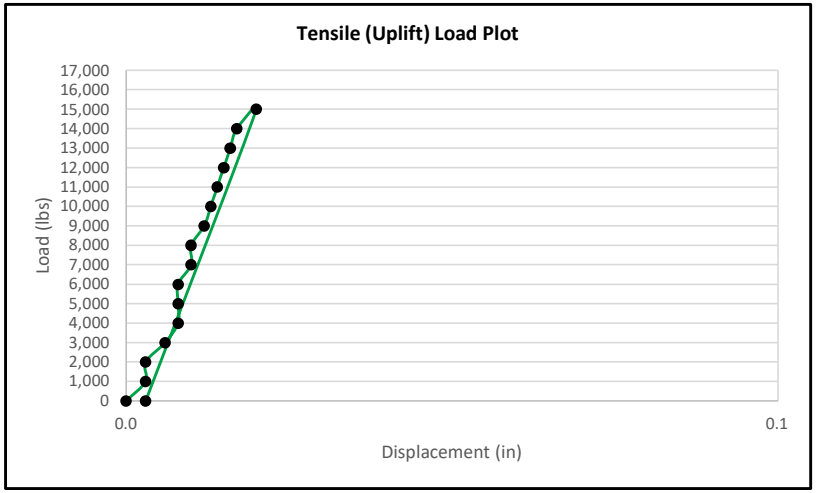
**Field Notes**

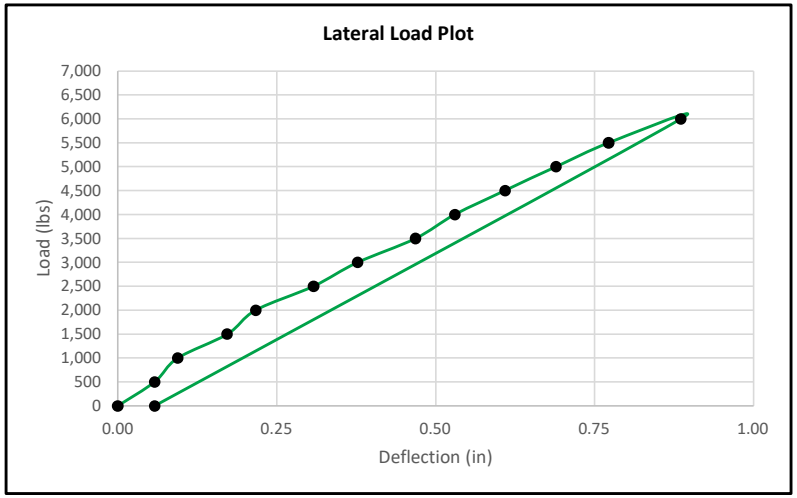
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0560 | 0.0600 | 0.0580 |
| 1 | 1,000 | 1,000 | 0.0920 | 0.0960 | 0.0940 |
| 1 | 1,500 | 1,500 | 0.1680 | 0.1760 | 0.1720 |
| 1 | 2,000 | 2,000 | 0.2120 | 0.2220 | 0.2170 |
| 1 | 2,500 | 2,500 | 0.3320 | 0.2840 | 0.3080 |
| 1 | 3,000 | 3,000 | 0.4080 | 0.3460 | 0.3770 |
| 1 | 3,500 | 3,500 | 0.5100 | 0.4260 | 0.4680 |
| 1 | 4,000 | 4,000 | 0.5520 | 0.5080 | 0.5300 |
| 1 | 4,500 | 4,500 | 0.6440 | 0.5740 | 0.6090 |
| 1 | 5,000 | 5,000 | 0.7060 | 0.6720 | 0.6890 |
| 1 | 5,500 | 5,500 | 0.8140 | 0.7300 | 0.7720 |
| 1 | 6,000 | 6,000 | 0.9230 | 0.8480 | 0.8855 |
| 1 | 0 | 0 | 0.0640 | 0.0520 | 0.0580 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-045A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 7.8 |
| Location: | 45.37610, -120.67514 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.21 |
| 4 | 1.35 |
| 5 | 1.35 |
| 6 | 1.32 |
| 7 | 1.27 |
| 8 | 2.25 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 7.75 |

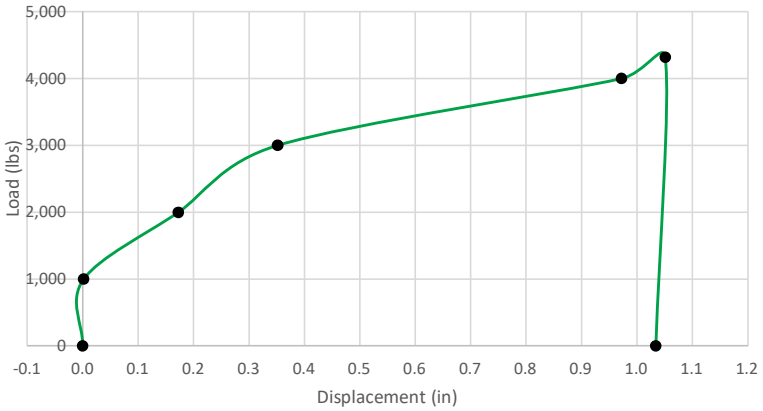
**Field Notes**

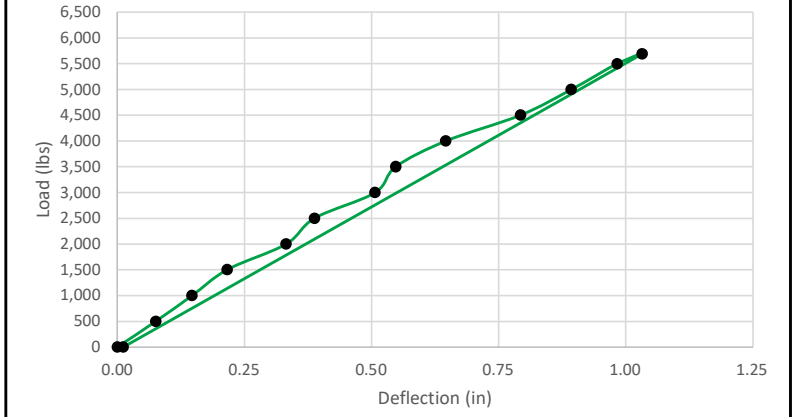
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.1740 | 0.1720 | 0.1730 |
| 1 | 3,000 | 3,000 | 0.3520 | 0.3520 | 0.3520 |
| 1 | 4,000 | 4,000 | 0.9720 | 0.9720 | 0.9720 |
| 1 | 5,000 | 4,320 | 1.0520 | 1.0500 | 1.0510 |
| 1 | 0 | 0 | 1.0340 | 1.0340 | 1.0340 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0780 | 0.0740 | 0.0760 |
| 1 | 1,000 | 1,000 | 0.1500 | 0.1440 | 0.1470 |
| 1 | 1,500 | 1,500 | 0.2180 | 0.2140 | 0.2160 |
| 1 | 2,000 | 2,000 | 0.3360 | 0.3280 | 0.3320 |
| 1 | 2,500 | 2,500 | 0.3920 | 0.3840 | 0.3880 |
| 1 | 3,000 | 3,000 | 0.5120 | 0.5020 | 0.5070 |
| 1 | 3,500 | 3,500 | 0.5540 | 0.5420 | 0.5480 |
| 1 | 4,000 | 4,000 | 0.6520 | 0.6400 | 0.6460 |
| 1 | 4,500 | 4,500 | 0.8000 | 0.7860 | 0.7930 |
| 1 | 5,000 | 5,000 | 0.9000 | 0.8860 | 0.8930 |
| 1 | 5,500 | 5,500 | 0.9880 | 0.9780 | 0.9830 |
| 1 | 6,000 | 5,690 | 1.0340 | 1.0300 | 1.0320 |
| 1 | 0 | 0 | 0.0200 | 0.0040 | 0.0120 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-045A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 7.8 |
| Location: | 45.37610, -120.67514 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.4 |

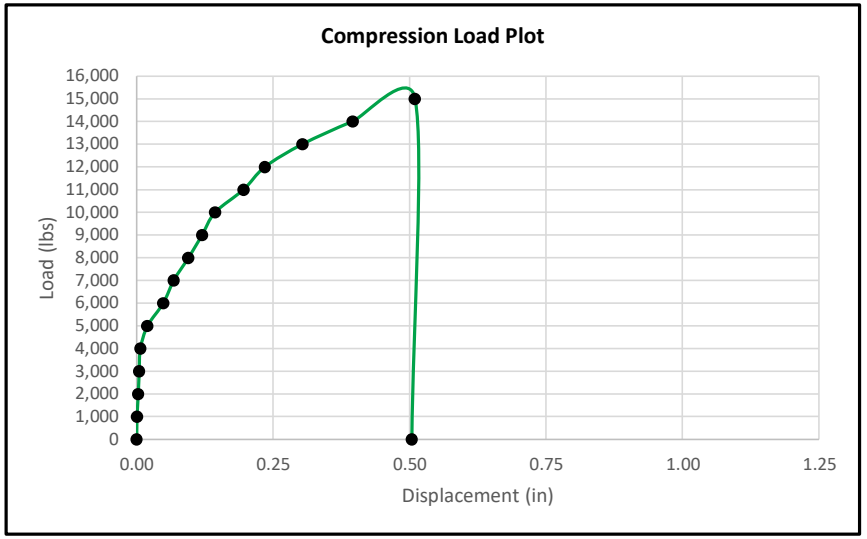
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.21 |
| 4 | 1.35 |
| 5 | 1.35 |
| 6 | 1.32 |
| 7 | 1.27 |
| 8 | 2.25 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 7.75 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0020 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0040 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0260 | 0.0140 | 0.0200 |
| 1 | 6,000 | 6,000 | 0.0560 | 0.0420 | 0.0490 |
| 1 | 7,000 | 7,000 | 0.0760 | 0.0600 | 0.0680 |
| 1 | 8,000 | 8,000 | 0.0980 | 0.0920 | 0.0950 |
| 1 | 9,000 | 9,000 | 0.1220 | 0.1180 | 0.1200 |
| 1 | 10,000 | 10,000 | 0.1460 | 0.1420 | 0.1440 |
| 1 | 11,000 | 11,000 | 0.1980 | 0.1940 | 0.1960 |
| 1 | 12,000 | 12,000 | 0.2340 | 0.2360 | 0.2350 |
| 1 | 13,000 | 13,000 | 0.3020 | 0.3060 | 0.3040 |
| 1 | 14,000 | 14,000 | 0.3940 | 0.3980 | 0.3960 |
| 1 | 15,000 | 15,000 | 0.5060 | 0.5140 | 0.5100 |
| 1 | 0 | 0 | 0.5040 | 0.5040 | 0.5040 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-045B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 27.3 |
| Location: | 45.37610, -120.67514 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.87 |
| 5 | 1.33 |
| 6 | 1.4 |
| 7 | 1.64 |
| 8 | 2.93 |
| 9 | 3.27 |
| 10 | 2.78 |
| 11 | 5.27 |
| 12 | 7.81 |
| Total Time (s) = | 27.3 |

**Field Notes**

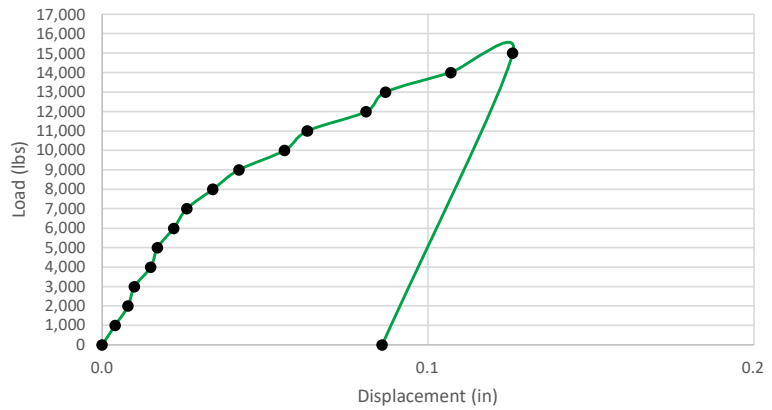
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 4,000 | 4,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 5,000 | 5,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 6,000 | 6,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 7,000 | 7,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 8,000 | 8,000 | 0.0360 | 0.0320 | 0.0340 |
| 1 | 9,000 | 9,000 | 0.0440 | 0.0400 | 0.0420 |
| 1 | 10,000 | 10,000 | 0.0580 | 0.0540 | 0.0560 |
| 1 | 11,000 | 11,000 | 0.0640 | 0.0620 | 0.0630 |
| 1 | 12,000 | 12,000 | 0.0820 | 0.0800 | 0.0810 |
| 1 | 13,000 | 13,000 | 0.0880 | 0.0860 | 0.0870 |
| 1 | 14,000 | 14,000 | 0.1080 | 0.1060 | 0.1070 |
| 1 | 15,000 | 15,000 | 0.1260 | 0.1260 | 0.1260 |
| 1 | 0 | 0 | 0.0860 | 0.0860 | 0.0860 |

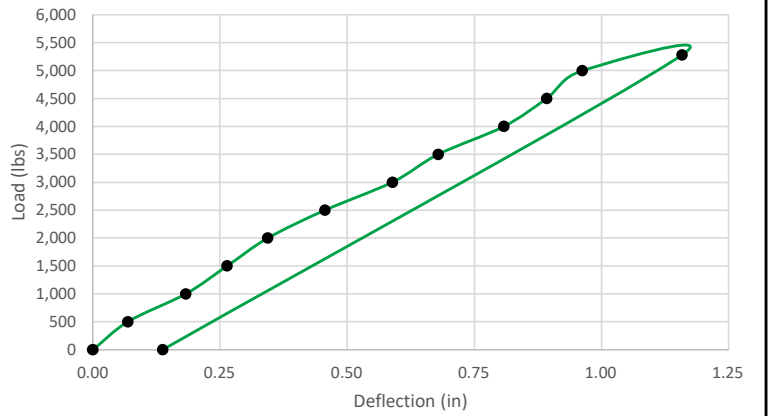
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0620 | 0.0760 | 0.0690 |
| 1 | 1,000 | 1,000 | 0.1720 | 0.1940 | 0.1830 |
| 1 | 1,500 | 1,500 | 0.2560 | 0.2720 | 0.2640 |
| 1 | 2,000 | 2,000 | 0.3300 | 0.3580 | 0.3440 |
| 1 | 2,500 | 2,500 | 0.4420 | 0.4700 | 0.4560 |
| 1 | 3,000 | 3,000 | 0.5760 | 0.6020 | 0.5890 |
| 1 | 3,500 | 3,500 | 0.6660 | 0.6920 | 0.6790 |
| 1 | 4,000 | 4,000 | 0.7940 | 0.8220 | 0.8080 |
| 1 | 4,500 | 4,500 | 0.8780 | 0.9060 | 0.8920 |
| 1 | 5,000 | 5,000 | 0.9480 | 0.9760 | 0.9620 |
| 1 | 5,500 | 5,280 | 1.1440 | 1.1720 | 1.1580 |
| 1 | 0 | 0 | 0.1300 | 0.1440 | 0.1370 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-045B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 27.3 |
| Location: | 45.37610, -120.67514 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.0 |

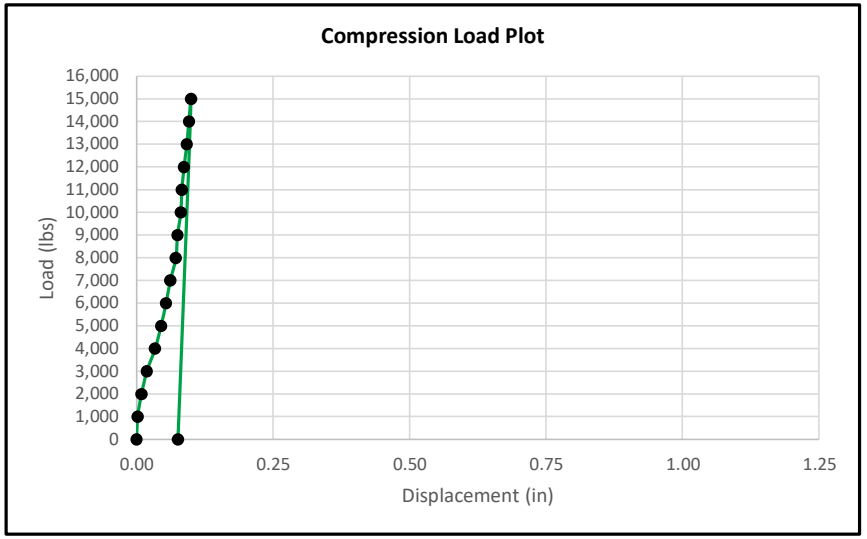
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.87 |
| 5 | 1.33 |
| 6 | 1.4 |
| 7 | 1.64 |
| 8 | 2.93 |
| 9 | 3.27 |
| 10 | 2.78 |
| 11 | 5.27 |
| 12 | 7.81 |
| Total Time (s) = | 27.3 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0120 | 0.0060 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 4,000 | 4,000 | 0.0380 | 0.0300 | 0.0340 |
| 1 | 5,000 | 5,000 | 0.0500 | 0.0400 | 0.0450 |
| 1 | 6,000 | 6,000 | 0.0600 | 0.0480 | 0.0540 |
| 1 | 7,000 | 7,000 | 0.0680 | 0.0560 | 0.0620 |
| 1 | 8,000 | 8,000 | 0.0780 | 0.0660 | 0.0720 |
| 1 | 9,000 | 9,000 | 0.0820 | 0.0680 | 0.0750 |
| 1 | 10,000 | 10,000 | 0.0880 | 0.0740 | 0.0810 |
| 1 | 11,000 | 11,000 | 0.0900 | 0.0760 | 0.0830 |
| 1 | 12,000 | 12,000 | 0.0940 | 0.0800 | 0.0870 |
| 1 | 13,000 | 13,000 | 0.1000 | 0.0840 | 0.0920 |
| 1 | 14,000 | 14,000 | 0.1040 | 0.0880 | 0.0960 |
| 1 | 15,000 | 15,000 | 0.1080 | 0.0920 | 0.1000 |
| 1 | 0 | 0 | 0.0760 | 0.0760 | 0.0760 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-PV-047 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 98.2 |
| Location: | 45.37609, -120.66261 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 14.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 2.2 |
| 4 | 5.11 |
| 5 | 11.71 |
| 6 | 11.3 |
| 7 | 13.13 |
| 8 | 20.31 |
| 9 | 34.42 |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 98.18 |

**Field Notes**

Rock encountered at 3 feet BGS during pre-drilling.
Pile refusal encountered at 9 feet BGS during install.

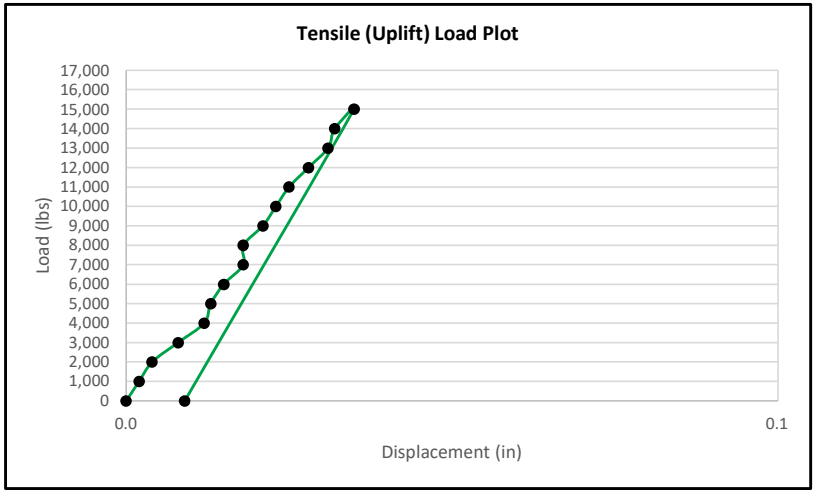
**Tensile (Uplift) Testing**

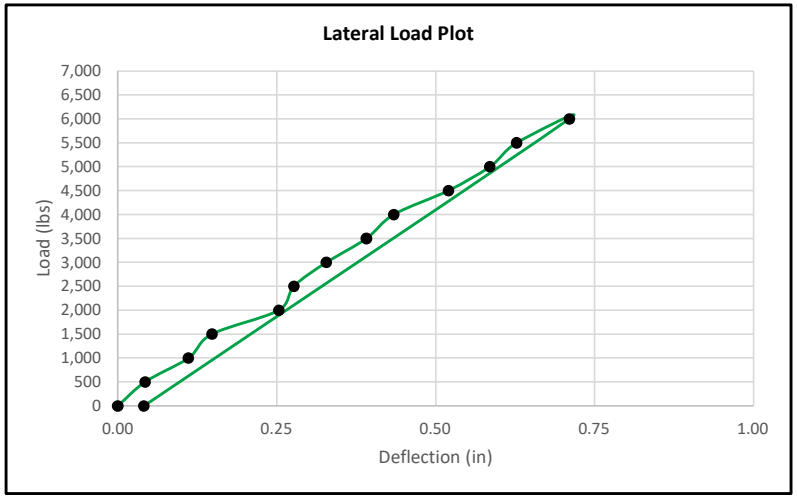
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 12,000 | 12,000 | 0.0220 | 0.0340 | 0.0280 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0380 | 0.0310 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0380 | 0.0320 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 0 | 0 | 0.0080 | 0.0100 | 0.0090 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0440 | 0.0420 | 0.0430 |
| 1 | 1,000 | 1,000 | 0.1140 | 0.1080 | 0.1110 |
| 1 | 1,500 | 1,500 | 0.1520 | 0.1440 | 0.1480 |
| 1 | 2,000 | 2,000 | 0.2580 | 0.2480 | 0.2530 |
| 1 | 2,500 | 2,500 | 0.2800 | 0.2740 | 0.2770 |
| 1 | 3,000 | 3,000 | 0.3340 | 0.3220 | 0.3280 |
| 1 | 3,500 | 3,500 | 0.3980 | 0.3840 | 0.3910 |
| 1 | 4,000 | 4,000 | 0.4420 | 0.4260 | 0.4340 |
| 1 | 4,500 | 4,500 | 0.5300 | 0.5100 | 0.5200 |
| 1 | 5,000 | 5,000 | 0.5960 | 0.5740 | 0.5850 |
| 1 | 5,500 | 5,500 | 0.6380 | 0.6160 | 0.6270 |
| 1 | 6,000 | 6,000 | 0.7180 | 0.7020 | 0.7100 |
| 1 | 0 | 0 | 0.0420 | 0.0400 | 0.0410 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-048 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 33.1 |
| Location: | 45.37078, -120.67498 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 5.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.22 |
| 2 | 1.82 |
| 3 | 1.32 |
| 4 | 1.12 |
| 5 | 2.8 |
| 6 | 10.23 |
| 7 | 15.57 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 33.08 |

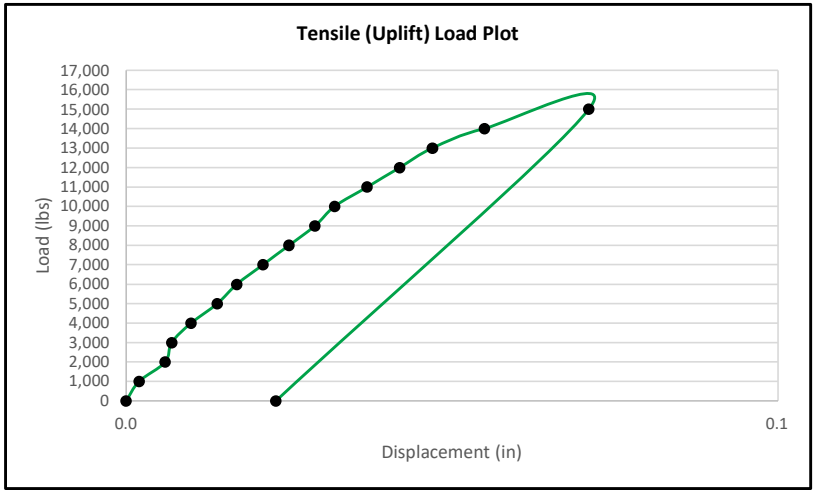
**Field Notes**

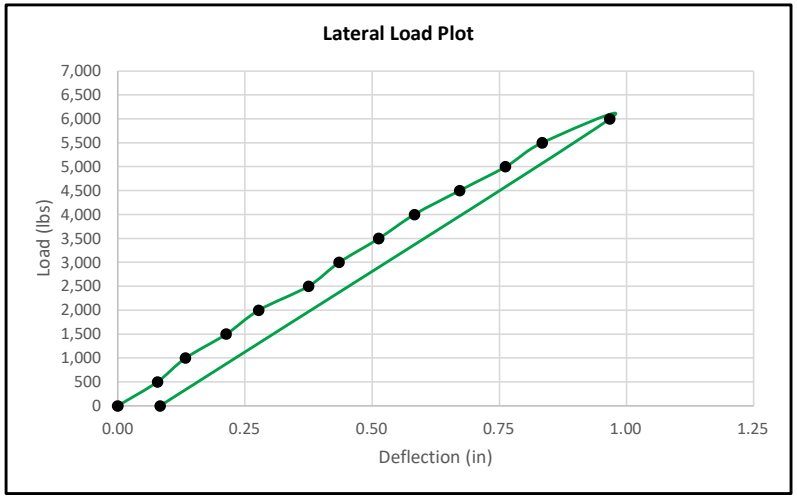
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 8,000 | 8,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 9,000 | 9,000 | 0.0240 | 0.0340 | 0.0290 |
| 1 | 10,000 | 10,000 | 0.0260 | 0.0380 | 0.0320 |
| 1 | 11,000 | 11,000 | 0.0300 | 0.0440 | 0.0370 |
| 1 | 12,000 | 12,000 | 0.0340 | 0.0500 | 0.0420 |
| 1 | 13,000 | 13,000 | 0.0380 | 0.0560 | 0.0470 |
| 1 | 14,000 | 14,000 | 0.0460 | 0.0640 | 0.0550 |
| 1 | 15,000 | 15,000 | 0.0600 | 0.0820 | 0.0710 |
| 1 | 0 | 0 | 0.0220 | 0.0240 | 0.0230 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0740 | 0.0820 | 0.0780 |
| 1 | 1,000 | 1,000 | 0.1260 | 0.1400 | 0.1330 |
| 1 | 1,500 | 1,500 | 0.2080 | 0.2180 | 0.2130 |
| 1 | 2,000 | 2,000 | 0.2720 | 0.2820 | 0.2770 |
| 1 | 2,500 | 2,500 | 0.3700 | 0.3800 | 0.3750 |
| 1 | 3,000 | 3,000 | 0.4300 | 0.4400 | 0.4350 |
| 1 | 3,500 | 3,500 | 0.5080 | 0.5180 | 0.5130 |
| 1 | 4,000 | 4,000 | 0.5800 | 0.5860 | 0.5830 |
| 1 | 4,500 | 4,500 | 0.6680 | 0.6760 | 0.6720 |
| 1 | 5,000 | 5,000 | 0.7580 | 0.7660 | 0.7620 |
| 1 | 5,500 | 5,500 | 0.8320 | 0.8360 | 0.8340 |
| 1 | 6,000 | 6,000 | 0.9660 | 0.9680 | 0.9670 |
| 1 | 0 | 0 | 0.0860 | 0.0800 | 0.0830 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-051 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 67.4 |
| Location: | 45.36900, -120.65892 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 11.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.86 |
| 4 | 9.1 |
| 5 | 9.19 |
| 6 | 12.17 |
| 7 | 12.65 |
| 8 | 22.42 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 67.39 |

**Field Notes**

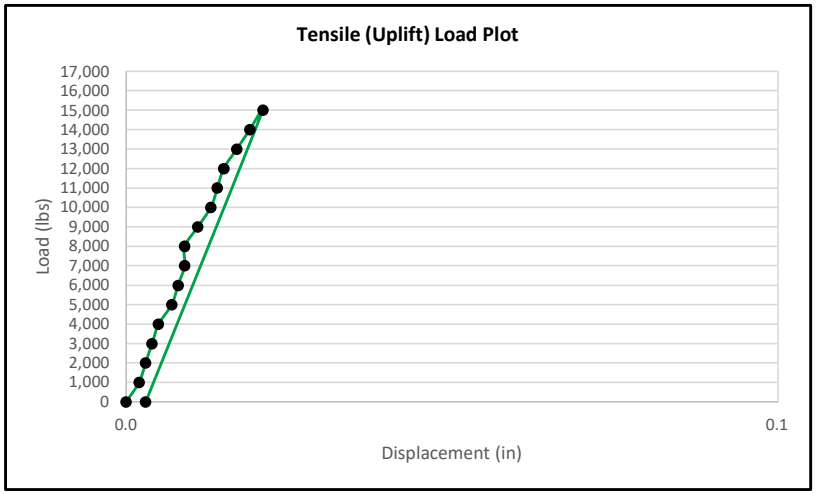
Rock encountered at 2 feet BGS during pre-drilling

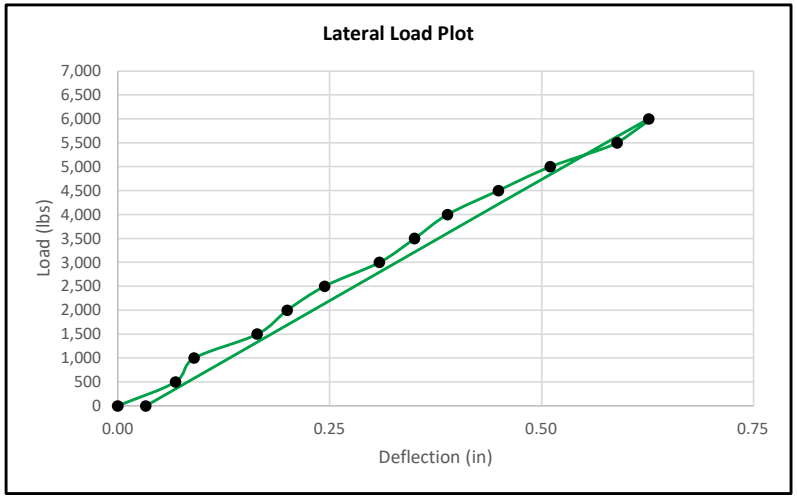
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 15,000 | 15,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0720 | 0.0640 | 0.0680 |
| 1 | 1,000 | 1,000 | 0.0960 | 0.0840 | 0.0900 |
| 1 | 1,500 | 1,500 | 0.1720 | 0.1570 | 0.1645 |
| 1 | 2,000 | 2,000 | 0.2120 | 0.1880 | 0.2000 |
| 1 | 2,500 | 2,500 | 0.2580 | 0.2300 | 0.2440 |
| 1 | 3,000 | 3,000 | 0.3200 | 0.2970 | 0.3085 |
| 1 | 3,500 | 3,500 | 0.3660 | 0.3340 | 0.3500 |
| 1 | 4,000 | 4,000 | 0.4060 | 0.3720 | 0.3890 |
| 1 | 4,500 | 4,500 | 0.4660 | 0.4320 | 0.4490 |
| 1 | 5,000 | 5,000 | 0.5280 | 0.4920 | 0.5100 |
| 1 | 5,500 | 5,500 | 0.6060 | 0.5720 | 0.5890 |
| 1 | 6,000 | 6,000 | 0.6440 | 0.6080 | 0.6260 |
| 1 | 0 | 0 | 0.0320 | 0.0340 | 0.0330 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-052 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 123.19 |
| Location: | 45.36418, -120.67201 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 15.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 2.83 |
| 4 | 7.95 |
| 5 | 12.64 |
| 6 | 15.71 |
| 7 | 15.44 |
| 8 | 22.26 |
| 9 | 20.98 |
| 10 | 25.38 |
| 11 | |
| 12 | |
| Total Time (s) = | 123.19 |

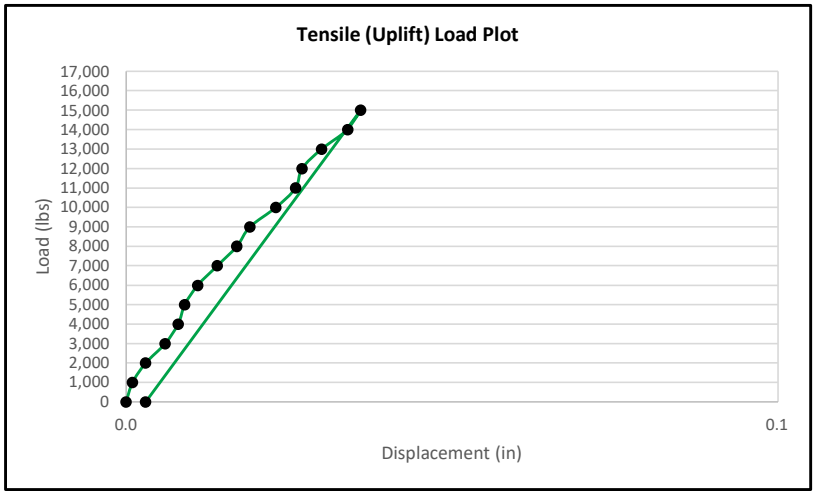
**Field Notes**

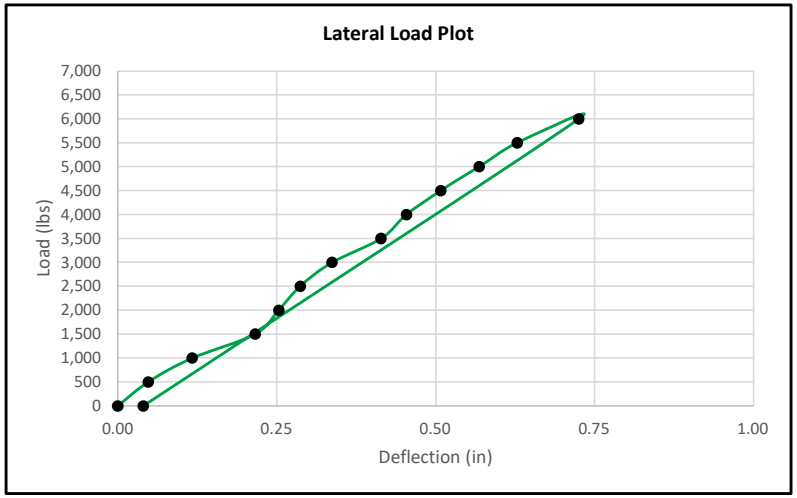
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0240 | 0.0190 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0300 | 0.0260 |
| 1 | 12,000 | 12,000 | 0.0220 | 0.0320 | 0.0270 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0360 | 0.0300 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0400 | 0.0340 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0420 | 0.0360 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0460 | 0.0500 | 0.0480 |
| 1 | 1,000 | 1,000 | 0.1140 | 0.1200 | 0.1170 |
| 1 | 1,500 | 1,500 | 0.2120 | 0.2200 | 0.2160 |
| 1 | 2,000 | 2,000 | 0.2480 | 0.2580 | 0.2530 |
| 1 | 2,500 | 2,500 | 0.2820 | 0.2920 | 0.2870 |
| 1 | 3,000 | 3,000 | 0.3300 | 0.3440 | 0.3370 |
| 1 | 3,500 | 3,500 | 0.4100 | 0.4180 | 0.4140 |
| 1 | 4,000 | 4,000 | 0.4500 | 0.4580 | 0.4540 |
| 1 | 4,500 | 4,500 | 0.5040 | 0.5120 | 0.5080 |
| 1 | 5,000 | 5,000 | 0.5640 | 0.5720 | 0.5680 |
| 1 | 5,500 | 5,500 | 0.6240 | 0.6320 | 0.6280 |
| 1 | 6,000 | 6,000 | 0.7220 | 0.7280 | 0.7250 |
| 1 | 0 | 0 | 0.0360 | 0.0440 | 0.0400 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-056 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 12.9 |
| Location: | 45.34958, -120.66401 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 1.62 |
| 7 | 2.3 |
| 8 | 8.93 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 12.85 |

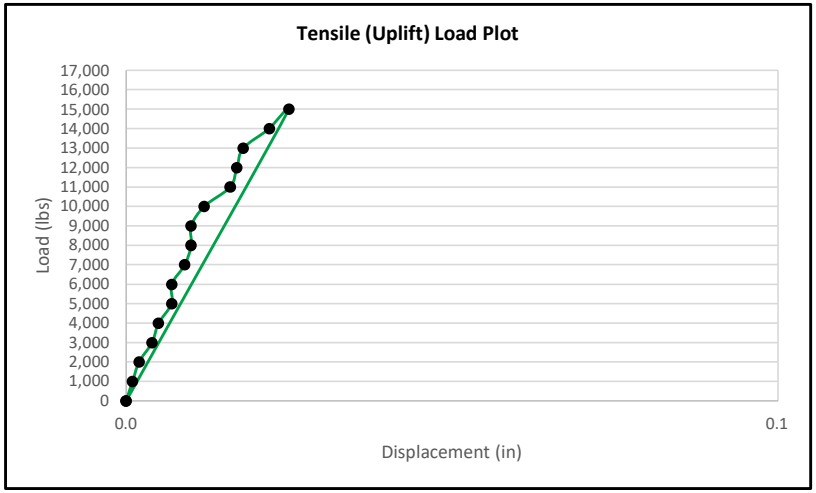
**Field Notes**

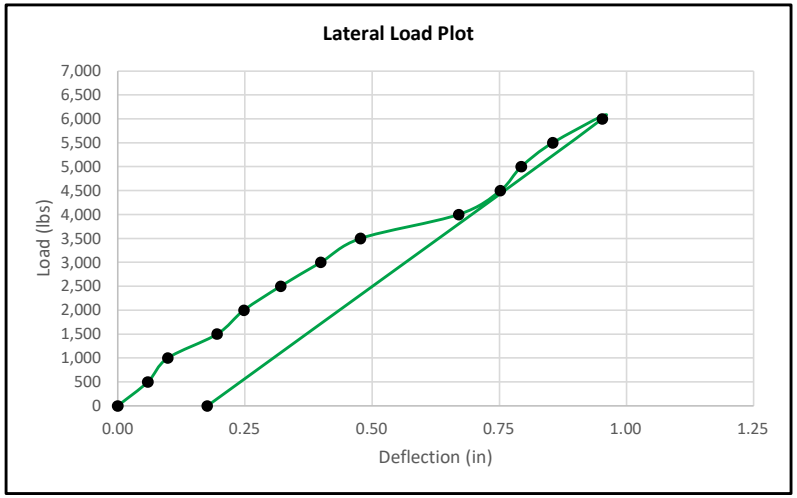
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0220 | 0.0250 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0560 | 0.0620 | 0.0590 |
| 1 | 1,000 | 1,000 | 0.0940 | 0.1020 | 0.0980 |
| 1 | 1,500 | 1,500 | 0.1900 | 0.2000 | 0.1950 |
| 1 | 2,000 | 2,000 | 0.2440 | 0.2520 | 0.2480 |
| 1 | 2,500 | 2,500 | 0.3160 | 0.3240 | 0.3200 |
| 1 | 3,000 | 3,000 | 0.3980 | 0.4000 | 0.3990 |
| 1 | 3,500 | 3,500 | 0.4760 | 0.4780 | 0.4770 |
| 1 | 4,000 | 4,000 | 0.6620 | 0.6780 | 0.6700 |
| 1 | 4,500 | 4,500 | 0.7480 | 0.7560 | 0.7520 |
| 1 | 5,000 | 5,000 | 0.7880 | 0.7980 | 0.7930 |
| 1 | 5,500 | 5,500 | 0.8480 | 0.8620 | 0.8550 |
| 1 | 6,000 | 6,000 | 0.9420 | 0.9620 | 0.9520 |
| 1 | 0 | 0 | 0.1680 | 0.1840 | 0.1760 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-058 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 62.47 |
| Location: | 45.34223, -120.66010 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 10.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.66 |
| 6 | 2.09 |
| 7 | 4.1 |
| 8 | 10.29 |
| 9 | 18.61 |
| 10 | 25.72 |
| 11 | |
| 12 | |
| Total Time (s) = | 62.47 |

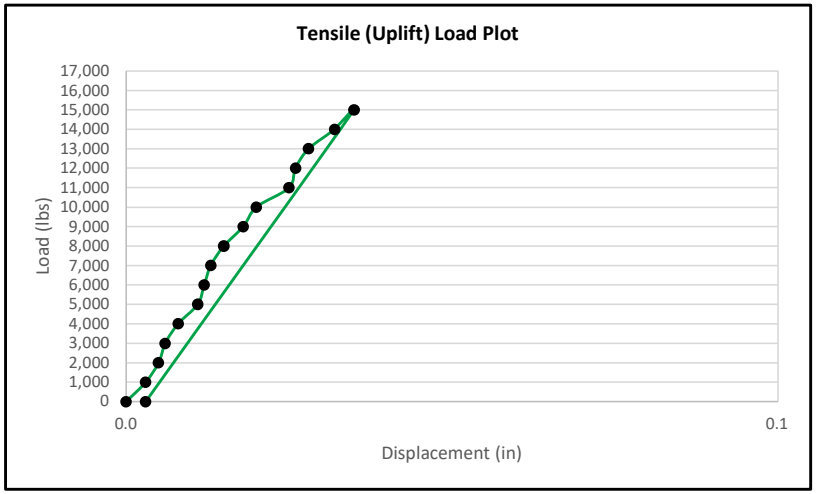
**Field Notes**

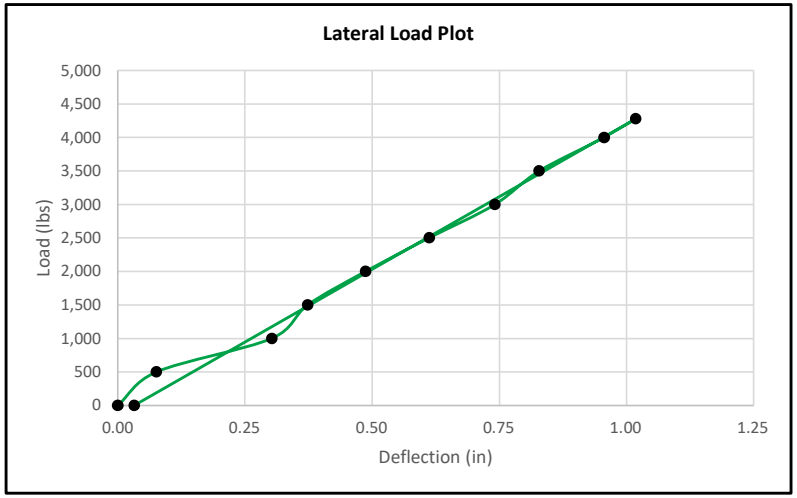
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0320 | 0.0260 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0340 | 0.0280 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0380 | 0.0320 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 0 | 0 | 0.0000 | 0.0060 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0700 | 0.0820 | 0.0760 |
| 1 | 1,000 | 1,000 | 0.2960 | 0.3100 | 0.3030 |
| 1 | 1,500 | 1,500 | 0.3700 | 0.3760 | 0.3730 |
| 1 | 2,000 | 2,000 | 0.4840 | 0.4900 | 0.4870 |
| 1 | 2,500 | 2,500 | 0.6120 | 0.6120 | 0.6120 |
| 1 | 3,000 | 3,000 | 0.7440 | 0.7380 | 0.7410 |
| 1 | 3,500 | 3,500 | 0.8360 | 0.8200 | 0.8280 |
| 1 | 4,000 | 4,000 | 0.9660 | 0.9460 | 0.9560 |
| 1 | 4,500 | 4,280 | 1.0300 | 1.0060 | 1.0180 |
| 1 | 0 | 0 | 0.0220 | 0.0420 | 0.0320 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-058A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/14/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 62.5 |
| Location: | 45.34223, -120.66010 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 10.4 |

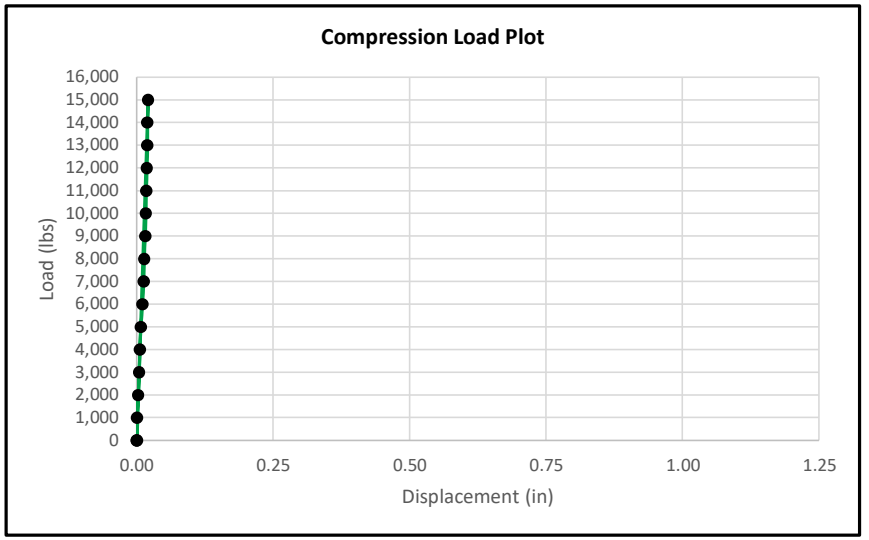
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.66 |
| 6 | 2.09 |
| 7 | 4.1 |
| 8 | 10.29 |
| 9 | 18.61 |
| 10 | 25.72 |
| 11 | |
| 12 | |
| Total Time (s) = | 62.47 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0240 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-060A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 6.4 |
| Location: | 45.36786, -120.68304 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 3.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 1.36 |
| 7 | 5.04 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 6.4 |

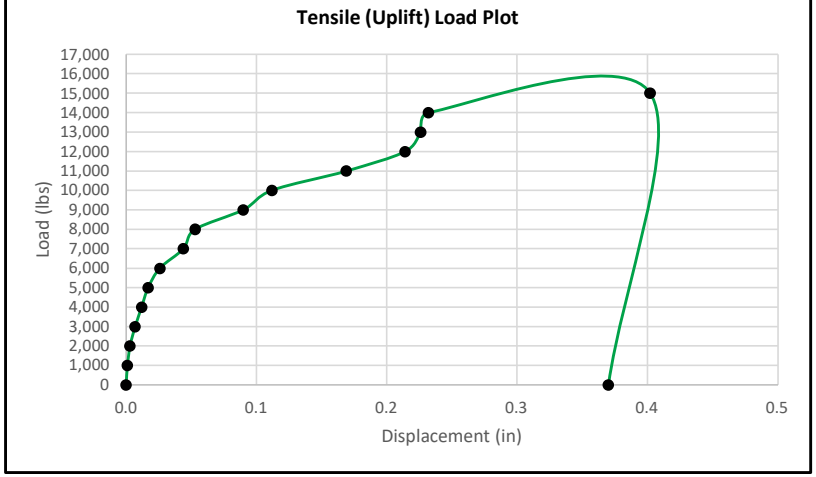
**Field Notes**

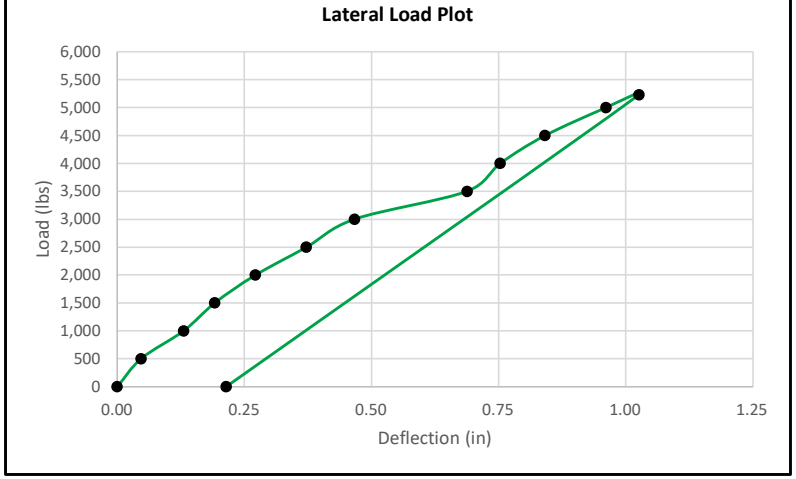
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 6,000 | 6,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 7,000 | 7,000 | 0.0480 | 0.0400 | 0.0440 |
| 1 | 8,000 | 8,000 | 0.0580 | 0.0480 | 0.0530 |
| 1 | 9,000 | 9,000 | 0.0980 | 0.0820 | 0.0900 |
| 1 | 10,000 | 10,000 | 0.1180 | 0.1060 | 0.1120 |
| 1 | 11,000 | 11,000 | 0.1760 | 0.1620 | 0.1690 |
| 1 | 12,000 | 12,000 | 0.2220 | 0.2060 | 0.2140 |
| 1 | 13,000 | 13,000 | 0.2340 | 0.2180 | 0.2260 |
| 1 | 14,000 | 14,000 | 0.2440 | 0.2200 | 0.2320 |
| 1 | 15,000 | 15,000 | 0.4120 | 0.3920 | 0.4020 |
| 1 | 0 | 0 | 0.3720 | 0.3680 | 0.3700 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0460 | 0.0480 | 0.0470 |
| 1 | 1,000 | 1,000 | 0.1260 | 0.1360 | 0.1310 |
| 1 | 1,500 | 1,500 | 0.1860 | 0.1980 | 0.1920 |
| 1 | 2,000 | 2,000 | 0.2640 | 0.2800 | 0.2720 |
| 1 | 2,500 | 2,500 | 0.3640 | 0.3800 | 0.3720 |
| 1 | 3,000 | 3,000 | 0.4600 | 0.4740 | 0.4670 |
| 1 | 3,500 | 3,500 | 0.6800 | 0.6960 | 0.6880 |
| 1 | 4,000 | 4,000 | 0.7440 | 0.7620 | 0.7530 |
| 1 | 4,500 | 4,500 | 0.8320 | 0.8500 | 0.8410 |
| 1 | 5,000 | 5,000 | 0.9520 | 0.9700 | 0.9610 |
| 1 | 5,500 | 5,230 | 1.0160 | 1.0360 | 1.0260 |
| 1 | 0 | 0 | 0.2080 | 0.2200 | 0.2140 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-060B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 35.9 |
| Location: | 45.36786, -120.68304 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 9.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.37 |
| 5 | 3.47 |
| 6 | 5.78 |
| 7 | 24.25 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 35.87 |

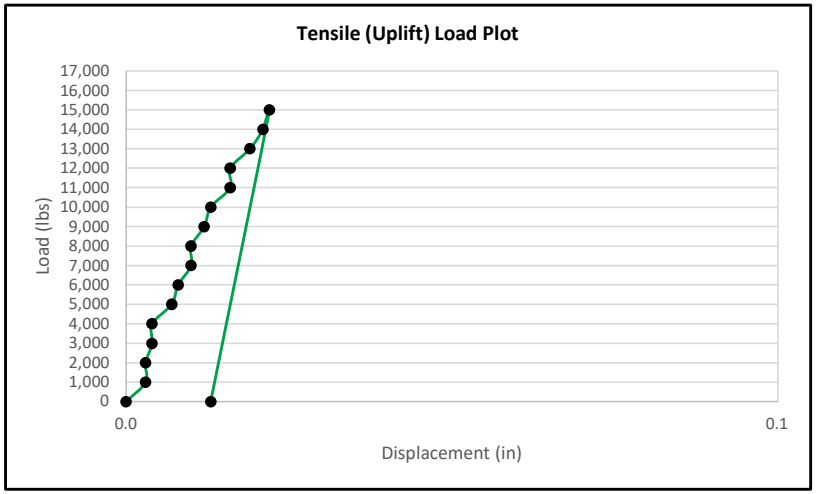
**Field Notes**

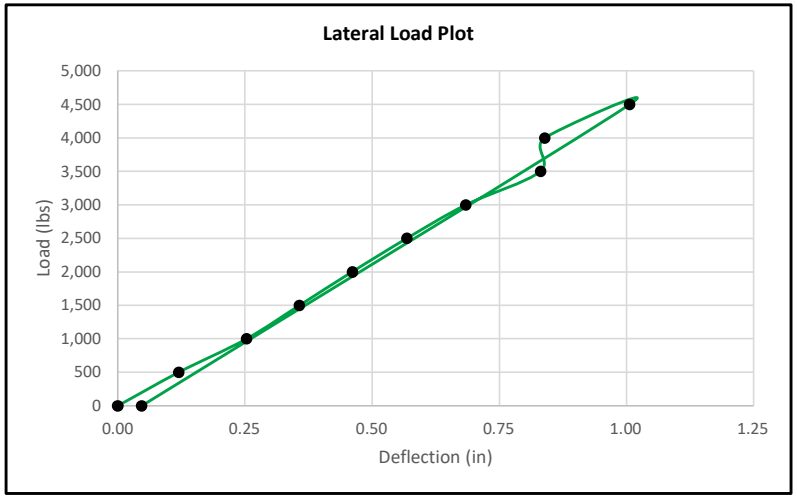
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 0 | 0 | 0.0040 | 0.0220 | 0.0130 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1200 | 0.1200 | 0.1200 |
| 1 | 1,000 | 1,000 | 0.2540 | 0.2520 | 0.2530 |
| 1 | 1,500 | 1,500 | 0.3600 | 0.3540 | 0.3570 |
| 1 | 2,000 | 2,000 | 0.4660 | 0.4560 | 0.4610 |
| 1 | 2,500 | 2,500 | 0.5740 | 0.5620 | 0.5680 |
| 1 | 3,000 | 3,000 | 0.6900 | 0.6780 | 0.6840 |
| 1 | 3,500 | 3,500 | 0.8380 | 0.8240 | 0.8310 |
| 1 | 4,000 | 4,000 | 0.8480 | 0.8300 | 0.8390 |
| 1 | 4,500 | 4,500 | 1.0100 | 1.0020 | 1.0060 |
| 1 | 0 | 0 | 0.0480 | 0.0460 | 0.0470 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7 | Pile ID: | PT-PV-060B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 35.9 |
| Location: | 45.36786, -120.68304 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 9.0 |

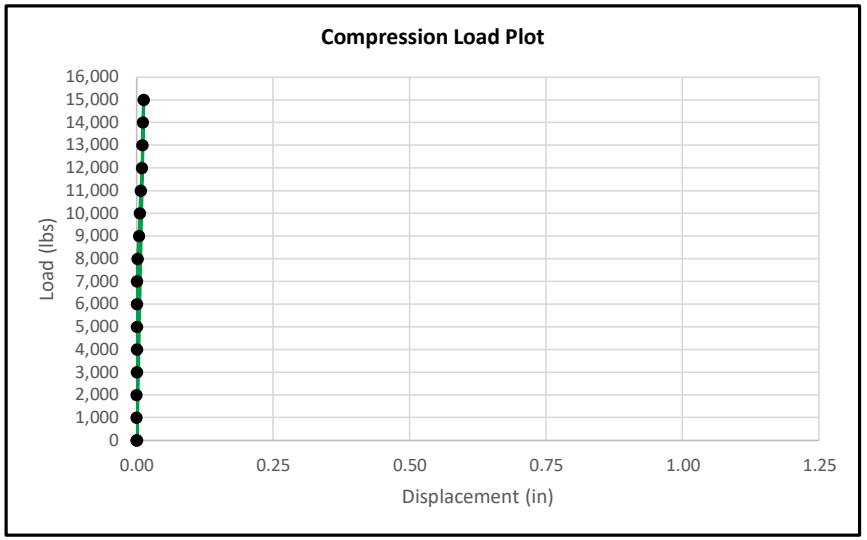
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.37 |
| 5 | 3.47 |
| 6 | 5.78 |
| 7 | 24.25 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 35.87 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 4,000 | 4,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 5,000 | 5,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 6,000 | 6,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 7,000 | 7,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 8,000 | 8,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 9,000 | 9,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 10,000 | 10,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 11,000 | 11,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 13,000 | 13,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 14,000 | 14,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 15,000 | 15,000 | 0.0080 | 0.0180 | 0.0130 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-062 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 22.5 |
| Location: | 45.36046, -120.68573 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 5.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.48 |
| 5 | 1.72 |
| 6 | 1.81 |
| 7 | 6.86 |
| 8 | 11.65 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 22.52 |

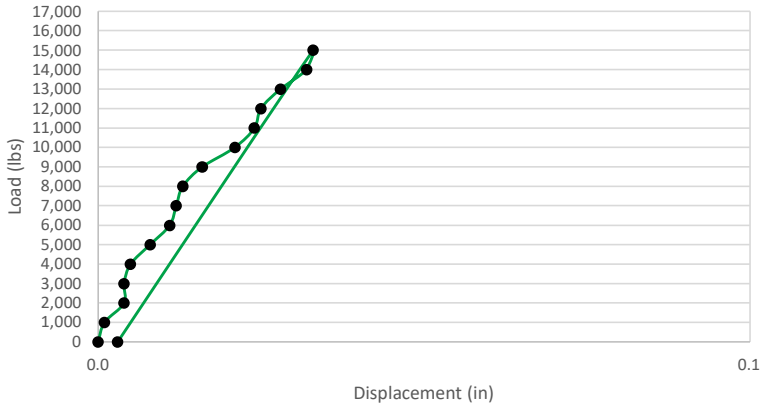
**Field Notes**

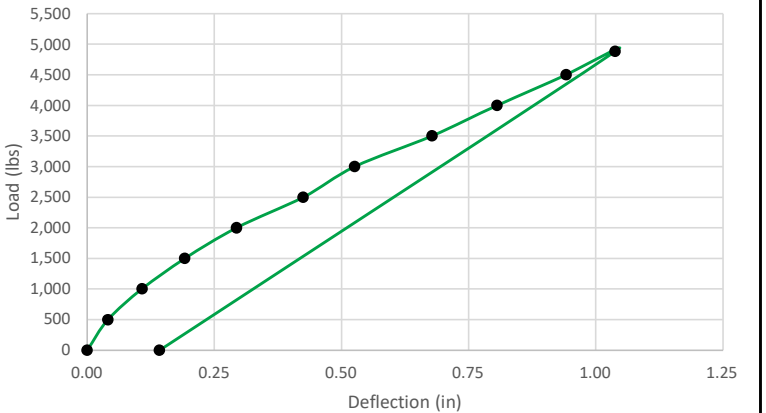
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0080 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0220 | 0.0100 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0280 | 0.0140 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0320 | 0.0160 | 0.0240 |
| 1 | 12,000 | 12,000 | 0.0320 | 0.0180 | 0.0250 |
| 1 | 13,000 | 13,000 | 0.0360 | 0.0200 | 0.0280 |
| 1 | 14,000 | 14,000 | 0.0400 | 0.0240 | 0.0320 |
| 1 | 15,000 | 15,000 | 0.0400 | 0.0260 | 0.0330 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0420 | 0.0400 | 0.0410 |
| 1 | 1,000 | 1,000 | 0.1080 | 0.1080 | 0.1080 |
| 1 | 1,500 | 1,500 | 0.1920 | 0.1920 | 0.1920 |
| 1 | 2,000 | 2,000 | 0.2940 | 0.2940 | 0.2940 |
| 1 | 2,500 | 2,500 | 0.4200 | 0.4290 | 0.4245 |
| 1 | 3,000 | 3,000 | 0.5240 | 0.5280 | 0.5260 |
| 1 | 3,500 | 3,500 | 0.6740 | 0.6820 | 0.6780 |
| 1 | 4,000 | 4,000 | 0.8020 | 0.8100 | 0.8060 |
| 1 | 4,500 | 4,500 | 0.9360 | 0.9480 | 0.9420 |
| 1 | 5,000 | 4,880 | 1.0300 | 1.0460 | 1.0380 |
| 1 | 0 | 0 | 0.1380 | 0.1460 | 0.1420 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-064 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 68.5 |
| Location: | 45.36588, -120.68939 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 13.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 4.66 |
| 7 | 8.29 |
| 8 | 11.93 |
| 9 | 23.07 |
| 10 | 20.55 |
| 11 | |
| 12 | |
| Total Time (s) = | 68.5 |

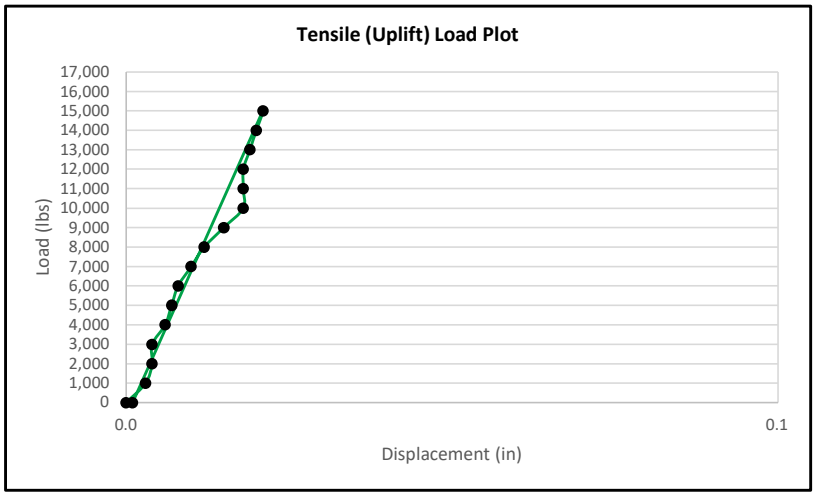
**Field Notes**

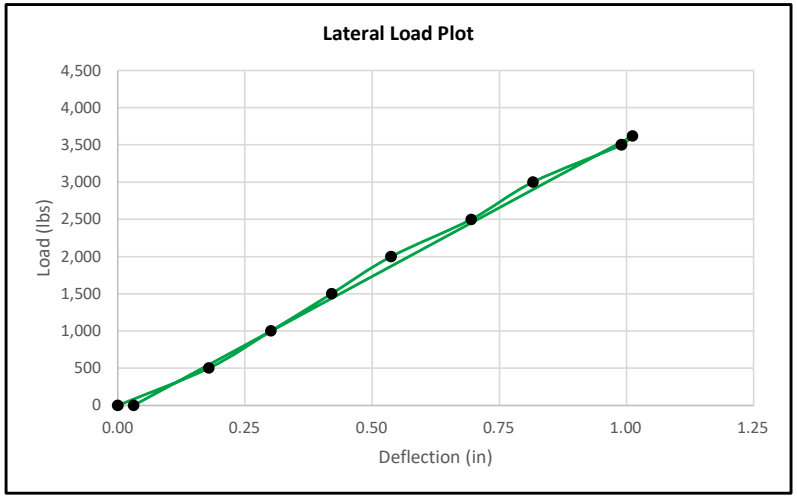
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1800 | 0.1780 | 0.1790 |
| 1 | 1,000 | 1,000 | 0.3020 | 0.3000 | 0.3010 |
| 1 | 1,500 | 1,500 | 0.4240 | 0.4160 | 0.4200 |
| 1 | 2,000 | 2,000 | 0.5420 | 0.5320 | 0.5370 |
| 1 | 2,500 | 2,500 | 0.7020 | 0.6880 | 0.6950 |
| 1 | 3,000 | 3,000 | 0.8240 | 0.8080 | 0.8160 |
| 1 | 3,500 | 3,500 | 0.9980 | 0.9820 | 0.9900 |
| 1 | 4,000 | 3,620 | 1.0200 | 1.0040 | 1.0120 |
| 1 | 0 | 0 | 0.0320 | 0.0300 | 0.0310 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-065 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 29.8 |
| Location: | 45.37036, -120.69464 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 5.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.29 |
| 2 | 1.29 |
| 3 | 1.62 |
| 4 | 1.51 |
| 5 | 2.64 |
| 6 | 22.46 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 29.81 |

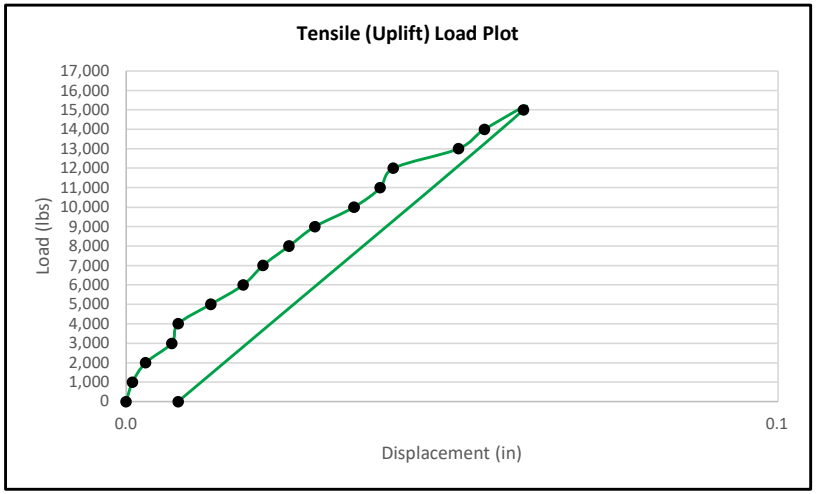
**Field Notes**

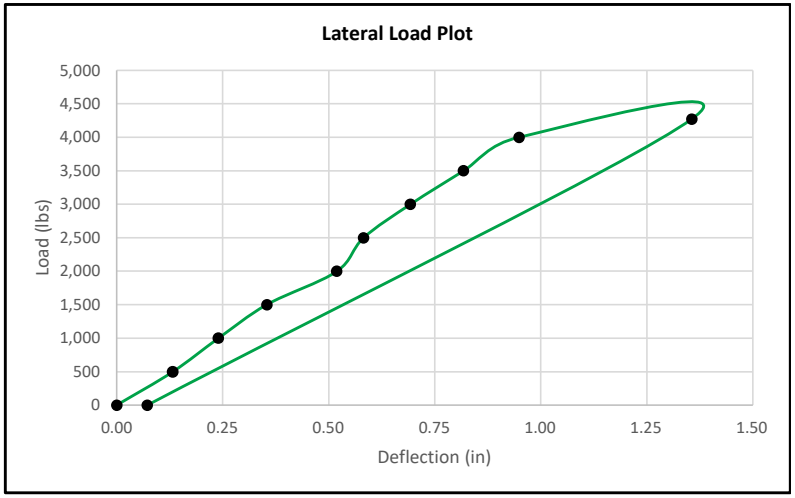
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 7,000 | 7,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0320 | 0.0250 |
| 1 | 9,000 | 9,000 | 0.0220 | 0.0360 | 0.0290 |
| 1 | 10,000 | 10,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 11,000 | 11,000 | 0.0320 | 0.0460 | 0.0390 |
| 1 | 12,000 | 12,000 | 0.0280 | 0.0540 | 0.0410 |
| 1 | 13,000 | 13,000 | 0.0440 | 0.0580 | 0.0510 |
| 1 | 14,000 | 14,000 | 0.0480 | 0.0620 | 0.0550 |
| 1 | 15,000 | 15,000 | 0.0520 | 0.0700 | 0.0610 |
| 1 | 0 | 0 | 0.0080 | 0.0080 | 0.0080 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1300 | 0.1340 | 0.1320 |
| 1 | 1,000 | 1,000 | 0.2400 | 0.2400 | 0.2400 |
| 1 | 1,500 | 1,500 | 0.3560 | 0.3520 | 0.3540 |
| 1 | 2,000 | 2,000 | 0.5200 | 0.5180 | 0.5190 |
| 1 | 2,500 | 2,500 | 0.5840 | 0.5800 | 0.5820 |
| 1 | 3,000 | 3,000 | 0.6940 | 0.6920 | 0.6930 |
| 1 | 3,500 | 3,500 | 0.8200 | 0.8160 | 0.8180 |
| 1 | 4,000 | 4,000 | 0.9520 | 0.9460 | 0.9490 |
| 1 | 4,500 | 4,270 | 1.0600 | 1.6520 | 1.3560 |
| 1 | 0 | 0 | 0.0720 | 0.0720 | 0.0720 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-068 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 52.8 |
| Location: | 45.37177, -120.71033 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 10.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 4.03 |
| 5 | 4.94 |
| 6 | 7.32 |
| 7 | 13.68 |
| 8 | 22.78 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 52.75 |

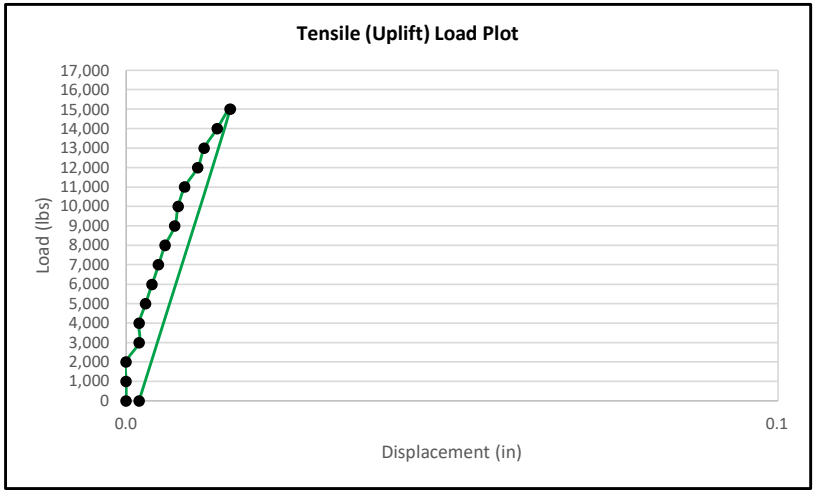
**Field Notes**

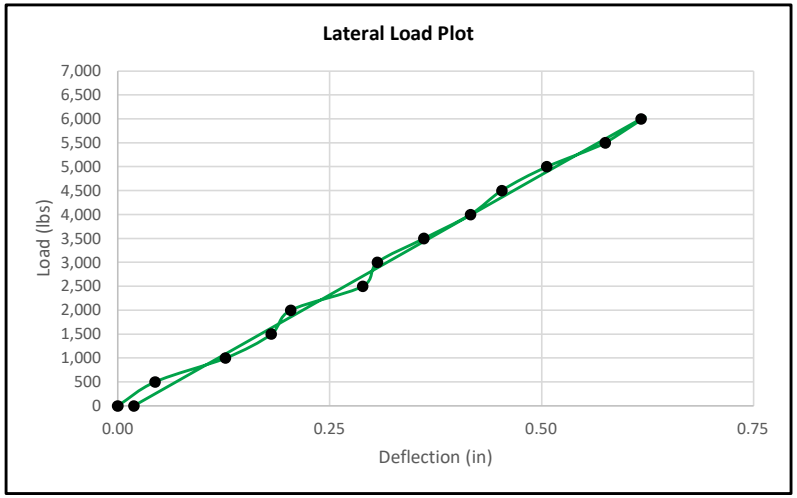
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0090 | 0.0075 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 11,000 | 11,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 13,000 | 13,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0440 | 0.0440 | 0.0440 |
| 1 | 1,000 | 1,000 | 0.1280 | 0.1260 | 0.1270 |
| 1 | 1,500 | 1,500 | 0.1840 | 0.1780 | 0.1810 |
| 1 | 2,000 | 2,000 | 0.2080 | 0.2000 | 0.2040 |
| 1 | 2,500 | 2,500 | 0.2940 | 0.2840 | 0.2890 |
| 1 | 3,000 | 3,000 | 0.3120 | 0.3000 | 0.3060 |
| 1 | 3,500 | 3,500 | 0.3680 | 0.3540 | 0.3610 |
| 1 | 4,000 | 4,000 | 0.4240 | 0.4080 | 0.4160 |
| 1 | 4,500 | 4,500 | 0.4640 | 0.4420 | 0.4530 |
| 1 | 5,000 | 5,000 | 0.5180 | 0.4940 | 0.5060 |
| 1 | 5,500 | 5,500 | 0.5880 | 0.5620 | 0.5750 |
| 1 | 6,000 | 6,000 | 0.6320 | 0.6020 | 0.6170 |
| 1 | 0 | 0 | 0.0040 | 0.0340 | 0.0190 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-068 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 52.8 |
| Location: | 45.37177, -120.71033 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 10.6 |

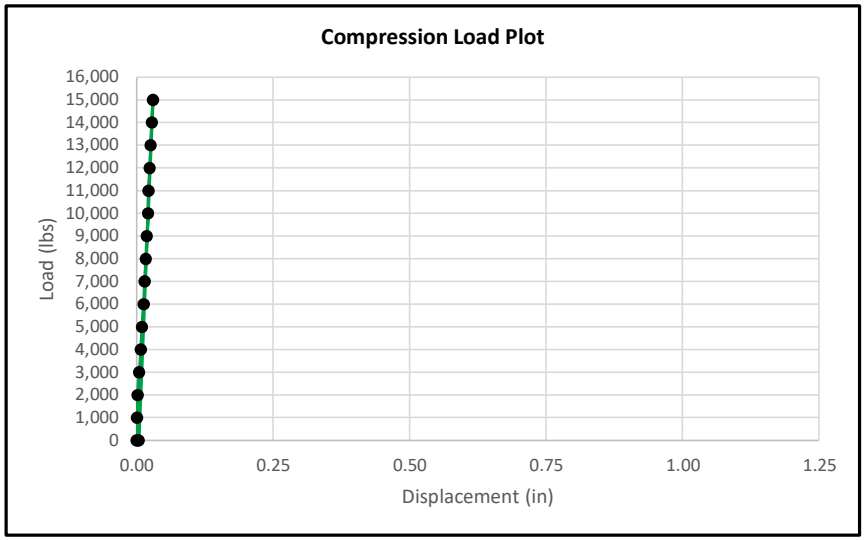
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 4.03 |
| 5 | 4.94 |
| 6 | 7.32 |
| 7 | 13.68 |
| 8 | 22.78 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 52.75 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0000 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0020 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0120 | 0.0040 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0140 | 0.0060 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0080 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0200 | 0.0100 | 0.0150 |
| 1 | 8,000 | 8,000 | 0.0220 | 0.0120 | 0.0170 |
| 1 | 9,000 | 9,000 | 0.0240 | 0.0140 | 0.0190 |
| 1 | 10,000 | 10,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0280 | 0.0160 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0300 | 0.0180 | 0.0240 |
| 1 | 13,000 | 13,000 | 0.0320 | 0.0200 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0340 | 0.0220 | 0.0280 |
| 1 | 15,000 | 15,000 | 0.0360 | 0.0240 | 0.0300 |
| 1 | 0 | 0 | 0.0040 | 0.0040 | 0.0040 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-071 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 145.9 |
| Location: | 45.36097, -120.71694 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 20.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 3.95 |
| 3 | 9 |
| 4 | 19.53 |
| 5 | 21.98 |
| 6 | 25.19 |
| 7 | 37.41 |
| 8 | 28.8 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 145.86 |

**Field Notes**

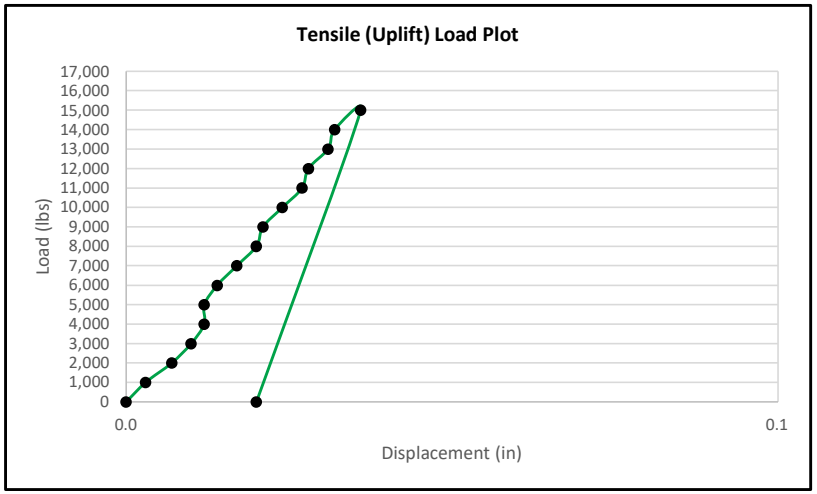
Rock encountered at 1 foot BGS during pre-drilling.

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 7,000 | 7,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 10,000 | 10,000 | 0.0240 | 0.0240 | 0.0240 |
| 1 | 11,000 | 11,000 | 0.0280 | 0.0260 | 0.0270 |
| 1 | 12,000 | 12,000 | 0.0280 | 0.0280 | 0.0280 |
| 1 | 13,000 | 13,000 | 0.0320 | 0.0300 | 0.0310 |
| 1 | 14,000 | 14,000 | 0.0340 | 0.0300 | 0.0320 |
| 1 | 15,000 | 15,000 | 0.0380 | 0.0340 | 0.0360 |
| 1 | 0 | 0 | 0.0200 | 0.0200 | 0.0200 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0320 | 0.0260 | 0.0290 |
| 1 | 1,000 | 1,000 | 0.0660 | 0.0580 | 0.0620 |
| 1 | 1,500 | 1,500 | 0.1020 | 0.0940 | 0.0980 |
| 1 | 2,000 | 2,000 | 0.1280 | 0.1240 | 0.1260 |
| 1 | 2,500 | 2,500 | 0.1460 | 0.1420 | 0.1440 |
| 1 | 3,000 | 3,000 | 0.1960 | 0.1940 | 0.1950 |
| 1 | 3,500 | 3,500 | 0.2020 | 0.2000 | 0.2010 |
| 1 | 4,000 | 4,000 | 0.2100 | 0.2100 | 0.2100 |
| 1 | 4,500 | 4,500 | 0.2340 | 0.2380 | 0.2360 |
| 1 | 5,000 | 5,000 | 0.2560 | 0.2640 | 0.2600 |
| 1 | 5,500 | 5,500 | 0.2860 | 0.2960 | 0.2910 |
| 1 | 6,000 | 6,000 | 0.3280 | 0.3440 | 0.3360 |
| 1 | 0 | 0 | 0.0300 | 0.0280 | 0.0290 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-072 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 16.7 |
| Location: | 45.36097, -120.71694 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 2.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.81 |
| 6 | 1.39 |
| 7 | 1.66 |
| 8 | 4.03 |
| 9 | 4.16 |
| 10 | 4.68 |
| 11 | |
| 12 | |
| Total Time (s) = | 16.73 |

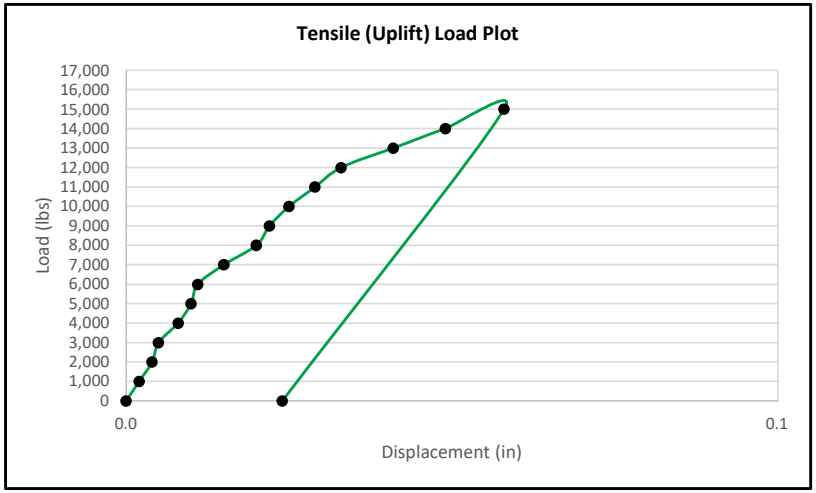
**Field Notes**

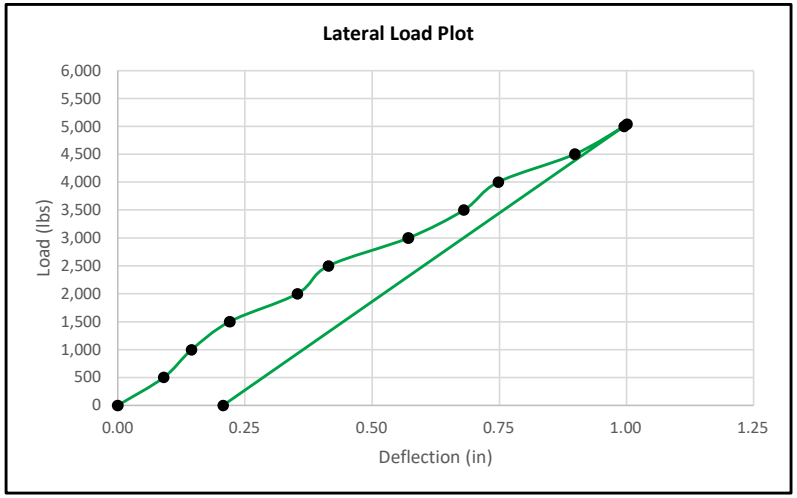
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 8,000 | 8,000 | 0.0240 | 0.0160 | 0.0200 |
| 1 | 9,000 | 9,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 10,000 | 10,000 | 0.0300 | 0.0200 | 0.0250 |
| 1 | 11,000 | 11,000 | 0.0340 | 0.0240 | 0.0290 |
| 1 | 12,000 | 12,000 | 0.0380 | 0.0280 | 0.0330 |
| 1 | 13,000 | 13,000 | 0.0480 | 0.0340 | 0.0410 |
| 1 | 14,000 | 14,000 | 0.0560 | 0.0420 | 0.0490 |
| 1 | 15,000 | 15,000 | 0.0660 | 0.0500 | 0.0580 |
| 1 | 0 | 0 | 0.0260 | 0.0220 | 0.0240 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0880 | 0.0920 | 0.0900 |
| 1 | 1,000 | 1,000 | 0.1420 | 0.1480 | 0.1450 |
| 1 | 1,500 | 1,500 | 0.2160 | 0.2240 | 0.2200 |
| 1 | 2,000 | 2,000 | 0.3500 | 0.3560 | 0.3530 |
| 1 | 2,500 | 2,500 | 0.4120 | 0.4160 | 0.4140 |
| 1 | 3,000 | 3,000 | 0.5680 | 0.5740 | 0.5710 |
| 1 | 3,500 | 3,500 | 0.6760 | 0.6840 | 0.6800 |
| 1 | 4,000 | 4,000 | 0.7460 | 0.7500 | 0.7480 |
| 1 | 4,500 | 4,500 | 0.8960 | 0.9000 | 0.8980 |
| 1 | 5,000 | 5,000 | 0.9940 | 0.9960 | 0.9950 |
| 1 | 5,500 | 5,040 | 1.0000 | 1.0020 | 1.0010 |
| 1 | 0 | 0 | 0.2060 | 0.2080 | 0.2070 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-074 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 22.8 |
| Location: | 45.35705, -120.72284 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 5.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.54 |
| 5 | 2.57 |
| 6 | 3.51 |
| 7 | 4.67 |
| 8 | 11.54 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 22.83 |

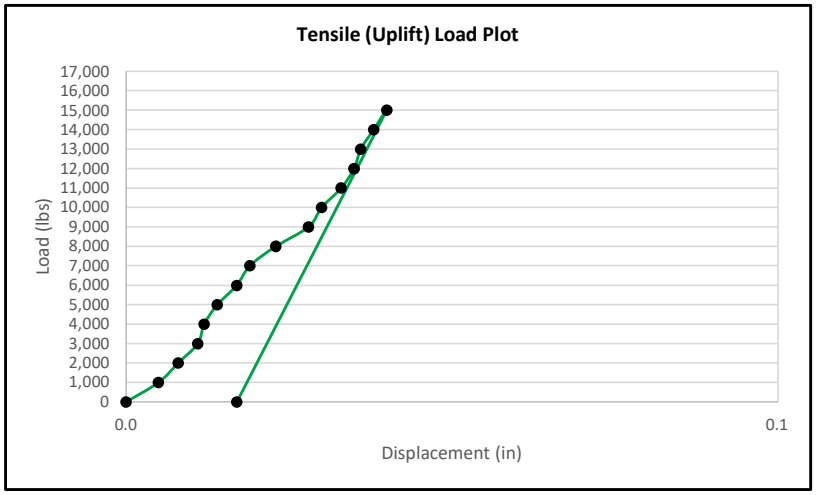
**Field Notes**

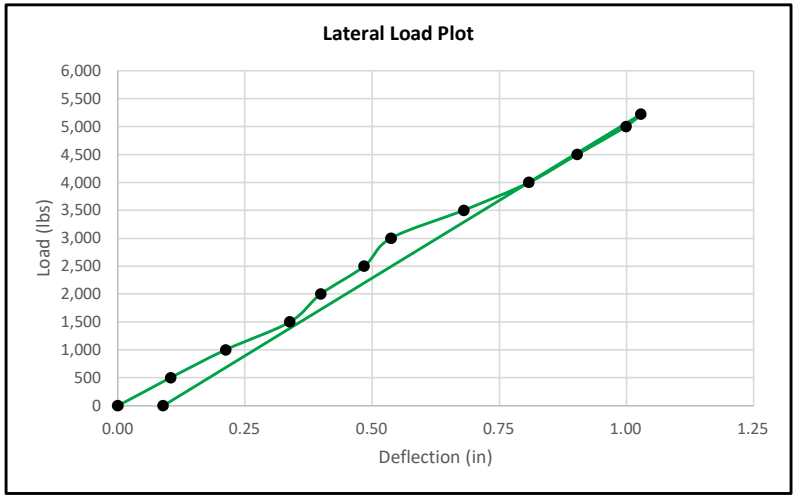
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 6,000 | 6,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 7,000 | 7,000 | 0.0240 | 0.0140 | 0.0190 |
| 1 | 8,000 | 8,000 | 0.0300 | 0.0160 | 0.0230 |
| 1 | 9,000 | 9,000 | 0.0360 | 0.0200 | 0.0280 |
| 1 | 10,000 | 10,000 | 0.0380 | 0.0220 | 0.0300 |
| 1 | 11,000 | 11,000 | 0.0400 | 0.0260 | 0.0330 |
| 1 | 12,000 | 12,000 | 0.0400 | 0.0300 | 0.0350 |
| 1 | 13,000 | 13,000 | 0.0400 | 0.0320 | 0.0360 |
| 1 | 14,000 | 14,000 | 0.0420 | 0.0340 | 0.0380 |
| 1 | 15,000 | 15,000 | 0.0440 | 0.0360 | 0.0400 |
| 1 | 0 | 0 | 0.0180 | 0.0160 | 0.0170 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1000 | 0.1080 | 0.1040 |
| 1 | 1,000 | 1,000 | 0.2040 | 0.2200 | 0.2120 |
| 1 | 1,500 | 1,500 | 0.3280 | 0.3480 | 0.3380 |
| 1 | 2,000 | 2,000 | 0.3880 | 0.4100 | 0.3990 |
| 1 | 2,500 | 2,500 | 0.4720 | 0.4960 | 0.4840 |
| 1 | 3,000 | 3,000 | 0.5220 | 0.5520 | 0.5370 |
| 1 | 3,500 | 3,500 | 0.6680 | 0.6920 | 0.6800 |
| 1 | 4,000 | 4,000 | 0.7940 | 0.8220 | 0.8080 |
| 1 | 4,500 | 4,500 | 0.8880 | 0.9180 | 0.9030 |
| 1 | 5,000 | 5,000 | 0.9860 | 1.0120 | 0.9990 |
| 1 | 5,500 | 5,220 | 1.0160 | 1.0400 | 1.0280 |
| 1 | 0 | 0 | 0.0840 | 0.0940 | 0.0890 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-077A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 4.8 |
| Location: | 45.35193, -120.72687 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 1.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.15 |
| 6 | 1.71 |
| 7 | 1.21 |
| 8 | 1.74 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 4.81 |

**Tensile (Uplift) Testing**

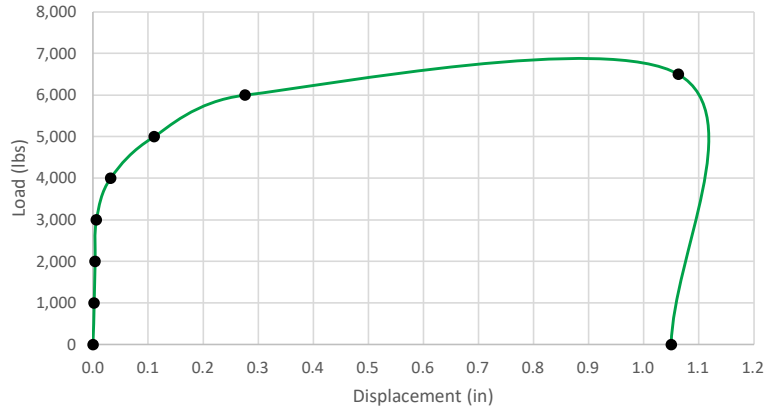
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0320 | 0.0320 | 0.0320 |
| 1 | 5,000 | 5,000 | 0.1100 | 0.1120 | 0.1110 |
| 1 | 6,000 | 6,000 | 0.2760 | 0.2760 | 0.2760 |
| 1 | 7,000 | 6,500 | 1.0660 | 1.0600 | 1.0630 |
| 1 | 0 | 0 | 1.0520 | 1.0480 | 1.0500 |

**Lateral Testing**

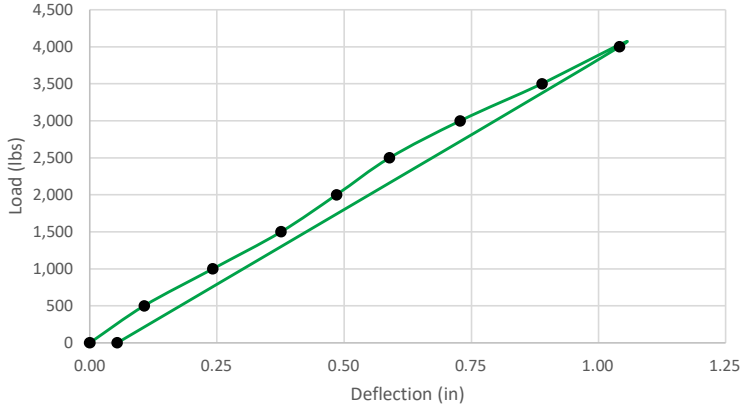
| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0940 | 0.1200 | 0.1070 |
| 1 | 1,000 | 1,000 | 0.2332 | 0.2500 | 0.2416 |
| 1 | 1,500 | 1,500 | 0.3680 | 0.3840 | 0.3760 |
| 1 | 2,000 | 2,000 | 0.4780 | 0.4920 | 0.4850 |
| 1 | 2,500 | 2,500 | 0.5820 | 0.5960 | 0.5890 |
| 1 | 3,000 | 3,000 | 0.7220 | 0.7340 | 0.7280 |
| 1 | 3,500 | 3,500 | 0.8840 | 0.8940 | 0.8890 |
| 1 | 4,000 | 4,000 | 1.0360 | 1.0460 | 1.0410 |
| 1 | 0 | 0 | 0.0560 | 0.0520 | 0.0540 |

**Field Notes**

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-077B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 29.2 |
| Location: | 45.35193, -120.72687 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 6.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.87 |
| 5 | 1.99 |
| 6 | 2.44 |
| 7 | 8.39 |
| 8 | 15.47 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 29.16 |

**Tensile (Uplift) Testing**

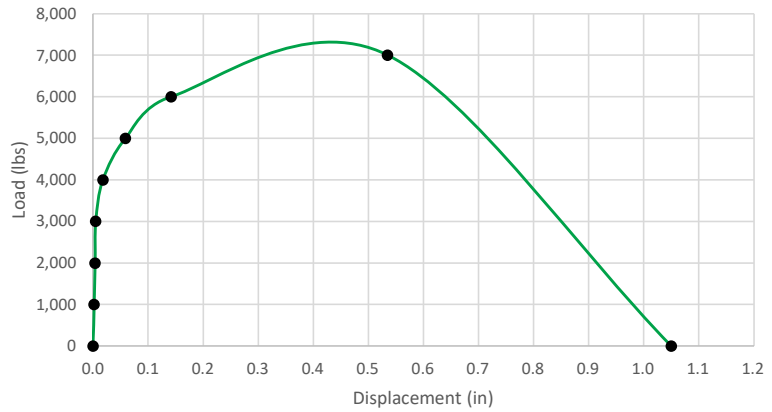
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0320 | 0.0180 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.1120 | 0.0590 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.2760 | 0.1420 |
| 1 | 7,000 | 7,000 | 0.0100 | 1.0600 | 0.5350 |
| 1 | 0 | 0 | 1.0520 | 1.0480 | 1.0500 |

**Lateral Testing**

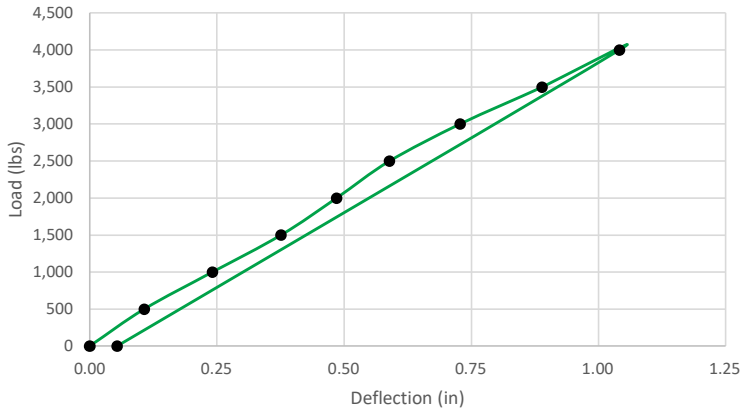
| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0940 | 0.1200 | 0.1070 |
| 1 | 1,000 | 1,000 | 0.2320 | 0.2500 | 0.2410 |
| 1 | 1,500 | 1,500 | 0.3680 | 0.3840 | 0.3760 |
| 1 | 2,000 | 2,000 | 0.4780 | 0.4920 | 0.4850 |
| 1 | 2,500 | 2,500 | 0.5820 | 0.5960 | 0.5890 |
| 1 | 3,000 | 3,000 | 0.7220 | 0.7340 | 0.7280 |
| 1 | 3,500 | 3,500 | 0.8840 | 0.8940 | 0.8890 |
| 1 | 4,000 | 4,000 | 1.0360 | 1.0460 | 1.0410 |
| 1 | 0 | 0 | 0.0560 | 0.0520 | 0.0540 |

**Field Notes**

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8 | Pile ID: | PT-PV-077B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 29.2 |
| Location: | 45.35193, -120.72687 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 6.5 |

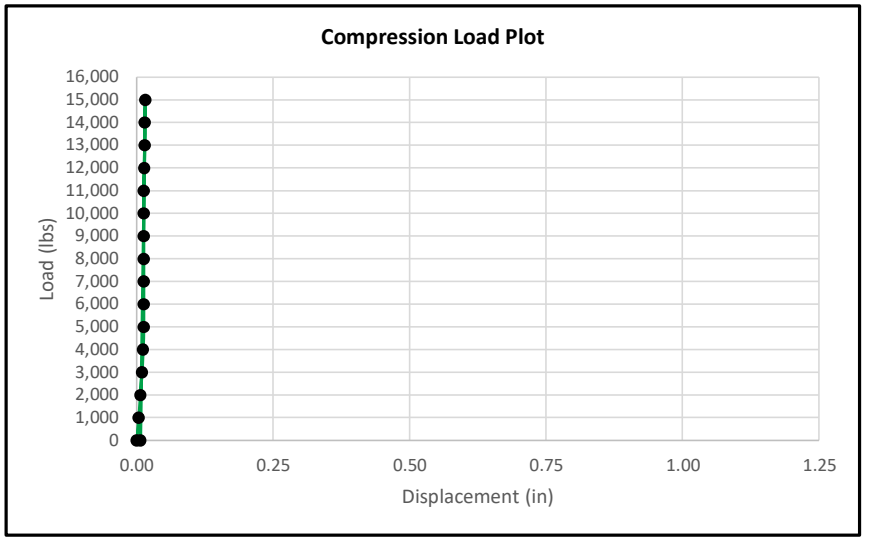
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.87 |
| 5 | 1.99 |
| 6 | 2.44 |
| 7 | 8.39 |
| 8 | 15.47 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 29.16 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 4,000 | 4,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 0 | 0 | 0.0060 | 0.0080 | 0.0070 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-079 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 76.3 |
| Location: | 45.34920, -120.72154 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 10.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.57 |
| 5 | 7.51 |
| 6 | 7.1 |
| 7 | 11.67 |
| 8 | 15.28 |
| 9 | 13.48 |
| 10 | 18.72 |
| 11 | |
| 12 | |
| Total Time (s) = | 76.33 |

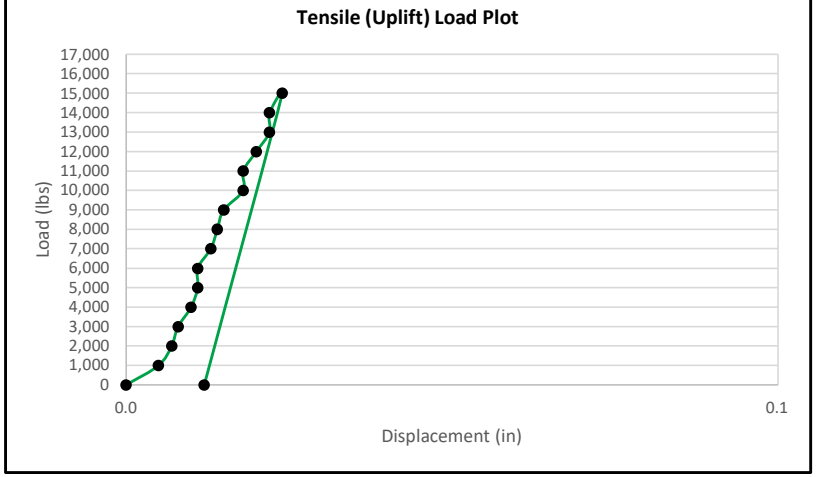
**Field Notes**

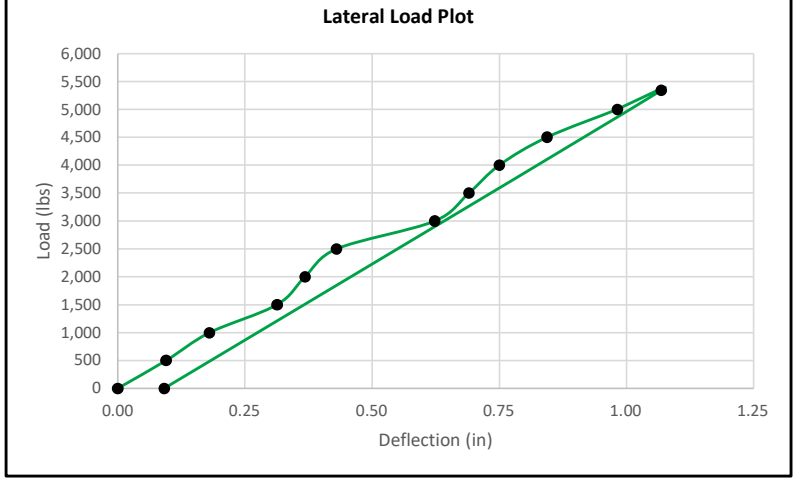
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 0 | 0 | 0.0120 | 0.0120 | 0.0120 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0960 | 0.0940 | 0.0950 |
| 1 | 1,000 | 1,000 | 0.1820 | 0.1780 | 0.1800 |
| 1 | 1,500 | 1,500 | 0.3160 | 0.3100 | 0.3130 |
| 1 | 2,000 | 2,000 | 0.3720 | 0.3640 | 0.3680 |
| 1 | 2,500 | 2,500 | 0.4340 | 0.4260 | 0.4300 |
| 1 | 3,000 | 3,000 | 0.6280 | 0.6180 | 0.6230 |
| 1 | 3,500 | 3,500 | 0.6960 | 0.6840 | 0.6900 |
| 1 | 4,000 | 4,000 | 0.7560 | 0.7440 | 0.7500 |
| 1 | 4,500 | 4,500 | 0.8500 | 0.8380 | 0.8440 |
| 1 | 5,000 | 5,000 | 0.9900 | 0.9740 | 0.9820 |
| 1 | 5,500 | 5,340 | 1.0760 | 1.0600 | 1.0680 |
| 1 | 0 | 0 | 0.1000 | 0.0820 | 0.0910 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-081 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 15.9 |
| Location: | 45.34920, -120.72154 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.52 |
| 6 | 4.83 |
| 7 | 4.85 |
| 8 | 4.69 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 15.89 |

**Field Notes**

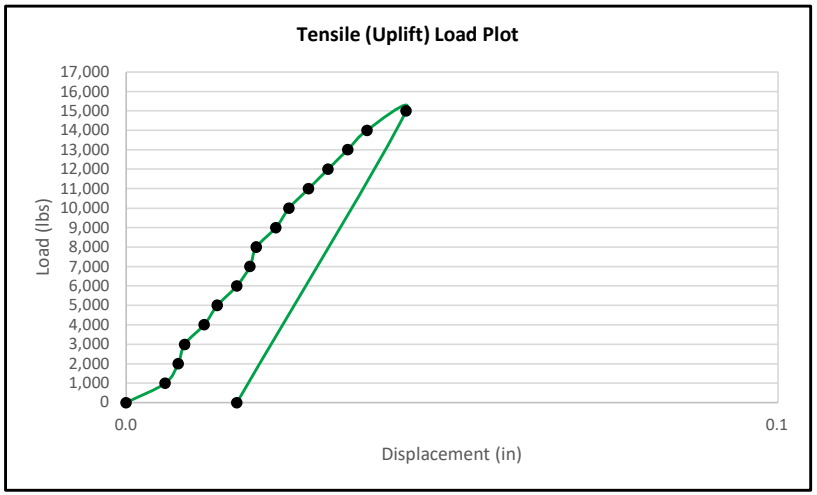
Rock layer encountered from 4-6 feet BGS during pre-drilling.

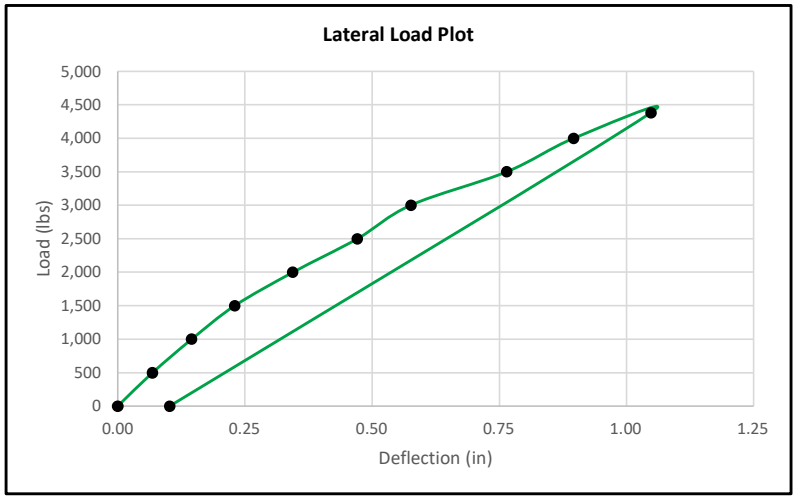
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 7,000 | 7,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0340 | 0.0280 |
| 1 | 12,000 | 12,000 | 0.0260 | 0.0360 | 0.0310 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0400 | 0.0340 |
| 1 | 14,000 | 14,000 | 0.0320 | 0.0420 | 0.0370 |
| 1 | 15,000 | 15,000 | 0.0360 | 0.0500 | 0.0430 |
| 1 | 0 | 0 | 0.0160 | 0.0180 | 0.0170 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0620 | 0.0740 | 0.0680 |
| 1 | 1,000 | 1,000 | 0.1360 | 0.1540 | 0.1450 |
| 1 | 1,500 | 1,500 | 0.2180 | 0.2420 | 0.2300 |
| 1 | 2,000 | 2,000 | 0.3300 | 0.3580 | 0.3440 |
| 1 | 2,500 | 2,500 | 0.4540 | 0.4880 | 0.4710 |
| 1 | 3,000 | 3,000 | 0.5560 | 0.5960 | 0.5760 |
| 1 | 3,500 | 3,500 | 0.7440 | 0.7840 | 0.7640 |
| 1 | 4,000 | 4,000 | 0.8780 | 0.9140 | 0.8960 |
| 1 | 4,500 | 4,380 | 1.0280 | 1.0680 | 1.0480 |
| 1 | 0 | 0 | 0.1120 | 0.0920 | 0.1020 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-084A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/2/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 45.7 |
| Location: | 45.35332, -120.73683 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 13.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.67 |
| 5 | 6.47 |
| 6 | 10.03 |
| 7 | 10.27 |
| 8 | 16.27 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 45.71 |

**Field Notes**

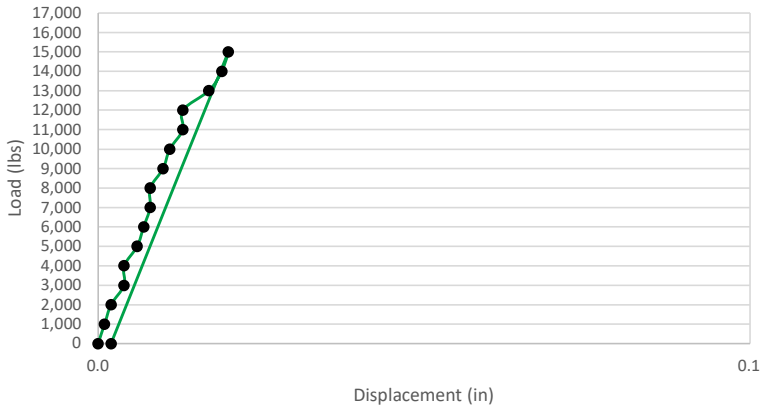
Loose, fractured rock encountered from 4 feet BGS during pre-drilling.

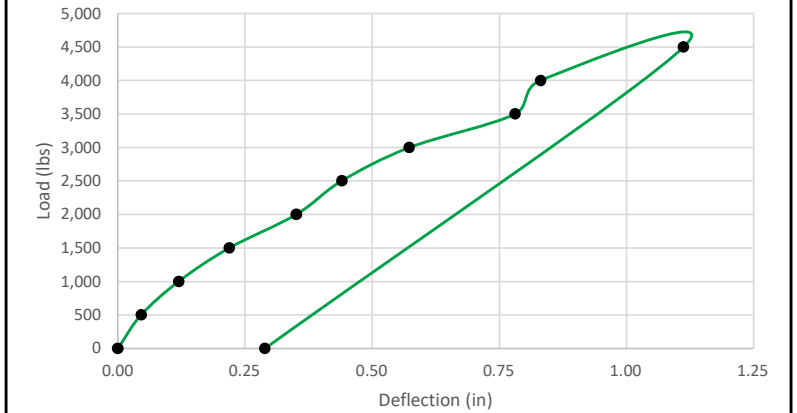
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 12,000 | 12,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0120 | 0.0170 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0120 | 0.0190 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0140 | 0.0200 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0440 | 0.0480 | 0.0460 |
| 1 | 1,000 | 1,000 | 0.1200 | 0.1200 | 0.1200 |
| 1 | 1,500 | 1,500 | 0.2200 | 0.2180 | 0.2190 |
| 1 | 2,000 | 2,000 | 0.3580 | 0.3440 | 0.3510 |
| 1 | 2,500 | 2,500 | 0.4500 | 0.4300 | 0.4400 |
| 1 | 3,000 | 3,000 | 0.5840 | 0.5620 | 0.5730 |
| 1 | 3,500 | 3,500 | 0.7980 | 0.7640 | 0.7810 |
| 1 | 4,000 | 4,000 | 0.8500 | 0.8120 | 0.8310 |
| 1 | 4,500 | 4,500 | 1.1320 | 1.0920 | 1.1120 |
| 1 | 0 | 0 | 0.3020 | 0.2760 | 0.2890 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 5.0 | Pile ID: | PT-PV-084B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/2/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 39.17 |
| Location: | 45.35332, -120.73683 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 19.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 6.24 |
| 5 | 32.93 |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 39.17 |

**Field Notes**

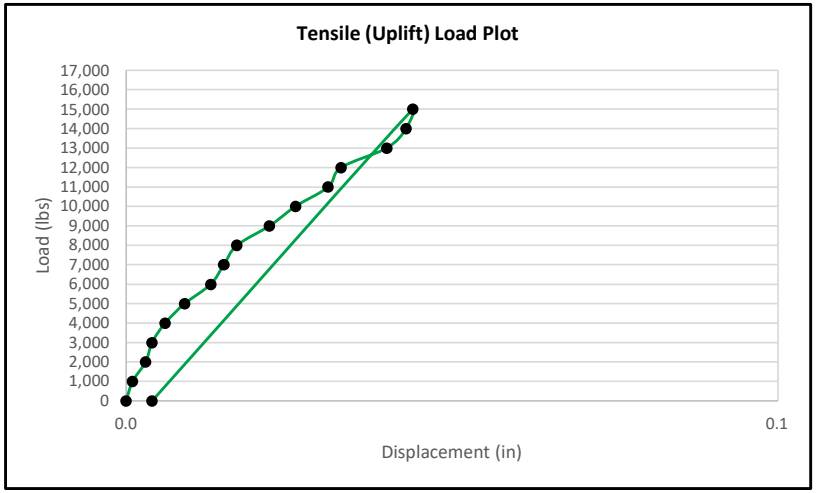
Pile refusal encountered at 5 feet BGS during install.

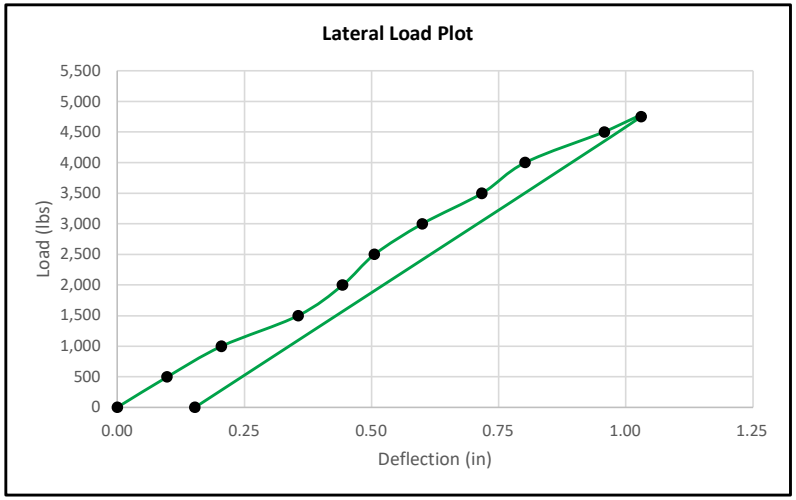
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0020 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0060 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 8,000 | 8,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 9,000 | 9,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 10,000 | 10,000 | 0.0300 | 0.0220 | 0.0260 |
| 1 | 11,000 | 11,000 | 0.0360 | 0.0260 | 0.0310 |
| 1 | 12,000 | 12,000 | 0.0380 | 0.0280 | 0.0330 |
| 1 | 13,000 | 13,000 | 0.0480 | 0.0320 | 0.0400 |
| 1 | 14,000 | 14,000 | 0.0500 | 0.0360 | 0.0430 |
| 1 | 15,000 | 15,000 | 0.0500 | 0.0380 | 0.0440 |
| 1 | 0 | 0 | 0.0040 | 0.0040 | 0.0040 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1060 | 0.0900 | 0.0980 |
| 1 | 1,000 | 1,000 | 0.2160 | 0.1940 | 0.2050 |
| 1 | 1,500 | 1,500 | 0.3700 | 0.3420 | 0.3560 |
| 1 | 2,000 | 2,000 | 0.4580 | 0.4280 | 0.4430 |
| 1 | 2,500 | 2,500 | 0.5200 | 0.4920 | 0.5060 |
| 1 | 3,000 | 3,000 | 0.6160 | 0.5840 | 0.6000 |
| 1 | 3,500 | 3,500 | 0.7340 | 0.7000 | 0.7170 |
| 1 | 4,000 | 4,000 | 0.8200 | 0.7840 | 0.8020 |
| 1 | 4,500 | 4,500 | 0.9780 | 0.9380 | 0.9580 |
| 1 | 5,000 | 4,750 | 1.0500 | 1.0100 | 1.0300 |
| 1 | 0 | 0 | 0.1540 | 0.1520 | 0.1530 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 5 | Pile ID: | PT-PV-084B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/2/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 39.2 |
| Location: | 45.35332, -120.73683 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 19.6 |

**Embedment Data**

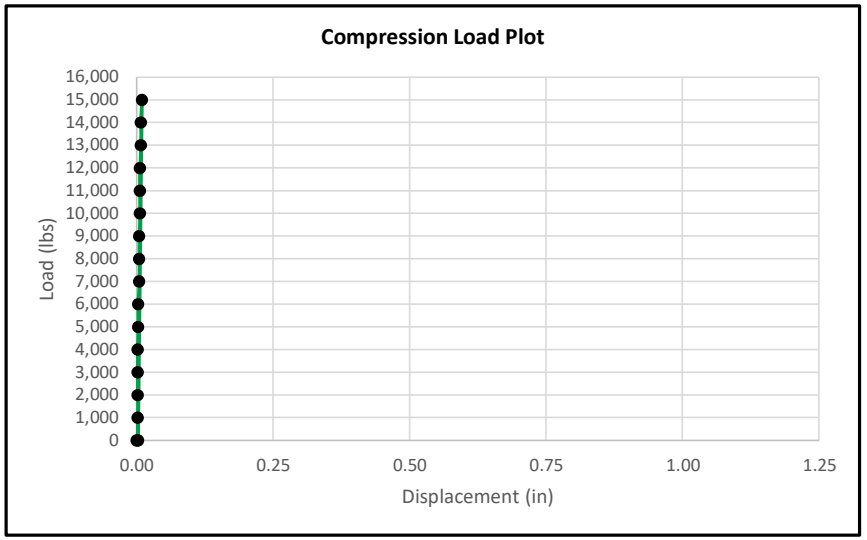
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 6.24 |
| 5 | 32.93 |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 39.17 |

**Field Notes**

Pile refusal encountered at 5 feet BGS during install.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-086 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/2/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 50.1 |
| Location: | 45.34646, -120.74563 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 7.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.78 |
| 5 | 5.16 |
| 6 | 5.31 |
| 7 | 6.94 |
| 8 | 6.73 |
| 9 | 9.82 |
| 10 | 14.35 |
| 11 | |
| 12 | |
| Total Time (s) = | 50.09 |

**Field Notes**

Rock encountered at 6 feet BGS during pre-drilling.

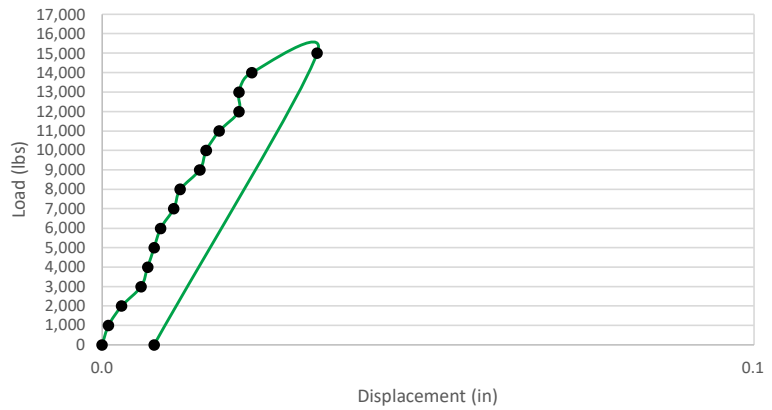
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 15,000 | 15,000 | 0.0380 | 0.0280 | 0.0330 |
| 1 | 0 | 0 | 0.0100 | 0.0060 | 0.0080 |

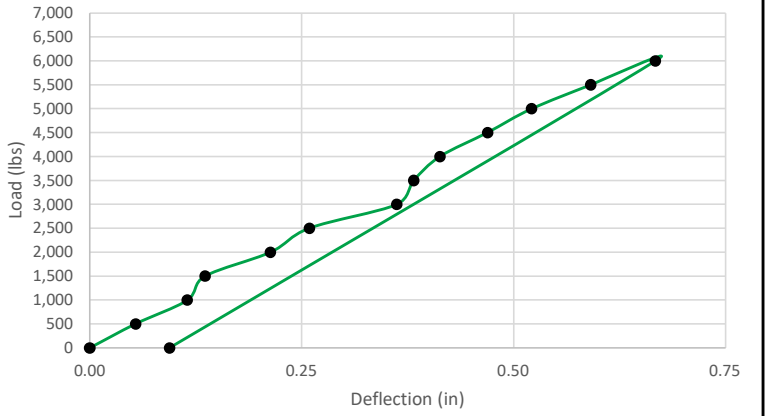
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0580 | 0.0500 | 0.0540 |
| 1 | 1,000 | 1,000 | 0.1200 | 0.1100 | 0.1150 |
| 1 | 1,500 | 1,500 | 0.1160 | 0.1560 | 0.1360 |
| 1 | 2,000 | 2,000 | 0.2180 | 0.2080 | 0.2130 |
| 1 | 2,500 | 2,500 | 0.2640 | 0.2540 | 0.2590 |
| 1 | 3,000 | 3,000 | 0.3680 | 0.3560 | 0.3620 |
| 1 | 3,500 | 3,500 | 0.3880 | 0.3760 | 0.3820 |
| 1 | 4,000 | 4,000 | 0.4200 | 0.4060 | 0.4130 |
| 1 | 4,500 | 4,500 | 0.4760 | 0.4620 | 0.4690 |
| 1 | 5,000 | 5,000 | 0.5320 | 0.5100 | 0.5210 |
| 1 | 5,500 | 5,500 | 0.6000 | 0.5820 | 0.5910 |
| 1 | 6,000 | 6,000 | 0.6760 | 0.6580 | 0.6670 |
| 1 | 0 | 0 | 0.0920 | 0.0960 | 0.0940 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-089 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/23/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 8.6 |
| Location: | 45.35404, -120.75816 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 2.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.22 |
| 5 | 1.3 |
| 6 | 2.13 |
| 7 | 0.15 |
| 8 | 4.78 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 8.58 |

**Field Notes**

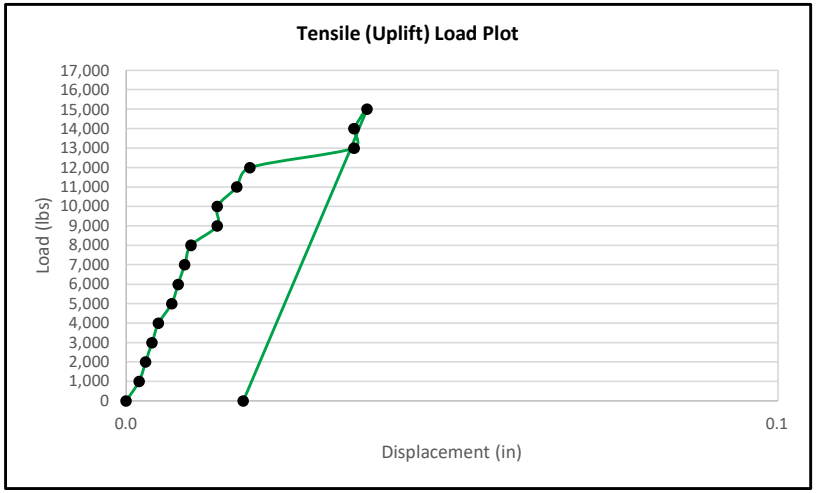
Rock encountered at 6 feet BGS during pre-drilling.

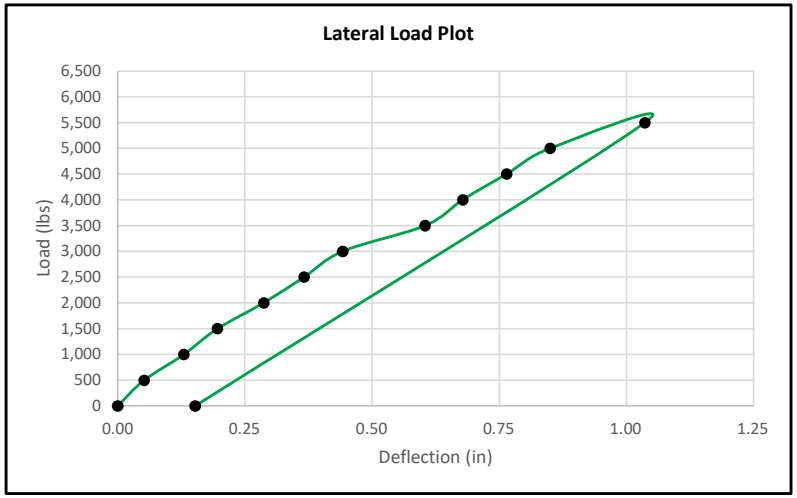
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0260 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0440 | 0.0370 |
| 1 | 0 | 0 | 0.0180 | 0.0180 | 0.0180 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0440 | 0.0600 | 0.0520 |
| 1 | 1,000 | 1,000 | 0.1160 | 0.1440 | 0.1300 |
| 1 | 1,500 | 1,500 | 0.1780 | 0.2140 | 0.1960 |
| 1 | 2,000 | 2,000 | 0.2660 | 0.3080 | 0.2870 |
| 1 | 2,500 | 2,500 | 0.3420 | 0.3900 | 0.3660 |
| 1 | 3,000 | 3,000 | 0.4160 | 0.4680 | 0.4420 |
| 1 | 3,500 | 3,500 | 0.5740 | 0.6340 | 0.6040 |
| 1 | 4,000 | 4,000 | 0.6480 | 0.7080 | 0.6780 |
| 1 | 4,500 | 4,500 | 0.7320 | 0.7960 | 0.7640 |
| 1 | 5,000 | 5,000 | 0.8180 | 0.8820 | 0.8500 |
| 1 | 5,500 | 5,500 | 1.0020 | 1.0700 | 1.0360 |
| 1 | 0 | 0 | 0.1540 | 0.1500 | 0.1520 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-090 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.5 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/22/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 28.3 |
| Location: | 45.34984, -120.75777 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 6.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.54 |
| 6 | 2.7 |
| 7 | 4.29 |
| 8 | 6.42 |
| 9 | 6.92 |
| 10 | 7.38 |
| 11 | |
| 12 | |
| Total Time (s) = | 28.25 |

**Field Notes**

Rock encountered at 4 feet BGS during pre-drilling.

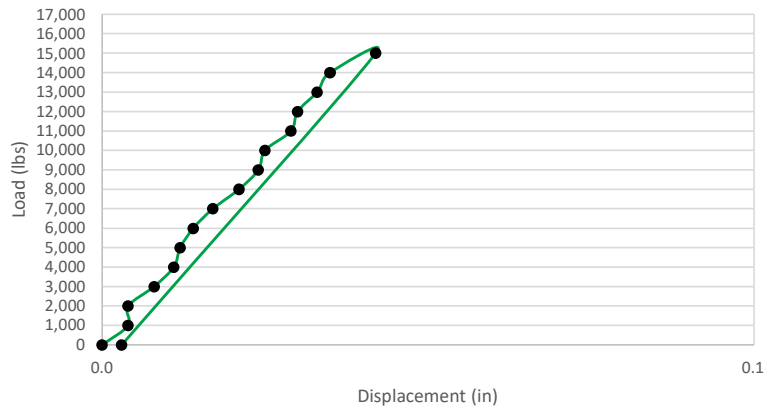
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0280 | 0.0240 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 11,000 | 11,000 | 0.0240 | 0.0340 | 0.0290 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0360 | 0.0300 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0400 | 0.0330 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 15,000 | 15,000 | 0.0320 | 0.0520 | 0.0420 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

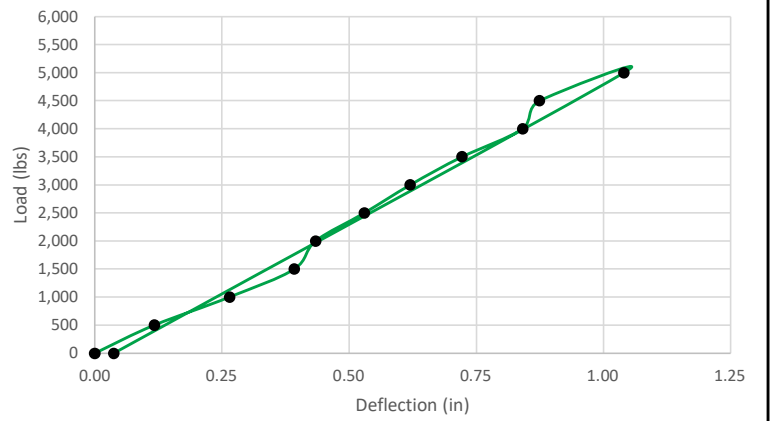
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1160 | 0.1180 | 0.1170 |
| 1 | 1,000 | 1,000 | 0.2620 | 0.2680 | 0.2650 |
| 1 | 1,500 | 1,500 | 0.3880 | 0.3960 | 0.3920 |
| 1 | 2,000 | 2,000 | 0.4300 | 0.4380 | 0.4340 |
| 1 | 2,500 | 2,500 | 0.5260 | 0.5340 | 0.5300 |
| 1 | 3,000 | 3,000 | 0.6160 | 0.6240 | 0.6200 |
| 1 | 3,500 | 3,500 | 0.7180 | 0.7260 | 0.7220 |
| 1 | 4,000 | 4,000 | 0.8360 | 0.8460 | 0.8410 |
| 1 | 4,500 | 4,500 | 0.8700 | 0.8780 | 0.8740 |
| 1 | 5,000 | 5,000 | 1.0340 | 1.0460 | 1.0400 |
| 1 | 0 | 0 | 0.0400 | 0.0340 | 0.0370 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-093A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 6.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/22/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 1.1 |
| Location: | 45.34365, -120.75930 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 1.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | 1.13 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 1.13 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0340 | 0.0340 | 0.0340 |
| 1 | 2,000 | 2,000 | 0.1400 | 0.1400 | 0.1400 |
| 1 | 3,000 | 2,780 | 1.2560 | 1.2540 | 1.2550 |
| 1 | 0 | 0 | 1.2040 | 1.2020 | 1.2030 |

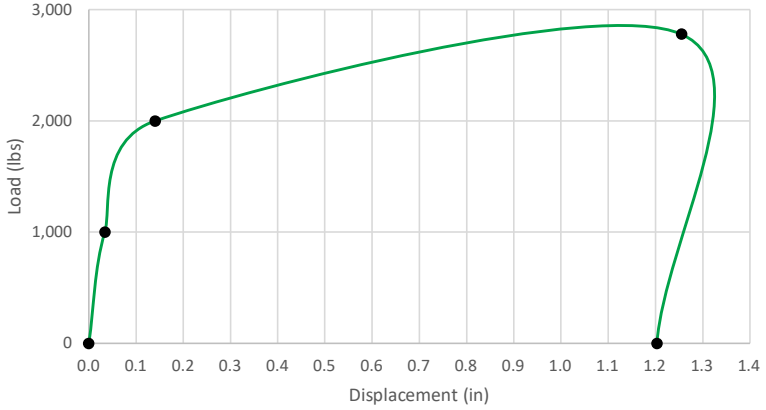
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1780 | 0.1860 | 0.1820 |
| 1 | 1,000 | 1,000 | 0.2680 | 0.2800 | 0.2740 |
| 1 | 1,500 | 1,500 | 0.3780 | 0.3920 | 0.3850 |
| 1 | 2,000 | 2,000 | 0.6100 | 0.6280 | 0.6190 |
| 1 | 2,500 | 2,500 | 0.7700 | 0.7920 | 0.7810 |
| 1 | 3,000 | 3,000 | 0.9200 | 0.9940 | 0.9570 |
| 1 | 3,500 | 3,180 | 1.0300 | 1.0520 | 1.0410 |
| 1 | 0 | 0 | 0.2040 | 0.2020 | 0.2030 |

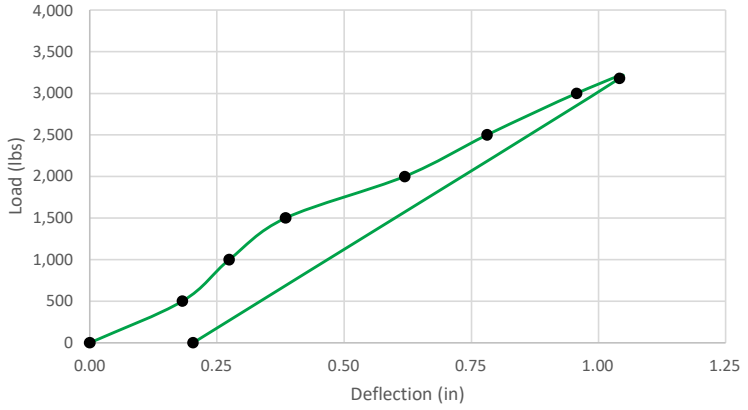
**Field Notes**

Rock encountered at 7 feet BGS during pre-drilling.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-093B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/22/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 21.7 |
| Location: | 45.34365, -120.75930 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 6.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.47 |
| 4 | 1.84 |
| 5 | 1.63 |
| 6 | 5.05 |
| 7 | 12.68 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 21.67 |

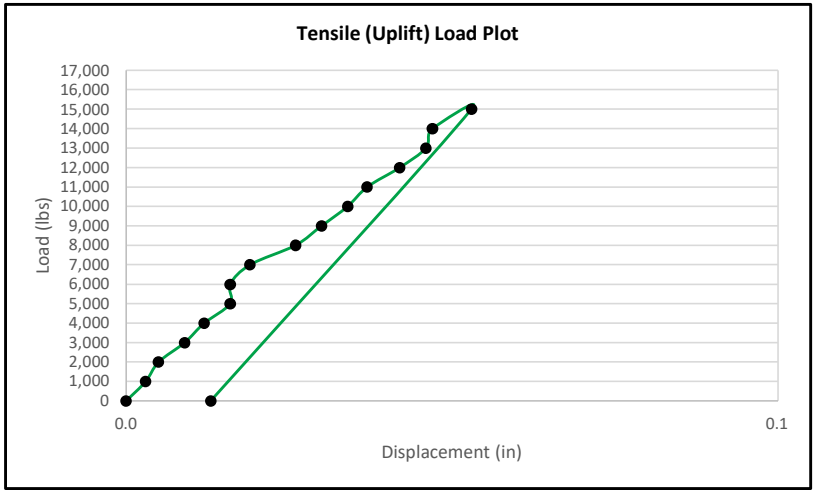
**Field Notes**

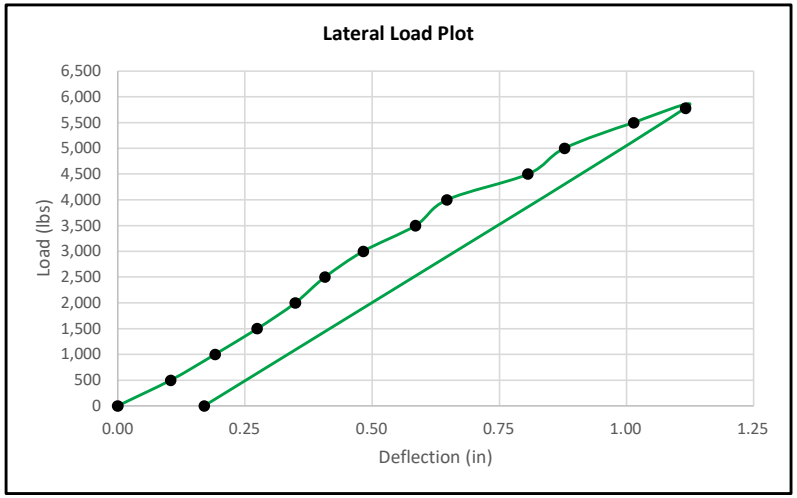
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 5,000 | 5,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 7,000 | 7,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 8,000 | 8,000 | 0.0300 | 0.0220 | 0.0260 |
| 1 | 9,000 | 9,000 | 0.0360 | 0.0240 | 0.0300 |
| 1 | 10,000 | 10,000 | 0.0400 | 0.0280 | 0.0340 |
| 1 | 11,000 | 11,000 | 0.0420 | 0.0320 | 0.0370 |
| 1 | 12,000 | 12,000 | 0.0480 | 0.0360 | 0.0420 |
| 1 | 13,000 | 13,000 | 0.0520 | 0.0400 | 0.0460 |
| 1 | 14,000 | 14,000 | 0.0540 | 0.0400 | 0.0470 |
| 1 | 15,000 | 15,000 | 0.0600 | 0.0460 | 0.0530 |
| 1 | 0 | 0 | 0.0120 | 0.0140 | 0.0130 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1160 | 0.0920 | 0.1040 |
| 1 | 1,000 | 1,000 | 0.2100 | 0.1720 | 0.1910 |
| 1 | 1,500 | 1,500 | 0.3000 | 0.2480 | 0.2740 |
| 1 | 2,000 | 2,000 | 0.3760 | 0.3220 | 0.3490 |
| 1 | 2,500 | 2,500 | 0.4420 | 0.3720 | 0.4070 |
| 1 | 3,000 | 3,000 | 0.5400 | 0.4250 | 0.4825 |
| 1 | 3,500 | 3,500 | 0.6300 | 0.5400 | 0.5850 |
| 1 | 4,000 | 4,000 | 0.6960 | 0.5980 | 0.6470 |
| 1 | 4,500 | 4,500 | 0.8640 | 0.7480 | 0.8060 |
| 1 | 5,000 | 5,000 | 0.9400 | 0.8160 | 0.8780 |
| 1 | 5,500 | 5,500 | 1.0860 | 0.9420 | 1.0140 |
| 1 | 6,000 | 5,780 | 1.1960 | 1.0360 | 1.1160 |
| 1 | 0 | 0 | 0.2060 | 0.1340 | 0.1700 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-095 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/22/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 66.6 |
| Location: | 45.33866, -120.76507 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 16.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.59 |
| 4 | 14.22 |
| 5 | 17.45 |
| 6 | 33.35 |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 66.61 |

**Field Notes**

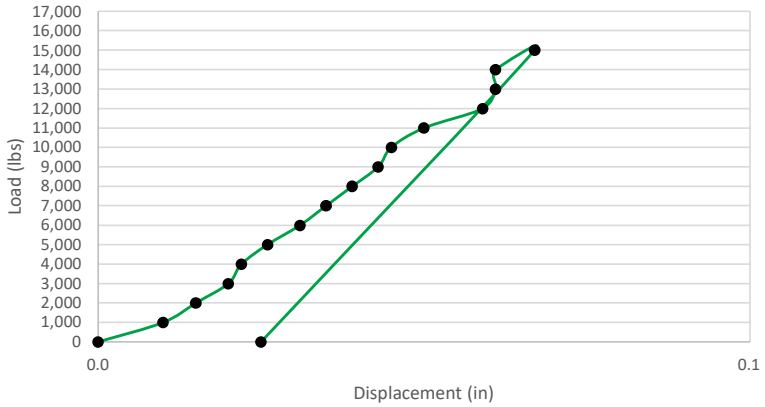
Rock encountered at 3 feet BGS during pre-drilling.
Pile refusal encountered at 6 feet BG during install.

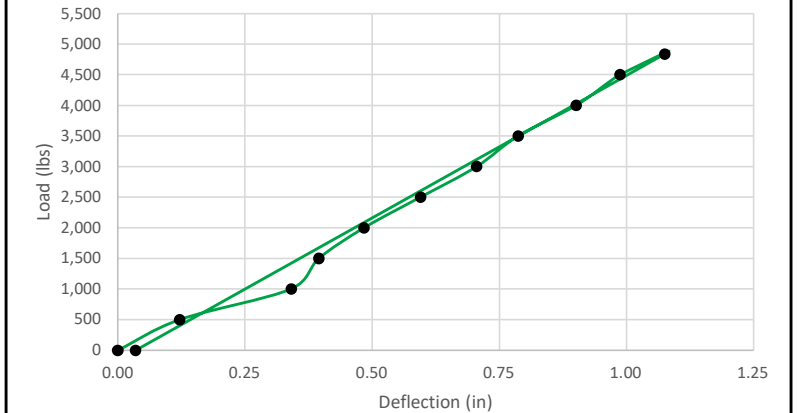
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 2,000 | 2,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 3,000 | 3,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 4,000 | 4,000 | 0.0220 | 0.0220 | 0.0220 |
| 1 | 5,000 | 5,000 | 0.0260 | 0.0260 | 0.0260 |
| 1 | 6,000 | 6,000 | 0.0300 | 0.0320 | 0.0310 |
| 1 | 7,000 | 7,000 | 0.0340 | 0.0360 | 0.0350 |
| 1 | 8,000 | 8,000 | 0.0380 | 0.0400 | 0.0390 |
| 1 | 9,000 | 9,000 | 0.0400 | 0.0460 | 0.0430 |
| 1 | 10,000 | 10,000 | 0.0420 | 0.0480 | 0.0450 |
| 1 | 11,000 | 11,000 | 0.0480 | 0.0520 | 0.0500 |
| 1 | 12,000 | 12,000 | 0.0560 | 0.0620 | 0.0590 |
| 1 | 13,000 | 13,000 | 0.0580 | 0.0640 | 0.0610 |
| 1 | 14,000 | 14,000 | 0.0580 | 0.0640 | 0.0610 |
| 1 | 15,000 | 15,000 | 0.0620 | 0.0720 | 0.0670 |
| 1 | 0 | 0 | 0.0220 | 0.0280 | 0.0250 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1280 | 0.1160 | 0.1220 |
| 1 | 1,000 | 1,000 | 0.3500 | 0.3320 | 0.3410 |
| 1 | 1,500 | 1,500 | 0.4040 | 0.3860 | 0.3950 |
| 1 | 2,000 | 2,000 | 0.4960 | 0.4720 | 0.4840 |
| 1 | 2,500 | 2,500 | 0.6100 | 0.5800 | 0.5950 |
| 1 | 3,000 | 3,000 | 0.7240 | 0.6860 | 0.7050 |
| 1 | 3,500 | 3,500 | 0.8080 | 0.7660 | 0.7870 |
| 1 | 4,000 | 4,000 | 0.9240 | 0.8780 | 0.9010 |
| 1 | 4,500 | 4,500 | 1.0120 | 0.9620 | 0.9870 |
| 1 | 5,000 | 4,840 | 1.1280 | 1.0220 | 1.0750 |
| 1 | 0 | 0 | 0.0320 | 0.0380 | 0.0350 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-097A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 3.3 |
| Location: | 45.34154, -120.77930 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 1.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 0.86 |
| 7 | 1.29 |
| 8 | 1.19 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 3.34 |

**Tensile (Uplift) Testing**

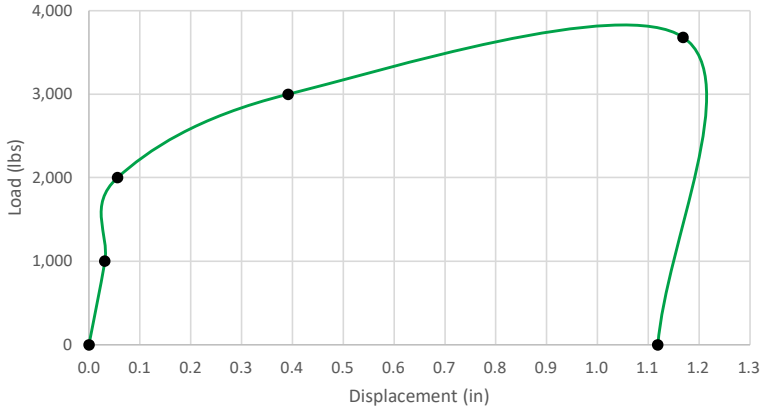
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0320 | 0.0300 | 0.0310 |
| 1 | 2,000 | 2,000 | 0.0520 | 0.0600 | 0.0560 |
| 1 | 3,000 | 3,000 | 0.3940 | 0.3900 | 0.3920 |
| 1 | 4,000 | 3,680 | 1.1700 | 1.1680 | 1.1690 |
| 1 | 0 | 0 | 1.1180 | 1.1200 | 1.1190 |

**Lateral Testing**

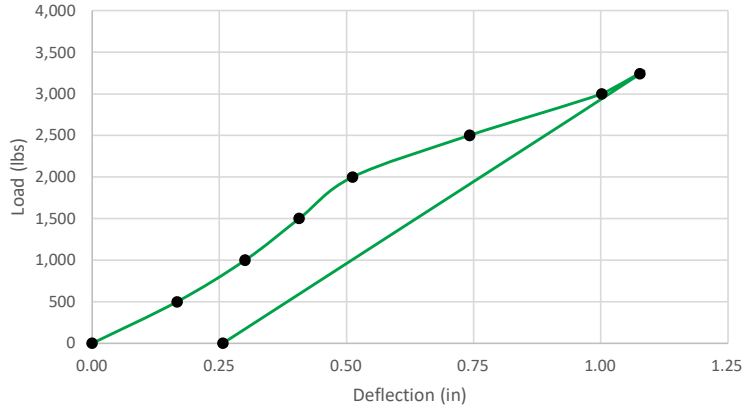
| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1520 | 0.1820 | 0.1670 |
| 1 | 1,000 | 1,000 | 0.2760 | 0.3260 | 0.3010 |
| 1 | 1,500 | 1,500 | 0.3800 | 0.4340 | 0.4070 |
| 1 | 2,000 | 2,000 | 0.4840 | 0.5400 | 0.5120 |
| 1 | 2,500 | 2,500 | 0.7140 | 0.7700 | 0.7420 |
| 1 | 3,000 | 3,000 | 0.9720 | 1.0320 | 1.0020 |
| 1 | 3,500 | 3,240 | 1.0460 | 1.1080 | 1.0770 |
| 1 | 0 | 0 | 0.2580 | 0.2560 | 0.2570 |

**Field Notes**

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-097B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 4.9 |
| Location: | 45.34154, -120.77930 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.73 |
| 6 | 1.3 |
| 7 | 1.22 |
| 8 | 1.6 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 4.85 |

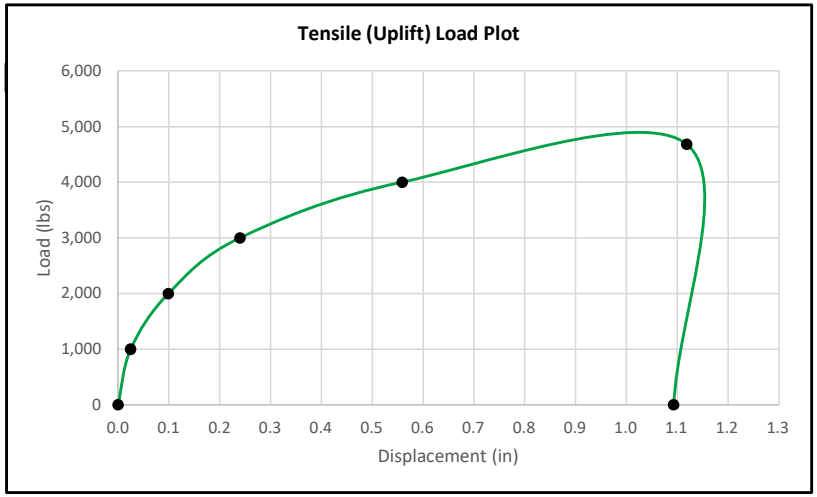
**Tensile (Uplift) Testing**

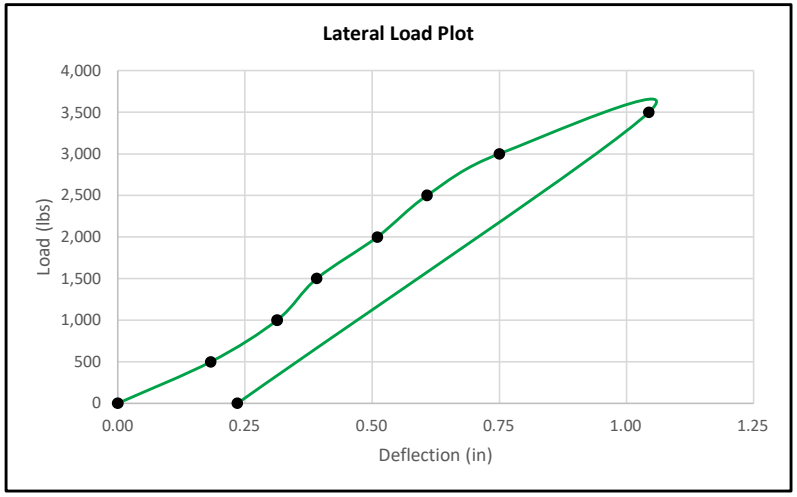
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0280 | 0.0220 | 0.0250 |
| 1 | 2,000 | 2,000 | 0.1020 | 0.0960 | 0.0990 |
| 1 | 3,000 | 3,000 | 0.2440 | 0.2360 | 0.2400 |
| 1 | 4,000 | 4,000 | 0.5660 | 0.5520 | 0.5590 |
| 1 | 5,000 | 4,680 | 1.1300 | 1.1080 | 1.1190 |
| 1 | 0 | 0 | 1.0960 | 1.0900 | 1.0930 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1840 | 0.1820 | 0.1830 |
| 1 | 1,000 | 1,000 | 0.3160 | 0.3100 | 0.3130 |
| 1 | 1,500 | 1,500 | 0.3920 | 0.3900 | 0.3910 |
| 1 | 2,000 | 2,000 | 0.5120 | 0.5080 | 0.5100 |
| 1 | 2,500 | 2,500 | 0.6100 | 0.6060 | 0.6080 |
| 1 | 3,000 | 3,000 | 0.7520 | 0.7480 | 0.7500 |
| 1 | 3,500 | 3,500 | 1.0460 | 1.0420 | 1.0440 |
| 1 | 0 | 0 | 0.2400 | 0.2300 | 0.2350 |

**Field Notes**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-097B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 4.9 |
| Location: | 45.34154, -120.77930 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.2 |

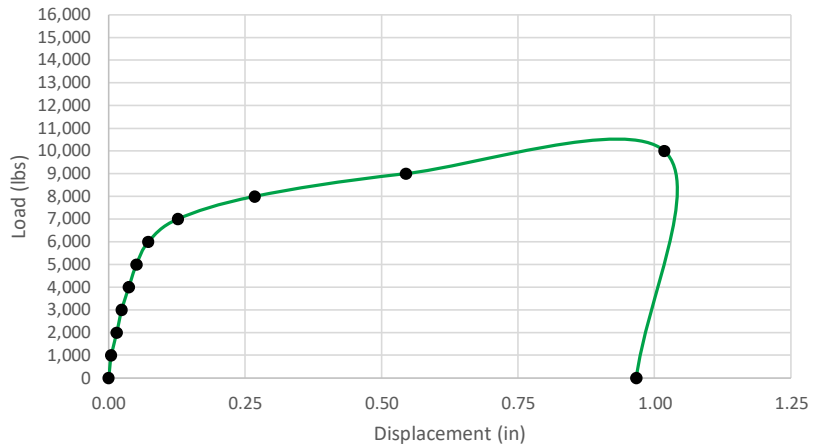
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.73 |
| 6 | 1.3 |
| 7 | 1.22 |
| 8 | 1.6 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 4.85 |

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 3,000 | 3,000 | 0.0300 | 0.0180 | 0.0240 |
| 1 | 4,000 | 4,000 | 0.0460 | 0.0280 | 0.0370 |
| 1 | 5,000 | 5,000 | 0.0600 | 0.0420 | 0.0510 |
| 1 | 6,000 | 6,000 | 0.0820 | 0.0640 | 0.0730 |
| 1 | 7,000 | 7,000 | 0.1340 | 0.1200 | 0.1270 |
| 1 | 8,000 | 8,000 | 0.2780 | 0.2580 | 0.2680 |
| 1 | 9,000 | 9,000 | 0.5500 | 0.5400 | 0.5450 |
| 1 | 10,000 | 10,000 | 1.0280 | 1.0080 | 1.0180 |
| 1 | 0 | 0 | 0.9700 | 0.9640 | 0.9670 |

**Compression Load Plot**




**Field Notes**

# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-098 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 12.5 |
| Location: | 45.33774, -120.78311 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 6.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 3.17 |
| 7 | 9.33 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 12.5 |

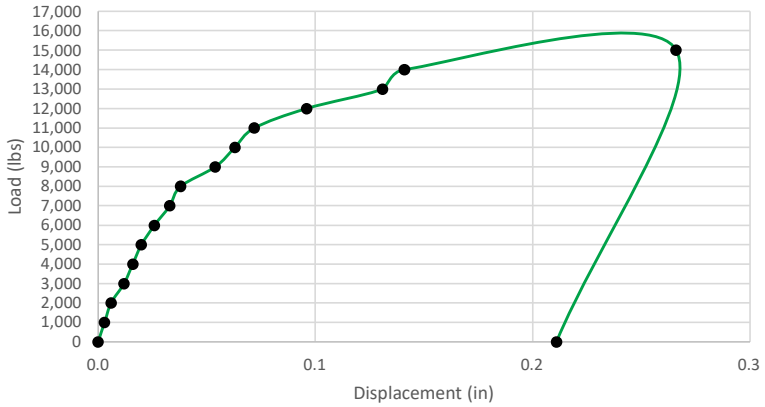
**Field Notes**

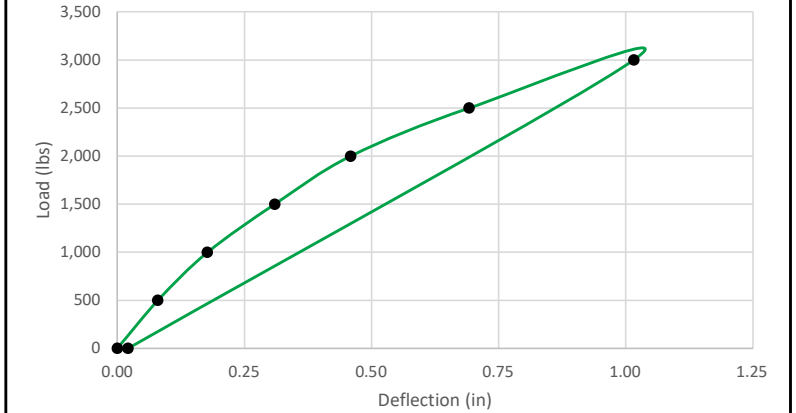
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 4,000 | 4,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 5,000 | 5,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 6,000 | 6,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 7,000 | 7,000 | 0.0340 | 0.0320 | 0.0330 |
| 1 | 8,000 | 8,000 | 0.0380 | 0.0380 | 0.0380 |
| 1 | 9,000 | 9,000 | 0.0540 | 0.0540 | 0.0540 |
| 1 | 10,000 | 10,000 | 0.0620 | 0.0640 | 0.0630 |
| 1 | 11,000 | 11,000 | 0.0720 | 0.0720 | 0.0720 |
| 1 | 12,000 | 12,000 | 0.0960 | 0.0960 | 0.0960 |
| 1 | 13,000 | 13,000 | 0.1300 | 0.1320 | 0.1310 |
| 1 | 14,000 | 14,000 | 0.1400 | 0.1420 | 0.1410 |
| 1 | 15,000 | 15,000 | 0.2660 | 0.2660 | 0.2660 |
| 1 | 0 | 0 | 0.2100 | 0.2120 | 0.2110 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0820 | 0.0780 | 0.0800 |
| 1 | 1,000 | 1,000 | 0.1800 | 0.1740 | 0.1770 |
| 1 | 1,500 | 1,500 | 0.3140 | 0.3060 | 0.3100 |
| 1 | 2,000 | 2,000 | 0.4640 | 0.4540 | 0.4590 |
| 1 | 2,500 | 2,500 | 0.7040 | 0.6800 | 0.6920 |
| 1 | 3,000 | 3,000 | 1.0300 | 1.0020 | 1.0160 |
| 1 | 0 | 0 | 0.0160 | 0.0260 | 0.0210 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-100 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 33.5 |
| Location: | 45.33289, -120.77213 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.38 |
| 5 | 4.54 |
| 6 | 5.47 |
| 7 | 13.89 |
| 8 | 7.25 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 33.53 |

**Field Notes**

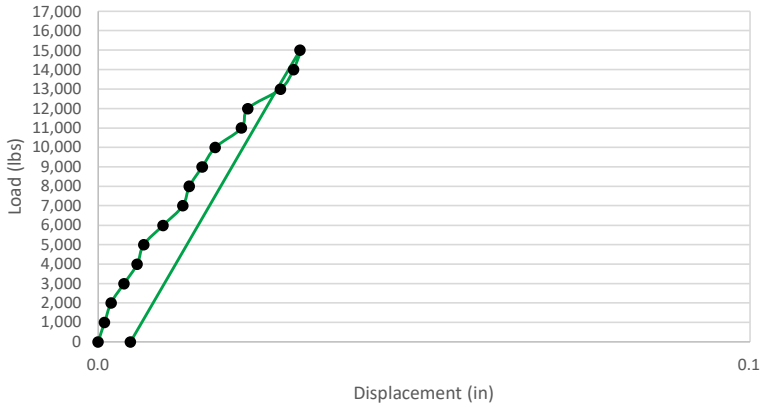
Rock encountered at 3 feet BGS during pre-drilling.

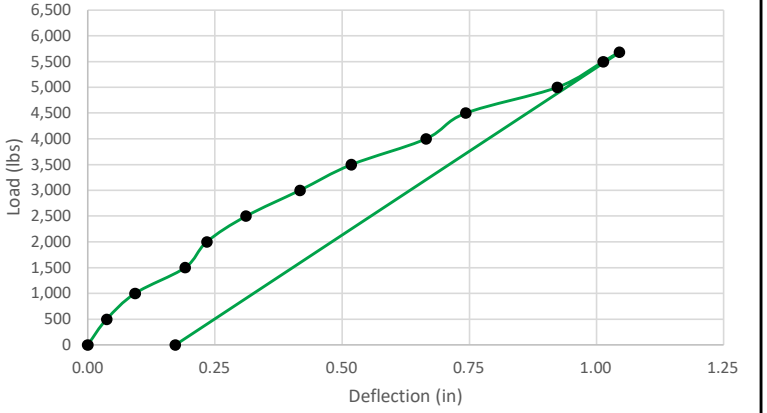
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0240 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0300 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0320 | 0.0230 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0400 | 0.0280 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0420 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0420 | 0.0310 |
| 1 | 0 | 0 | 0.0040 | 0.0060 | 0.0050 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0420 | 0.0320 | 0.0370 |
| 1 | 1,000 | 1,000 | 0.1000 | 0.0860 | 0.0930 |
| 1 | 1,500 | 1,500 | 0.2000 | 0.1820 | 0.1910 |
| 1 | 2,000 | 2,000 | 0.2440 | 0.2240 | 0.2340 |
| 1 | 2,500 | 2,500 | 0.3220 | 0.3000 | 0.3110 |
| 1 | 3,000 | 3,000 | 0.4300 | 0.4040 | 0.4170 |
| 1 | 3,500 | 3,500 | 0.5320 | 0.5040 | 0.5180 |
| 1 | 4,000 | 4,000 | 0.6800 | 0.6500 | 0.6650 |
| 1 | 4,500 | 4,500 | 0.7600 | 0.7260 | 0.7430 |
| 1 | 5,000 | 5,000 | 0.9400 | 0.9060 | 0.9230 |
| 1 | 5,500 | 5,500 | 1.0300 | 0.9960 | 1.0130 |
| 1 | 6,000 | 5,680 | 1.0620 | 1.0280 | 1.0450 |
| 1 | 0 | 0 | 0.1760 | 0.1680 | 0.1720 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-100 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/8/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 33.5 |
| Location: | 45.33289, -120.77213 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.7 |

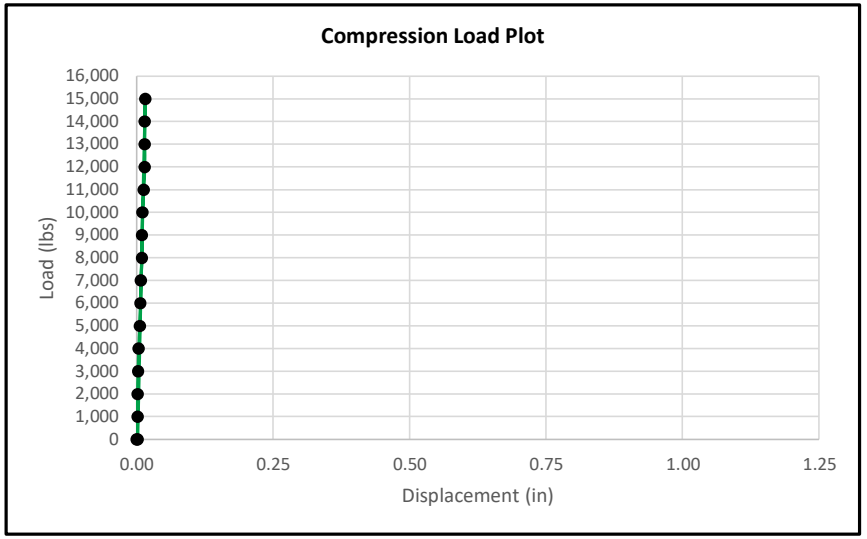
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.38 |
| 5 | 4.54 |
| 6 | 5.47 |
| 7 | 13.89 |
| 8 | 7.25 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 33.53 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0100 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0120 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0140 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0140 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0160 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0180 | 0.0130 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0200 | 0.0150 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0200 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0200 | 0.0150 |
| 1 | 15,000 | 15,000 | 0.0100 | 0.0220 | 0.0160 |
| 1 | 0 | 0 | 0.0040 | 0.0000 | 0.0020 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-101A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 1.1 |
| Location: | 45.33168, -120.78673 | Pre-Drill Depth (ft): | 6.0 | Avg. Installation Rate (sec/ft): | 1.1 |

**Embedment Data**

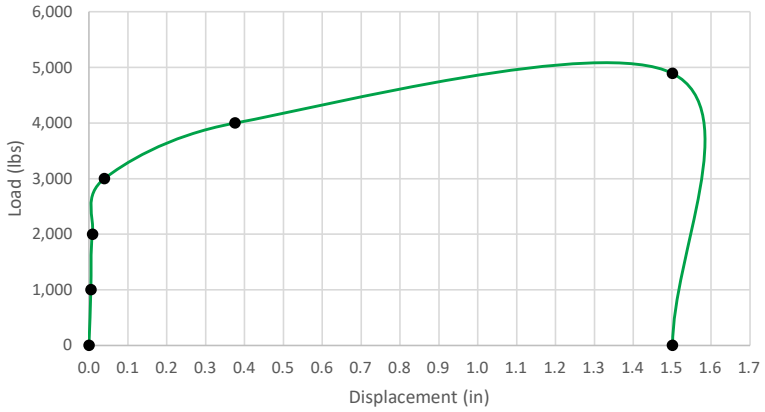
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 1.13 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 1.13 |

**Field Notes**

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0420 | 0.0380 | 0.0400 |
| 1 | 4,000 | 4,000 | 0.3780 | 0.3740 | 0.3760 |
| 1 | 5,000 | 4,890 | 1.5160 | 1.4860 | 1.5010 |
| 1 | 0 | 0 | 1.5160 | 1.4860 | 1.5010 |

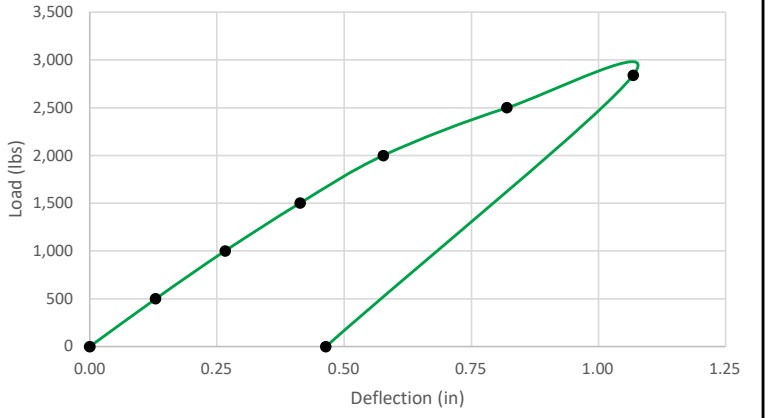
**Tensile (Uplift) Load Plot**




**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1320 | 0.1270 | 0.1295 |
| 1 | 1,000 | 1,000 | 0.2720 | 0.2600 | 0.2660 |
| 1 | 1,500 | 1,500 | 0.4200 | 0.4060 | 0.4130 |
| 1 | 2,000 | 2,000 | 0.5840 | 0.5700 | 0.5770 |
| 1 | 2,500 | 2,500 | 0.8260 | 0.8140 | 0.8200 |
| 1 | 3,000 | 2,840 | 1.0760 | 1.0600 | 1.0680 |
| 1 | 0 | 0 | 0.4500 | 0.4780 | 0.4640 |

**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-101B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 2.4 |
| Location: | 45.33168, -120.78673 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.2 |

**Embedment Data**

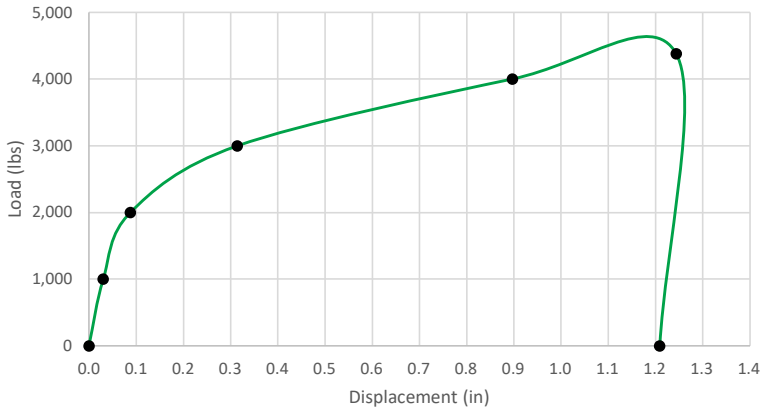
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.86 |
| 6 | 1.49 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 2.35 |

**Field Notes**

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0260 | 0.0340 | 0.0300 |
| 1 | 2,000 | 2,000 | 0.0800 | 0.0960 | 0.0880 |
| 1 | 3,000 | 3,000 | 0.3080 | 0.3200 | 0.3140 |
| 1 | 4,000 | 4,000 | 0.8880 | 0.9060 | 0.8970 |
| 1 | 5,000 | 4,380 | 1.2360 | 1.2520 | 1.2440 |
| 1 | 0 | 0 | 1.2080 | 1.2100 | 1.2090 |

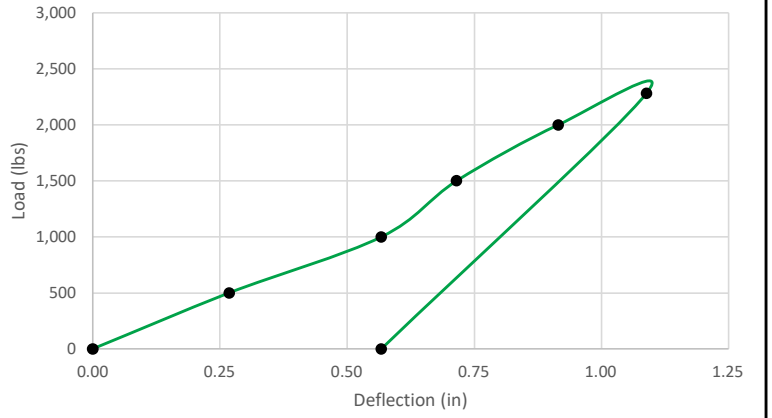
**Tensile (Uplift) Load Plot**




**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.2600 | 0.2760 | 0.2680 |
| 1 | 1,000 | 1,000 | 0.5560 | 0.5780 | 0.5670 |
| 1 | 1,500 | 1,500 | 0.7040 | 0.7260 | 0.7150 |
| 1 | 2,000 | 2,000 | 0.9020 | 0.9280 | 0.9150 |
| 1 | 2,500 | 2,280 | 1.0740 | 1.1020 | 1.0880 |
| 1 | 0 | 0 | 0.5660 | 0.5680 | 0.5670 |

**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-102 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 136.7 |
| Location: | 45.34302, -120.79663 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 12.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.19 |
| 3 | 3.68 |
| 4 | 2.88 |
| 5 | 3.77 |
| 6 | 7.54 |
| 7 | 11.76 |
| 8 | 16.16 |
| 9 | 19.53 |
| 10 | 17.63 |
| 11 | 20.48 |
| 12 | 32.03 |
| Total Time (s) = | 136.65 |

**Field Notes**

Rock encountered at 1.5 feet BGS during pre-drilling.

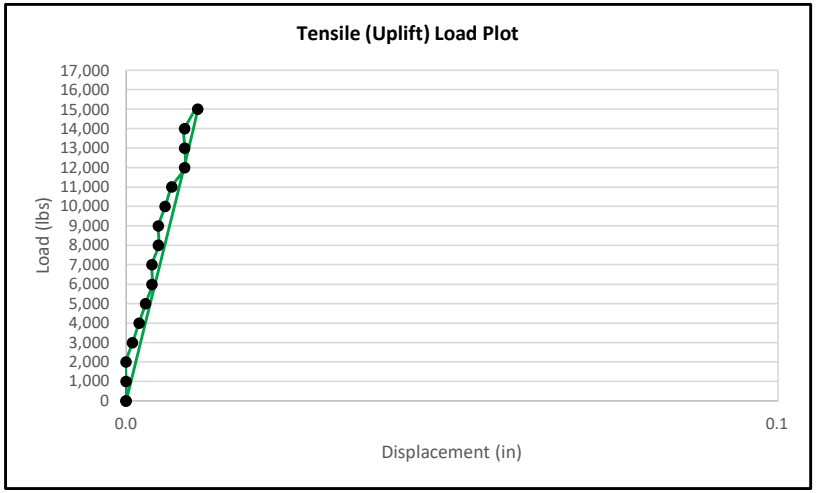
**Tensile (Uplift) Testing**

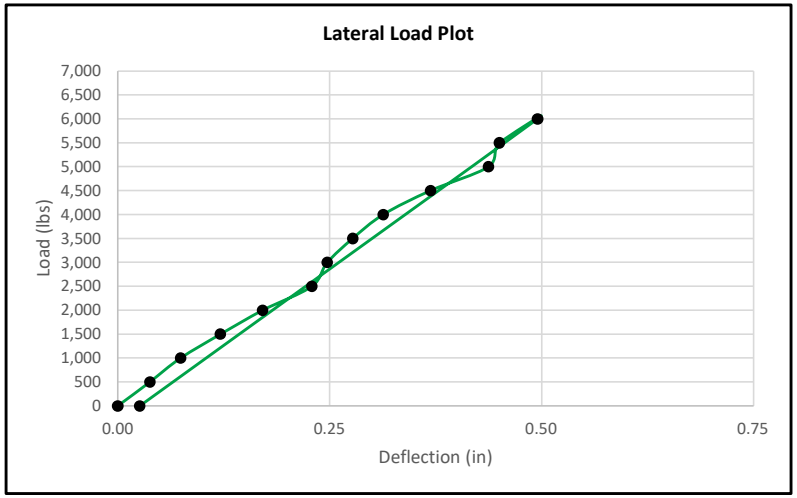
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 4,000 | 4,000 | 0.0000 | 0.0040 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 8,000 | 8,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 9,000 | 9,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 11,000 | 11,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 13,000 | 13,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 14,000 | 14,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 15,000 | 15,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0380 | 0.0380 | 0.0380 |
| 1 | 1,000 | 1,000 | 0.0740 | 0.0740 | 0.0740 |
| 1 | 1,500 | 1,500 | 0.1240 | 0.1180 | 0.1210 |
| 1 | 2,000 | 2,000 | 0.1760 | 0.1660 | 0.1710 |
| 1 | 2,500 | 2,500 | 0.2360 | 0.2220 | 0.2290 |
| 1 | 3,000 | 3,000 | 0.2540 | 0.2400 | 0.2470 |
| 1 | 3,500 | 3,500 | 0.2840 | 0.2700 | 0.2770 |
| 1 | 4,000 | 4,000 | 0.3200 | 0.3060 | 0.3130 |
| 1 | 4,500 | 4,500 | 0.3740 | 0.3640 | 0.3690 |
| 1 | 5,000 | 5,000 | 0.4400 | 0.4340 | 0.4370 |
| 1 | 5,500 | 5,500 | 0.4540 | 0.4460 | 0.4500 |
| 1 | 6,000 | 6,000 | 0.4980 | 0.4920 | 0.4950 |
| 1 | 0 | 0 | 0.0140 | 0.0380 | 0.0260 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-106A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 3.9 |
| Location: | 45.32815, -120.79835 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 1.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 0.87 |
| 7 | 1.41 |
| 8 | 1.61 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 3.89 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 3,000 | 3,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 4,000 | 4,000 | 0.0400 | 0.0380 | 0.0390 |
| 1 | 5,000 | 5,000 | 0.0720 | 0.0740 | 0.0730 |
| 1 | 6,000 | 6,000 | 0.2640 | 0.2660 | 0.2650 |
| 1 | 7,000 | 6,480 | 1.0340 | 1.0380 | 1.0360 |
| 1 | 0 | 0 | 1.0000 | 1.0040 | 1.0020 |

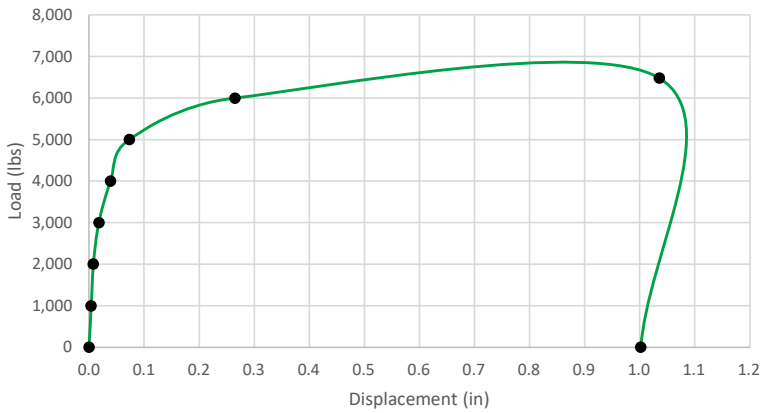
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1080 | 0.1140 | 0.1110 |
| 1 | 1,000 | 1,000 | 0.2340 | 0.2440 | 0.2390 |
| 1 | 1,500 | 1,500 | 0.3460 | 0.3580 | 0.3520 |
| 1 | 2,000 | 2,000 | 0.4980 | 0.5200 | 0.5090 |
| 1 | 2,500 | 2,500 | 0.6220 | 0.6420 | 0.6320 |
| 1 | 3,000 | 3,000 | 0.7360 | 0.7560 | 0.7460 |
| 1 | 3,500 | 3,500 | 0.8980 | 0.9200 | 0.9090 |
| 1 | 4,000 | 3,890 | 1.0640 | 1.0880 | 1.0760 |
| 1 | 0 | 0 | 0.0840 | 0.1040 | 0.0940 |

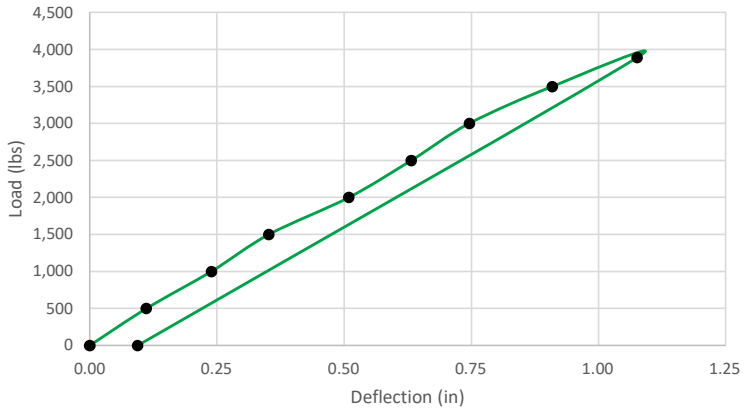
**Field Notes**

Rock encountered at 8 feet BGS during pre-drilling.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-106B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.8 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 18.1 |
| Location: | 45.32815, -120.79835 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 4.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.42 |
| 5 | 1.32 |
| 6 | 1.41 |
| 7 | 2.87 |
| 8 | 12.04 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 18.06 |

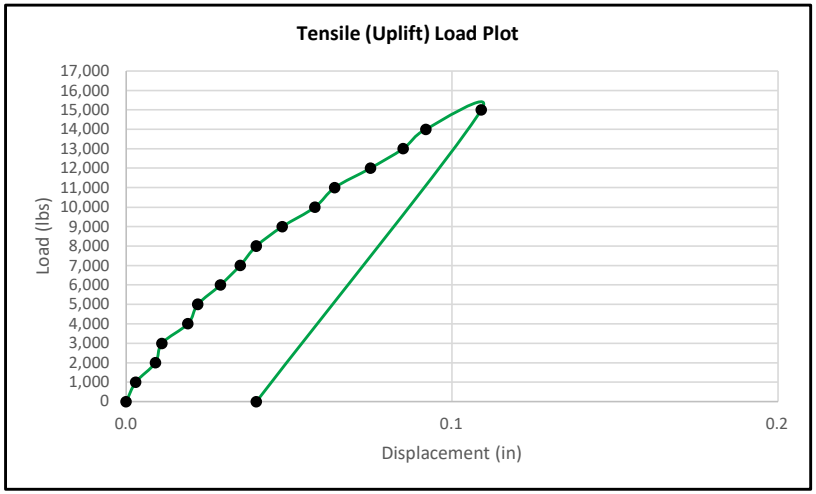
**Field Notes**

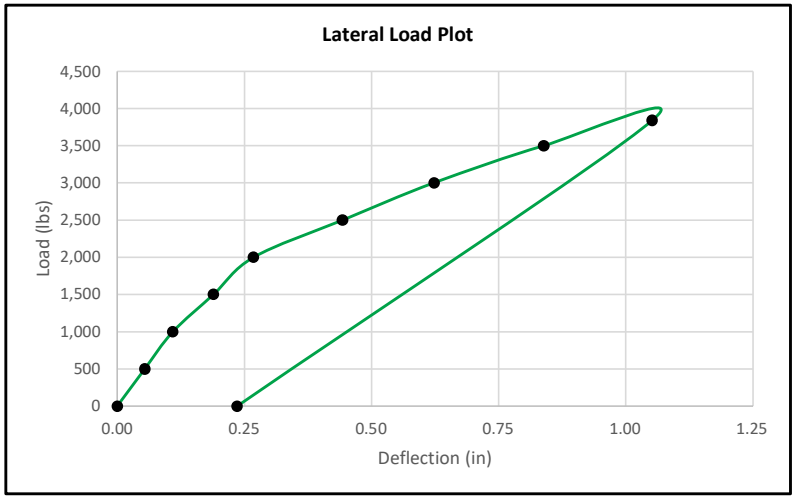
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 4,000 | 4,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 5,000 | 5,000 | 0.0220 | 0.0220 | 0.0220 |
| 1 | 6,000 | 6,000 | 0.0300 | 0.0280 | 0.0290 |
| 1 | 7,000 | 7,000 | 0.0360 | 0.0340 | 0.0350 |
| 1 | 8,000 | 8,000 | 0.0400 | 0.0400 | 0.0400 |
| 1 | 9,000 | 9,000 | 0.0480 | 0.0480 | 0.0480 |
| 1 | 10,000 | 10,000 | 0.0580 | 0.0580 | 0.0580 |
| 1 | 11,000 | 11,000 | 0.0640 | 0.0640 | 0.0640 |
| 1 | 12,000 | 12,000 | 0.0740 | 0.0760 | 0.0750 |
| 1 | 13,000 | 13,000 | 0.0840 | 0.0860 | 0.0850 |
| 1 | 14,000 | 14,000 | 0.0920 | 0.0920 | 0.0920 |
| 1 | 15,000 | 15,000 | 0.1080 | 0.1100 | 0.1090 |
| 1 | 0 | 0 | 0.0400 | 0.0400 | 0.0400 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0560 | 0.0520 | 0.0540 |
| 1 | 1,000 | 1,000 | 0.1120 | 0.1060 | 0.1090 |
| 1 | 1,500 | 1,500 | 0.1920 | 0.1860 | 0.1890 |
| 1 | 2,000 | 2,000 | 0.2720 | 0.2640 | 0.2680 |
| 1 | 2,500 | 2,500 | 0.4500 | 0.4360 | 0.4430 |
| 1 | 3,000 | 3,000 | 0.6320 | 0.6140 | 0.6230 |
| 1 | 3,500 | 3,500 | 0.8460 | 0.8320 | 0.8390 |
| 1 | 4,000 | 3,840 | 1.0840 | 1.0200 | 1.0520 |
| 1 | 0 | 0 | 0.2420 | 0.2300 | 0.2360 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-106B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.8 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 18.1 |
| Location: | 45.32815, -120.79835 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 4.3 |

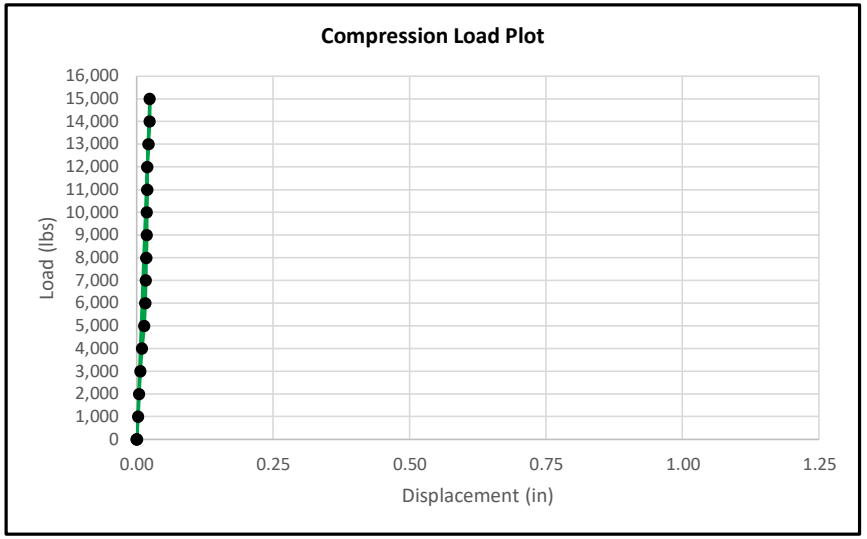
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.42 |
| 5 | 1.32 |
| 6 | 1.41 |
| 7 | 2.87 |
| 8 | 12.04 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 18.06 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0020 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0040 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0060 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0200 | 0.0080 | 0.0140 |
| 1 | 6,000 | 6,000 | 0.0220 | 0.0100 | 0.0160 |
| 1 | 7,000 | 7,000 | 0.0240 | 0.0100 | 0.0170 |
| 1 | 8,000 | 8,000 | 0.0240 | 0.0120 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0240 | 0.0140 | 0.0190 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0220 | 0.0220 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0240 | 0.0240 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0240 | 0.0240 |
| 1 | 0 | 0 | 0.0020 | 0.0000 | 0.0010 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-107 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 107.8 |
| Location: | 45.32292, -120.79782 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 15.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 3.44 |
| 5 | 7.9 |
| 6 | 11.65 |
| 7 | 13.48 |
| 8 | 15.26 |
| 9 | 18.84 |
| 10 | 37.24 |
| 11 | |
| 12 | |
| Total Time (s) = | 107.81 |

**Field Notes**

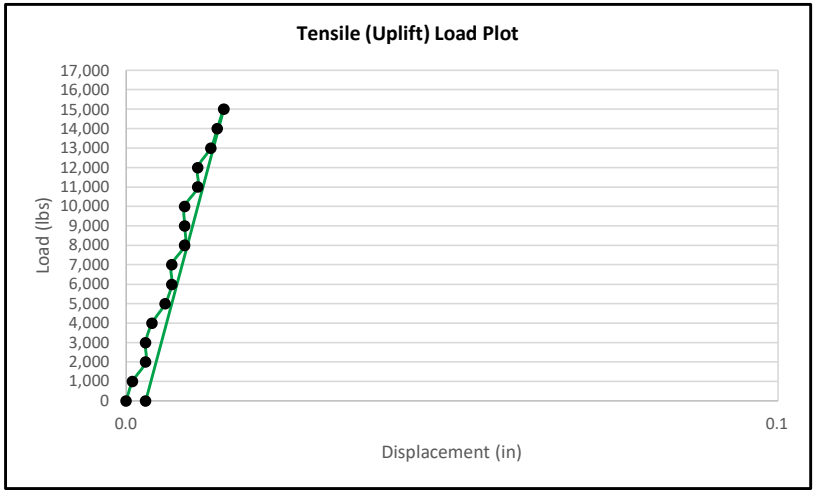
Rock encountered at 3.5 feet BGS during pre-drilling.

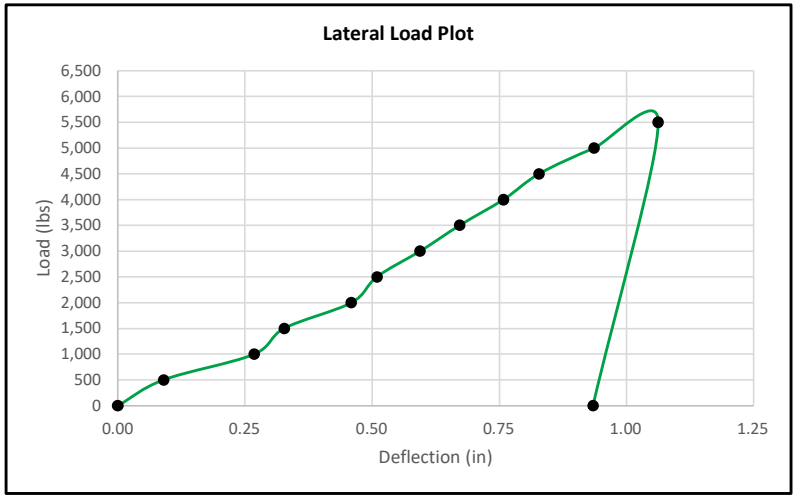
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0020 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0920 | 0.0880 | 0.0900 |
| 1 | 1,000 | 1,000 | 0.2660 | 0.2700 | 0.2680 |
| 1 | 1,500 | 1,500 | 0.3220 | 0.3320 | 0.3270 |
| 1 | 2,000 | 2,000 | 0.4480 | 0.4700 | 0.4590 |
| 1 | 2,500 | 2,500 | 0.5030 | 0.5160 | 0.5095 |
| 1 | 3,000 | 3,000 | 0.5780 | 0.6100 | 0.5940 |
| 1 | 3,500 | 3,500 | 0.6540 | 0.6900 | 0.6720 |
| 1 | 4,000 | 4,000 | 0.7380 | 0.7780 | 0.7580 |
| 1 | 4,500 | 4,500 | 0.8060 | 0.8500 | 0.8280 |
| 1 | 5,000 | 5,000 | 0.9060 | 0.9660 | 0.9360 |
| 1 | 5,500 | 5,500 | 1.0220 | 1.1020 | 1.0620 |
| 1 | 0 | 0 | 0.1280 | 1.7400 | 0.9340 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-109 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 19.9 |
| Location: | 45.31858, -120.79162 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 5.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.65 |
| 6 | 4.91 |
| 7 | 7.88 |
| 8 | 5.41 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 19.85 |

**Field Notes**

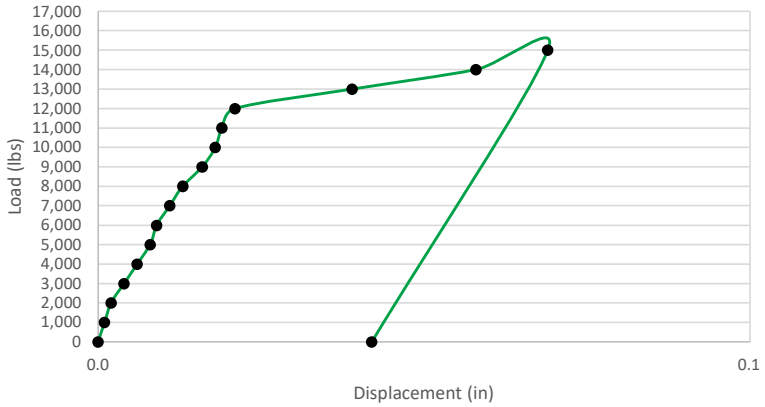
Rock encountered at 4 feet BGS during pre-drilling.

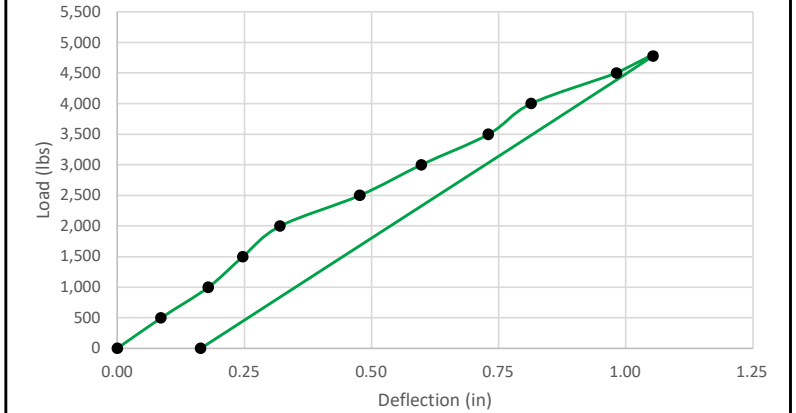
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0000 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0020 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0380 | 0.0400 | 0.0390 |
| 1 | 14,000 | 14,000 | 0.0560 | 0.0600 | 0.0580 |
| 1 | 15,000 | 15,000 | 0.0680 | 0.0700 | 0.0690 |
| 1 | 0 | 0 | 0.0440 | 0.0400 | 0.0420 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1020 | 0.0700 | 0.0860 |
| 1 | 1,000 | 1,000 | 0.1920 | 0.1660 | 0.1790 |
| 1 | 1,500 | 1,500 | 0.2580 | 0.2360 | 0.2470 |
| 1 | 2,000 | 2,000 | 0.3320 | 0.3080 | 0.3200 |
| 1 | 2,500 | 2,500 | 0.4900 | 0.4640 | 0.4770 |
| 1 | 3,000 | 3,000 | 0.6120 | 0.5840 | 0.5980 |
| 1 | 3,500 | 3,500 | 0.7440 | 0.7160 | 0.7300 |
| 1 | 4,000 | 4,000 | 0.8280 | 0.8000 | 0.8140 |
| 1 | 4,500 | 4,500 | 0.9920 | 0.9720 | 0.9820 |
| 1 | 5,000 | 4,780 | 1.0620 | 1.0460 | 1.0540 |
| 1 | 0 | 0 | 0.1680 | 0.1600 | 0.1640 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-111A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 4.6 |
| Location: | 45.32212, -120.77860 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 1.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.87 |
| 6 | 1.02 |
| 7 | 2.71 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 4.6 |

**Tensile (Uplift) Testing**

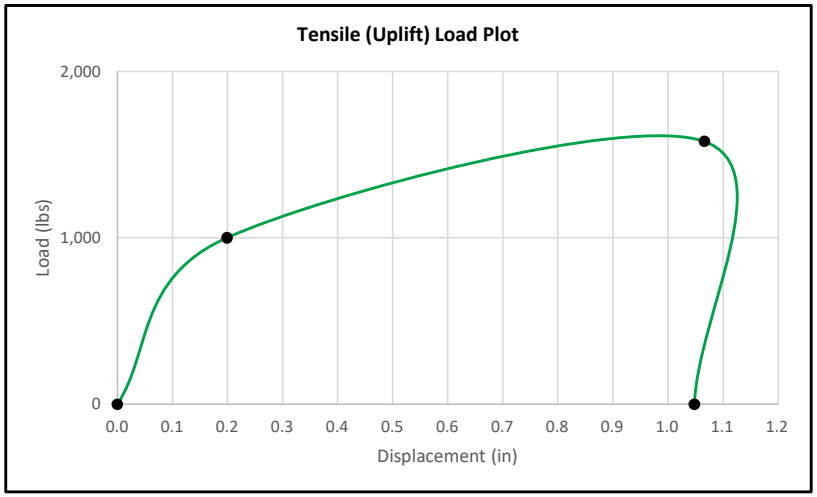
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.2000 | 0.1980 | 0.1990 |
| 1 | 2,000 | 1,580 | 1.0680 | 1.0640 | 1.0660 |
| 1 | 0 | 0 | 1.0480 | 1.0480 | 1.0480 |

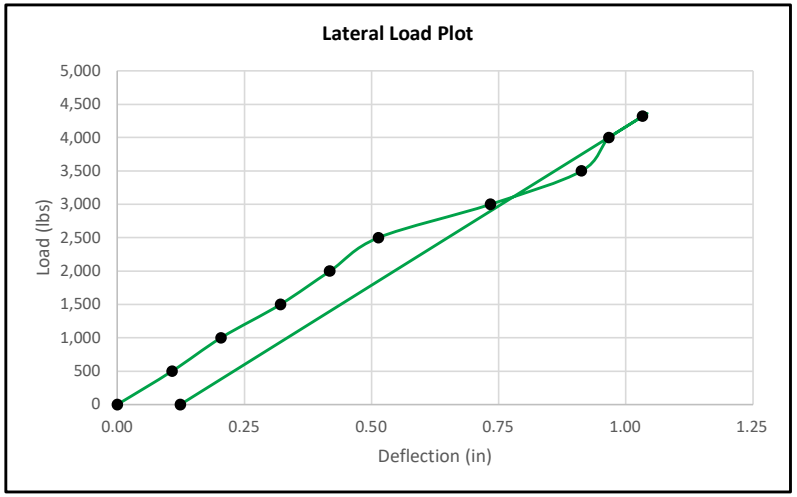
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1040 | 0.1120 | 0.1080 |
| 1 | 1,000 | 1,000 | 0.2000 | 0.2080 | 0.2040 |
| 1 | 1,500 | 1,500 | 0.3180 | 0.3240 | 0.3210 |
| 1 | 2,000 | 2,000 | 0.4140 | 0.4220 | 0.4180 |
| 1 | 2,500 | 2,500 | 0.5100 | 0.5180 | 0.5140 |
| 1 | 3,000 | 3,000 | 0.7300 | 0.7380 | 0.7340 |
| 1 | 3,500 | 3,500 | 0.9100 | 0.9160 | 0.9130 |
| 1 | 4,000 | 4,000 | 0.9640 | 0.9700 | 0.9670 |
| 1 | 4,500 | 4,320 | 1.0300 | 1.0360 | 1.0330 |
| 1 | 0 | 0 | 0.1220 | 0.1260 | 0.1240 |

**Field Notes**

Rock encountered at 7 feet BGS during pre-drilling.



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-111B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 12.1 |
| Location: | 45.32212, -120.77860 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.67 |
| 2 | 0.97 |
| 3 | 1.39 |
| 4 | 1.51 |
| 5 | 2.68 |
| 6 | 1.27 |
| 7 | 3.59 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 12.08 |

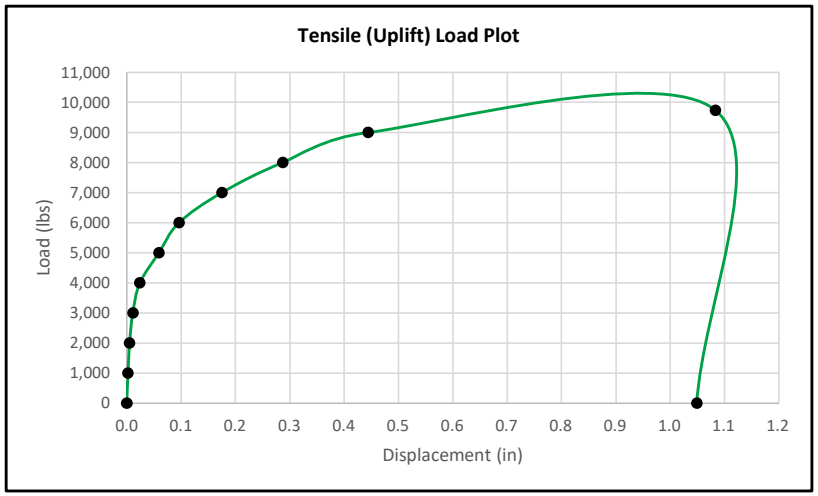
**Tensile (Uplift) Testing**

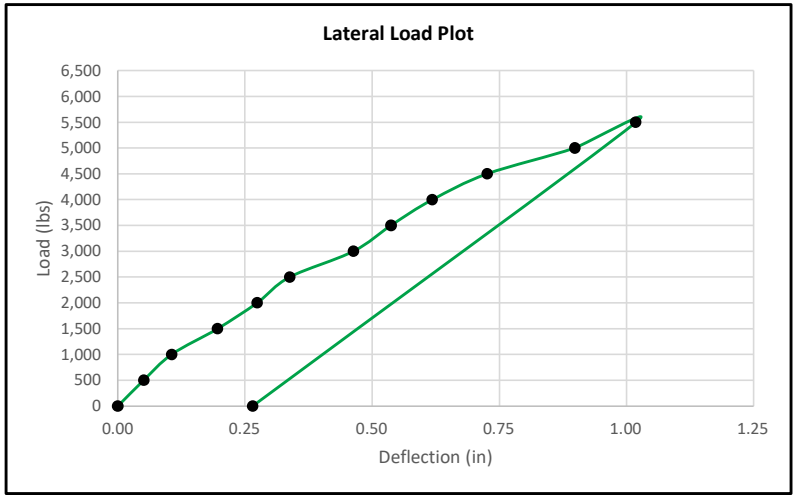
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 4,000 | 4,000 | 0.0240 | 0.0240 | 0.0240 |
| 1 | 5,000 | 5,000 | 0.0580 | 0.0600 | 0.0590 |
| 1 | 6,000 | 6,000 | 0.0940 | 0.0980 | 0.0960 |
| 1 | 7,000 | 7,000 | 0.1740 | 0.1760 | 0.1750 |
| 1 | 8,000 | 8,000 | 0.2840 | 0.2900 | 0.2870 |
| 1 | 9,000 | 9,000 | 0.4400 | 0.4480 | 0.4440 |
| 1 | 10,000 | 9,740 | 1.0800 | 1.0860 | 1.0830 |
| 1 | 0 | 0 | 1.0500 | 1.0480 | 1.0490 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0500 | 0.0520 | 0.0510 |
| 1 | 1,000 | 1,000 | 0.1060 | 0.1060 | 0.1060 |
| 1 | 1,500 | 1,500 | 0.1980 | 0.1940 | 0.1960 |
| 1 | 2,000 | 2,000 | 0.2740 | 0.2740 | 0.2740 |
| 1 | 2,500 | 2,500 | 0.3400 | 0.3360 | 0.3380 |
| 1 | 3,000 | 3,000 | 0.4640 | 0.4620 | 0.4630 |
| 1 | 3,500 | 3,500 | 0.5380 | 0.5360 | 0.5370 |
| 1 | 4,000 | 4,000 | 0.6180 | 0.6180 | 0.6180 |
| 1 | 4,500 | 4,500 | 0.7260 | 0.7260 | 0.7260 |
| 1 | 5,000 | 5,000 | 0.8960 | 0.9000 | 0.8980 |
| 1 | 5,500 | 5,500 | 1.0160 | 1.0200 | 1.0180 |
| 1 | 0 | 0 | 0.2680 | 0.2620 | 0.2650 |

**Field Notes**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-111B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 12.1 |
| Location: | 45.32212, -120.77860 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.9 |

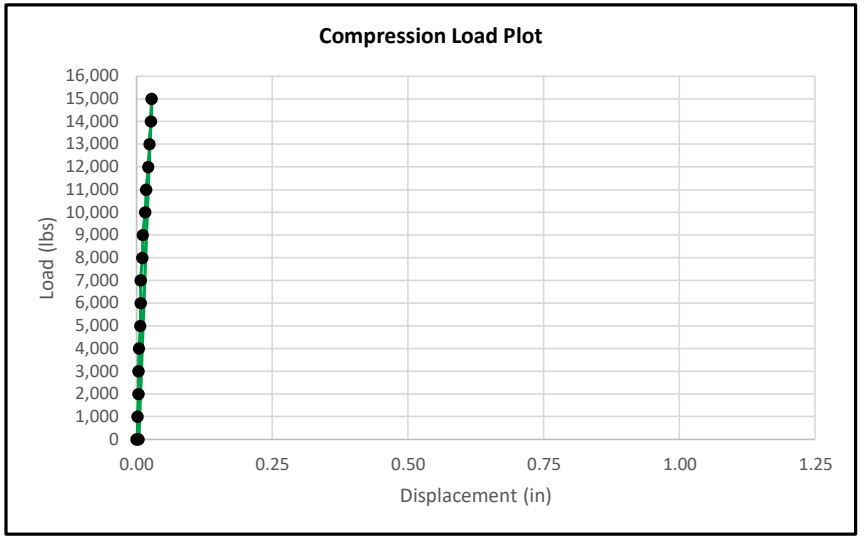
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.67 |
| 2 | 0.97 |
| 3 | 1.39 |
| 4 | 1.51 |
| 5 | 2.68 |
| 6 | 1.27 |
| 7 | 3.59 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 12.08 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0120 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0140 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0200 | 0.0240 |
| 1 | 14,000 | 14,000 | 0.0320 | 0.0220 | 0.0270 |
| 1 | 15,000 | 15,000 | 0.0320 | 0.0240 | 0.0280 |
| 1 | 0 | 0 | 0.0040 | 0.0040 | 0.0040 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-112 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 11.9 |
| Location: | 45.31929, -120.77229 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 2.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.12 |
| 6 | 1.76 |
| 7 | 1.51 |
| 8 | 2.68 |
| 9 | 1.27 |
| 10 | 3.59 |
| 11 | |
| 12 | |
| Total Time (s) = | 11.93 |

**Field Notes**

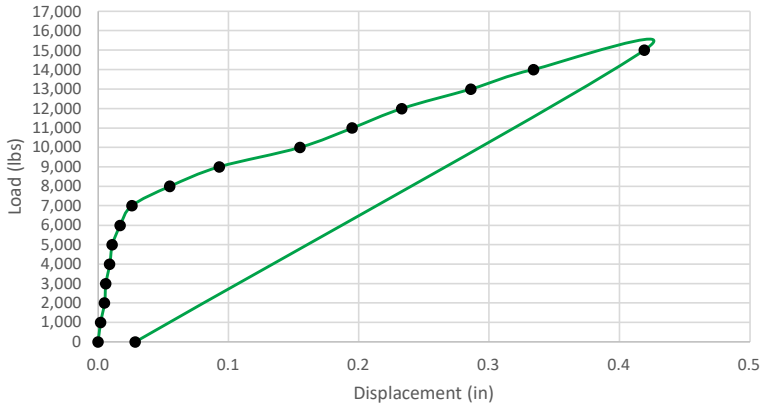
Rock encountered at 5.5 feet BGS during pre-drilling.

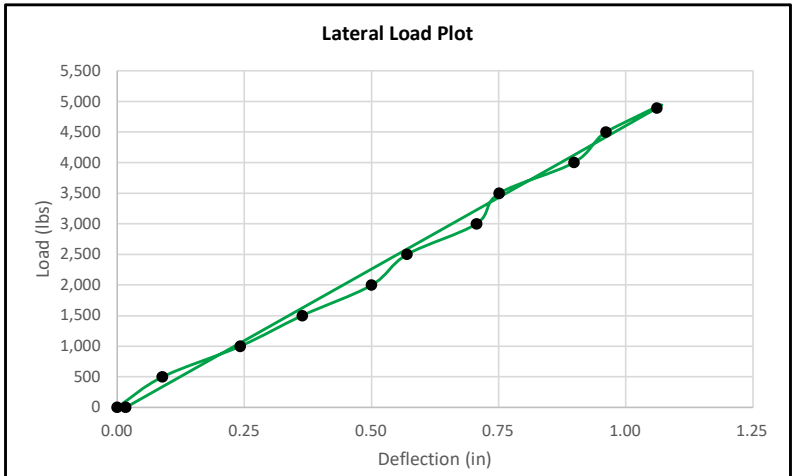
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 7,000 | 7,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 8,000 | 8,000 | 0.0580 | 0.0520 | 0.0550 |
| 1 | 9,000 | 9,000 | 0.0960 | 0.0900 | 0.0930 |
| 1 | 10,000 | 10,000 | 0.1600 | 0.1500 | 0.1550 |
| 1 | 11,000 | 11,000 | 0.2000 | 0.1900 | 0.1950 |
| 1 | 12,000 | 12,000 | 0.2380 | 0.2280 | 0.2330 |
| 1 | 13,000 | 13,000 | 0.2920 | 0.2800 | 0.2860 |
| 1 | 14,000 | 14,000 | 0.3400 | 0.3280 | 0.3340 |
| 1 | 15,000 | 15,000 | 0.4260 | 0.4120 | 0.4190 |
| 1 | 0 | 0 | 0.0260 | 0.0310 | 0.0285 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0920 | 0.0860 | 0.0890 |
| 1 | 1,000 | 1,000 | 0.2480 | 0.2360 | 0.2420 |
| 1 | 1,500 | 1,500 | 0.3700 | 0.3580 | 0.3640 |
| 1 | 2,000 | 2,000 | 0.5100 | 0.4900 | 0.5000 |
| 1 | 2,500 | 2,500 | 0.5760 | 0.5640 | 0.5700 |
| 1 | 3,000 | 3,000 | 0.7200 | 0.6930 | 0.7065 |
| 1 | 3,500 | 3,500 | 0.7640 | 0.7380 | 0.7510 |
| 1 | 4,000 | 4,000 | 0.9120 | 0.8840 | 0.8980 |
| 1 | 4,500 | 4,500 | 0.9760 | 0.9460 | 0.9610 |
| 1 | 5,000 | 4,890 | 1.0760 | 1.0460 | 1.0610 |
| 1 | 0 | 0 | 0.0260 | 0.0080 | 0.0170 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-114 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 125.4 |
| Location: | 45.31352, -120.77968 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 13.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.72 |
| 5 | 4.65 |
| 6 | 5.03 |
| 7 | 7.28 |
| 8 | 8.77 |
| 9 | 13.85 |
| 10 | 22.71 |
| 11 | 25.88 |
| 12 | 34.48 |
| Total Time (s) = | 125.37 |

**Field Notes**

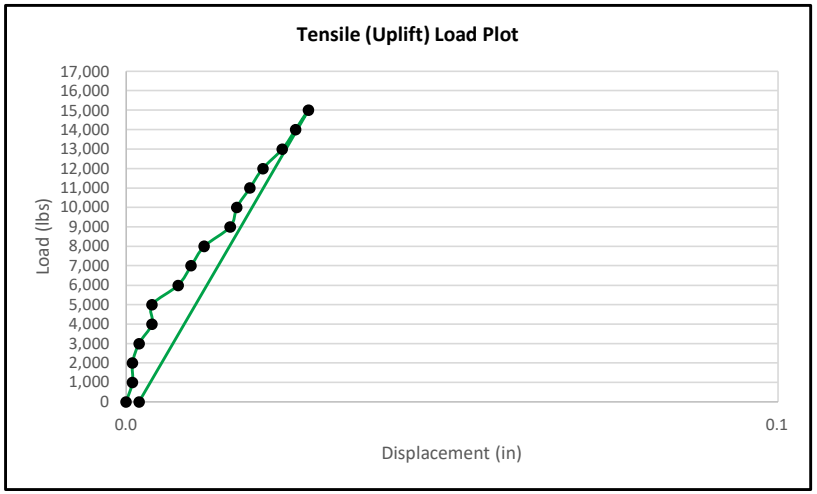
Rock encountered at 3 feet BGS during pre-drilling.

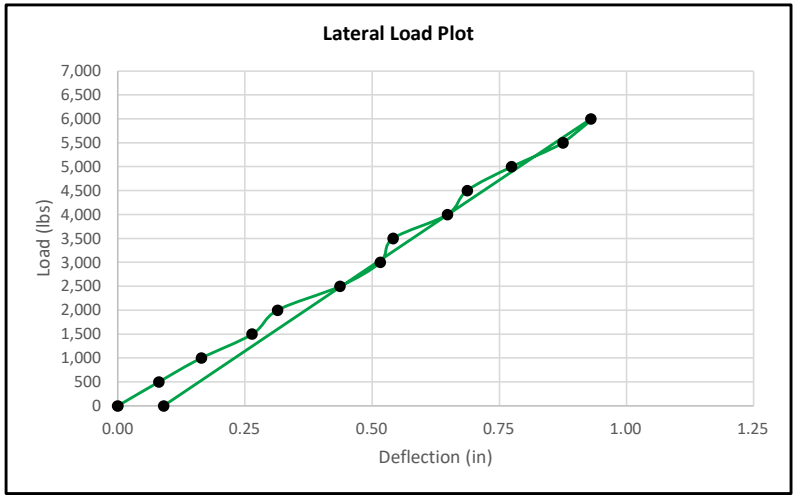
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0040 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 12,000 | 12,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0300 | 0.0180 | 0.0240 |
| 1 | 14,000 | 14,000 | 0.0320 | 0.0200 | 0.0260 |
| 1 | 15,000 | 15,000 | 0.0340 | 0.0220 | 0.0280 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0780 | 0.0840 | 0.0810 |
| 1 | 1,000 | 1,000 | 0.1620 | 0.1660 | 0.1640 |
| 1 | 1,500 | 1,500 | 0.2620 | 0.2660 | 0.2640 |
| 1 | 2,000 | 2,000 | 0.3120 | 0.3160 | 0.3140 |
| 1 | 2,500 | 2,500 | 0.4360 | 0.4380 | 0.4370 |
| 1 | 3,000 | 3,000 | 0.5140 | 0.5180 | 0.5160 |
| 1 | 3,500 | 3,500 | 0.5400 | 0.5420 | 0.5410 |
| 1 | 4,000 | 4,000 | 0.6460 | 0.6500 | 0.6480 |
| 1 | 4,500 | 4,500 | 0.6860 | 0.6880 | 0.6870 |
| 1 | 5,000 | 5,000 | 0.7720 | 0.7760 | 0.7740 |
| 1 | 5,500 | 5,500 | 0.8740 | 0.8760 | 0.8750 |
| 1 | 6,000 | 6,000 | 0.9300 | 0.9300 | 0.9300 |
| 1 | 0 | 0 | 0.0900 | 0.0900 | 0.0900 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-114 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 125.4 |
| Location: | 45.31352, -120.77968 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 13.9 |

**Embedment Data**

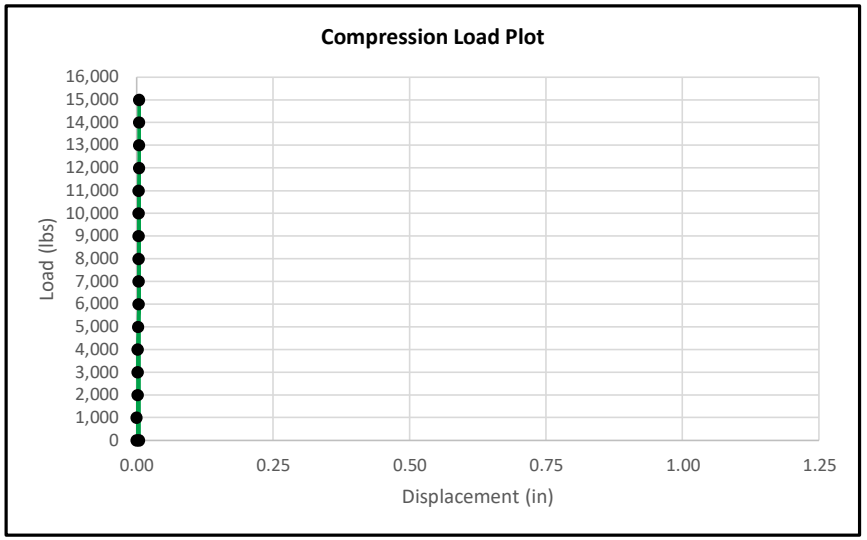
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.72 |
| 5 | 4.65 |
| 6 | 5.03 |
| 7 | 7.28 |
| 8 | 8.77 |
| 9 | 13.85 |
| 10 | 22.71 |
| 11 | 25.88 |
| 12 | 34.48 |
| Total Time (s) = | 125.37 |

**Field Notes**

Rock encountered at 3 feet BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 8,000 | 8,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 9,000 | 9,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 10,000 | 10,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 11,000 | 11,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 12,000 | 12,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 13,000 | 13,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 14,000 | 14,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 15,000 | 15,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 0 | 0 | 0.0060 | 0.0040 | 0.0050 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-117 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/19/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 26.2 |
| Location: | 45.31037, -120.77315 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.6 |
| 4 | 2.24 |
| 5 | 4.39 |
| 6 | 4.77 |
| 7 | 7.06 |
| 8 | 7.18 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 26.24 |

**Field Notes**

Rock encountered at 3.5 feet BGS during pre-drilling.

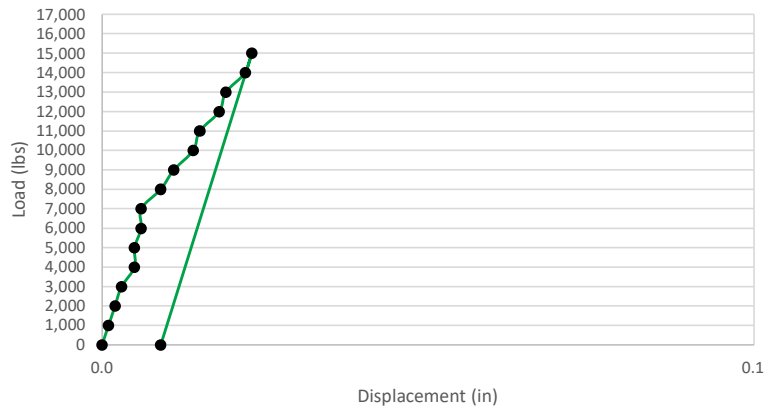
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0040 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 12,000 | 12,000 | 0.0220 | 0.0140 | 0.0180 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0180 | 0.0230 |
| 1 | 0 | 0 | 0.0100 | 0.0080 | 0.0090 |

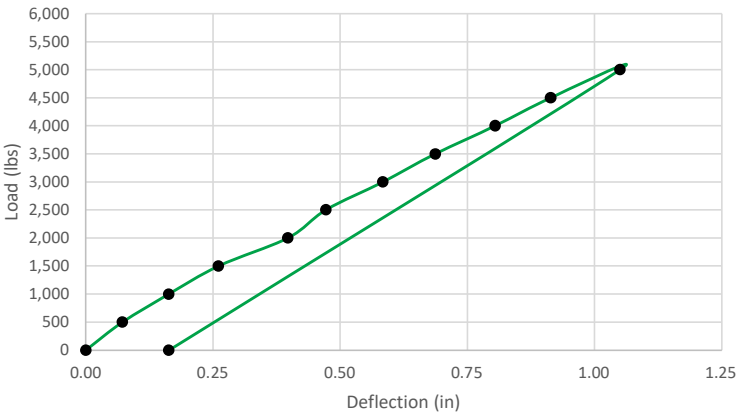
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0800 | 0.0720 |
| 1 | 1,000 | 1,000 | 0.1480 | 0.1780 | 0.1630 |
| 1 | 1,500 | 1,500 | 0.2420 | 0.2800 | 0.2610 |
| 1 | 2,000 | 2,000 | 0.3740 | 0.4200 | 0.3970 |
| 1 | 2,500 | 2,500 | 0.4480 | 0.4960 | 0.4720 |
| 1 | 3,000 | 3,000 | 0.5600 | 0.6080 | 0.5840 |
| 1 | 3,500 | 3,500 | 0.6620 | 0.7120 | 0.6870 |
| 1 | 4,000 | 4,000 | 0.7800 | 0.8300 | 0.8050 |
| 1 | 4,500 | 4,500 | 0.8900 | 0.9380 | 0.9140 |
| 1 | 5,000 | 5,000 | 1.0260 | 1.0740 | 1.0500 |
| 1 | 0 | 0 | 0.1720 | 0.1540 | 0.1630 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-PV-118 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 122.5 |
| Location: | 45.30681, -120.78605 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 17.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.74 |
| 4 | 10.73 |
| 5 | 14.13 |
| 6 | 19.42 |
| 7 | 21.72 |
| 8 | 18.17 |
| 9 | 36.55 |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 122.46 |

**Field Notes**

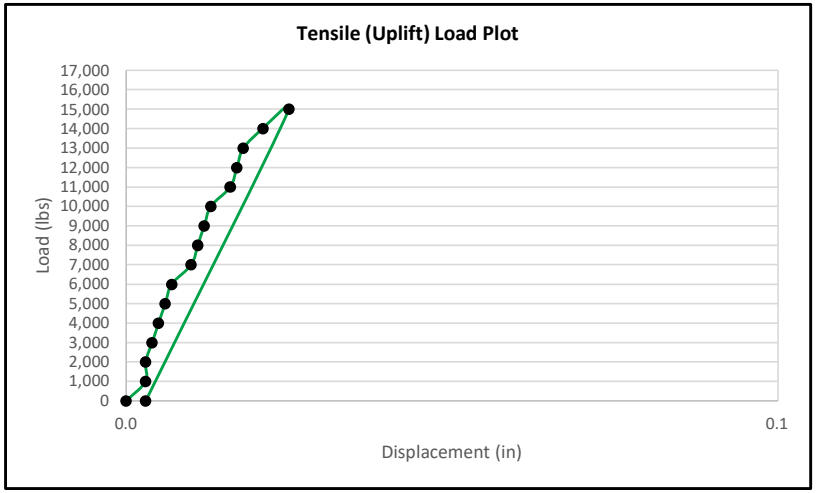
Rock encountered at 2 feet BGS during pre-drilling.
Pile refusal encountered at 9 feet BGS during install.

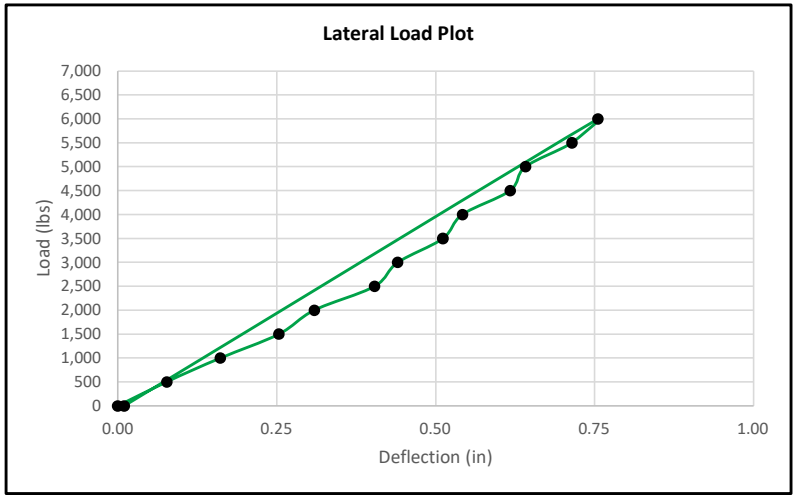
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0020 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0240 | 0.0180 |
| 1 | 14,000 | 14,000 | 0.0140 | 0.0280 | 0.0210 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0320 | 0.0250 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0800 | 0.0740 | 0.0770 |
| 1 | 1,000 | 1,000 | 0.1620 | 0.1600 | 0.1610 |
| 1 | 1,500 | 1,500 | 0.2520 | 0.2540 | 0.2530 |
| 1 | 2,000 | 2,000 | 0.3080 | 0.3100 | 0.3090 |
| 1 | 2,500 | 2,500 | 0.4000 | 0.4080 | 0.4040 |
| 1 | 3,000 | 3,000 | 0.4360 | 0.4440 | 0.4400 |
| 1 | 3,500 | 3,500 | 0.5060 | 0.5160 | 0.5110 |
| 1 | 4,000 | 4,000 | 0.5360 | 0.5480 | 0.5420 |
| 1 | 4,500 | 4,500 | 0.6100 | 0.6240 | 0.6170 |
| 1 | 5,000 | 5,000 | 0.6320 | 0.6500 | 0.6410 |
| 1 | 5,500 | 5,500 | 0.7000 | 0.7280 | 0.7140 |
| 1 | 6,000 | 6,000 | 0.7360 | 0.7740 | 0.7550 |
| 1 | 0 | 0 | 0.0080 | 0.0120 | 0.0100 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-121 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.8 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 26.7 |
| Location: | 45.30337, -120.77112 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 5.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.92 |
| 4 | 3.84 |
| 5 | 5.56 |
| 6 | 5.9 |
| 7 | 5.55 |
| 8 | 4.91 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 26.68 |

**Field Notes**

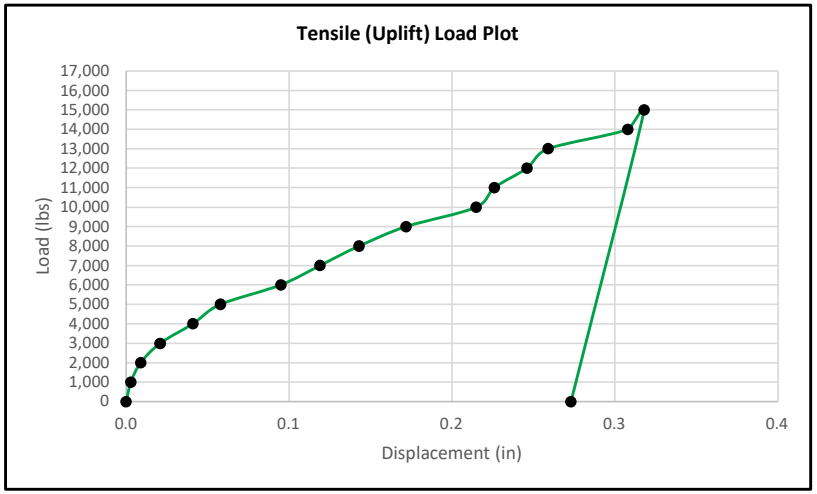
Rock encountered at 3 feet BGS during pre-drilling.

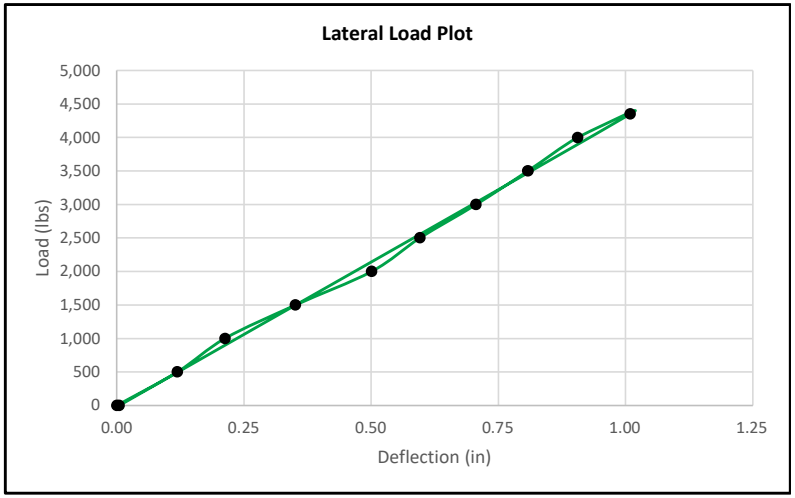
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 3,000 | 3,000 | 0.0220 | 0.0200 | 0.0210 |
| 1 | 4,000 | 4,000 | 0.0420 | 0.0400 | 0.0410 |
| 1 | 5,000 | 5,000 | 0.0580 | 0.0580 | 0.0580 |
| 1 | 6,000 | 6,000 | 0.0940 | 0.0960 | 0.0950 |
| 1 | 7,000 | 7,000 | 0.1180 | 0.1200 | 0.1190 |
| 1 | 8,000 | 8,000 | 0.1420 | 0.1440 | 0.1430 |
| 1 | 9,000 | 9,000 | 0.1700 | 0.1740 | 0.1720 |
| 1 | 10,000 | 10,000 | 0.2120 | 0.2180 | 0.2150 |
| 1 | 11,000 | 11,000 | 0.2220 | 0.2300 | 0.2260 |
| 1 | 12,000 | 12,000 | 0.2420 | 0.2500 | 0.2460 |
| 1 | 13,000 | 13,000 | 0.2540 | 0.2640 | 0.2590 |
| 1 | 14,000 | 14,000 | 0.3020 | 0.3140 | 0.3080 |
| 1 | 15,000 | 15,000 | 0.3120 | 0.3240 | 0.3180 |
| 1 | 0 | 0 | 0.2720 | 0.2740 | 0.2730 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1120 | 0.1260 | 0.1190 |
| 1 | 1,000 | 1,000 | 0.2040 | 0.2220 | 0.2130 |
| 1 | 1,500 | 1,500 | 0.3420 | 0.3600 | 0.3510 |
| 1 | 2,000 | 2,000 | 0.4900 | 0.5120 | 0.5010 |
| 1 | 2,500 | 2,500 | 0.5860 | 0.6060 | 0.5960 |
| 1 | 3,000 | 3,000 | 0.6980 | 0.7140 | 0.7060 |
| 1 | 3,500 | 3,500 | 0.8000 | 0.8160 | 0.8080 |
| 1 | 4,000 | 4,000 | 0.8980 | 0.9140 | 0.9060 |
| 1 | 4,500 | 4,350 | 1.0000 | 1.0180 | 1.0090 |
| 1 | 0 | 0 | 0.0040 | 0.0060 | 0.0050 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.5 | Pile ID: | PT-PV-122A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 36.3 |
| Location: | 45.31430, -120.81659 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 4.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.35 |
| 4 | 2.53 |
| 5 | 2.79 |
| 6 | 2.6 |
| 7 | 4.29 |
| 8 | 5.3 |
| 9 | 7.42 |
| 10 | 10.99 |
| 11 | |
| 12 | |
| Total Time (s) = | 36.27 |

**Field Notes**

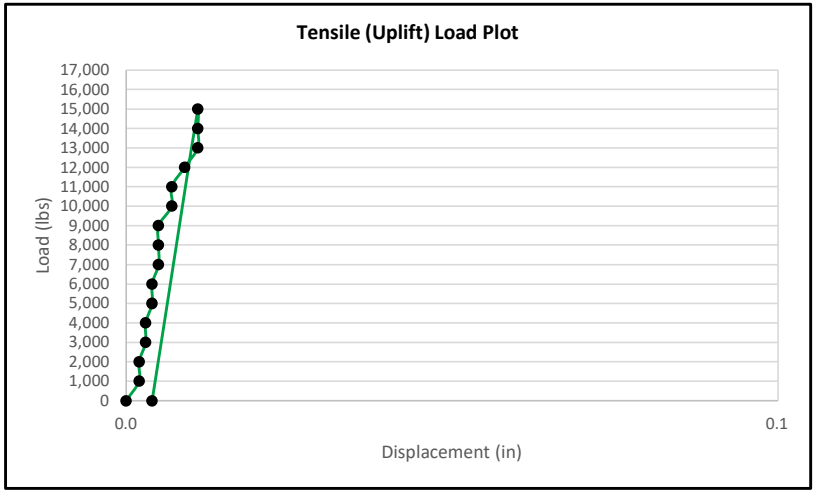
Rock encountered at 2.5 feet BGS during pre-drilling.
Pile refusal encountered at 9.5 feet BGS during install.

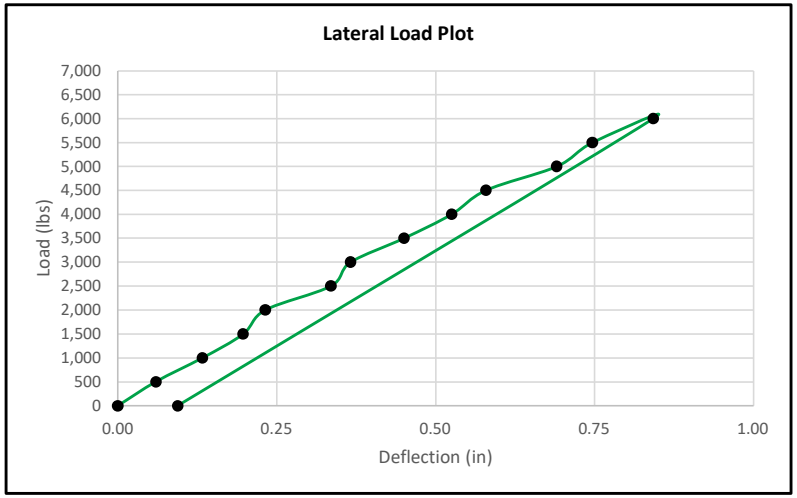
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 14,000 | 14,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 0 | 0 | 0.0040 | 0.0040 | 0.0040 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0560 | 0.0600 |
| 1 | 1,000 | 1,000 | 0.1380 | 0.1280 | 0.1330 |
| 1 | 1,500 | 1,500 | 0.2020 | 0.1920 | 0.1970 |
| 1 | 2,000 | 2,000 | 0.2380 | 0.2260 | 0.2320 |
| 1 | 2,500 | 2,500 | 0.3420 | 0.3280 | 0.3350 |
| 1 | 3,000 | 3,000 | 0.3740 | 0.3580 | 0.3660 |
| 1 | 3,500 | 3,500 | 0.4580 | 0.4420 | 0.4500 |
| 1 | 4,000 | 4,000 | 0.5340 | 0.5160 | 0.5250 |
| 1 | 4,500 | 4,500 | 0.5880 | 0.5700 | 0.5790 |
| 1 | 5,000 | 5,000 | 0.7000 | 0.6800 | 0.6900 |
| 1 | 5,500 | 5,500 | 0.7560 | 0.7360 | 0.7460 |
| 1 | 6,000 | 6,000 | 0.8480 | 0.8360 | 0.8420 |
| 1 | 0 | 0 | 0.0980 | 0.0900 | 0.0940 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-122B 6.5" |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/7/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 89.3 |
| Location: | 45.31430, -120.81659 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 11.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.44 |
| 4 | 4.35 |
| 5 | 7.94 |
| 6 | 6.36 |
| 7 | 8.34 |
| 8 | 10.25 |
| 9 | 21.32 |
| 10 | 29.28 |
| 11 | |
| 12 | |
| Total Time (s) = | 89.28 |

**Field Notes**

Rock encountered at 2.5 feet BGS during pre-drilling.

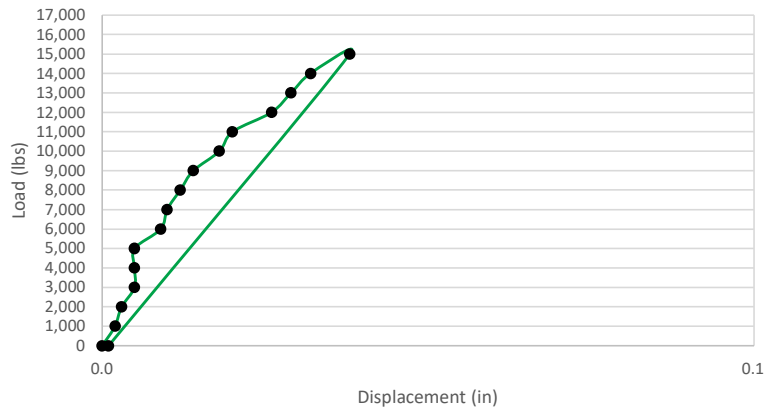
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 12,000 | 12,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 13,000 | 13,000 | 0.0300 | 0.0280 | 0.0290 |
| 1 | 14,000 | 14,000 | 0.0340 | 0.0300 | 0.0320 |
| 1 | 15,000 | 15,000 | 0.0400 | 0.0360 | 0.0380 |
| 1 | 0 | 0 | 0.0020 | 0.0000 | 0.0010 |

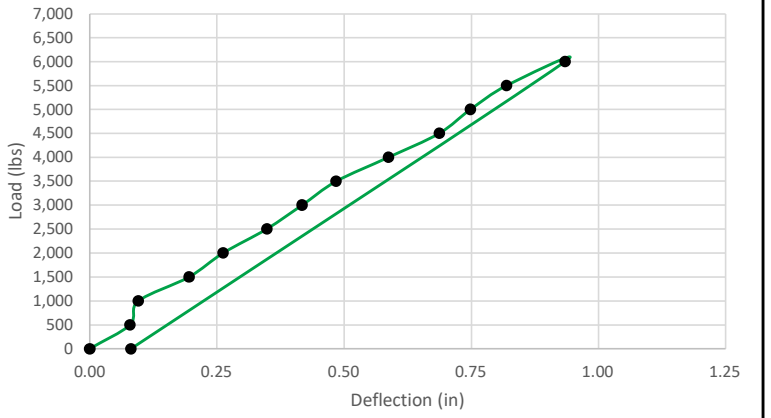
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0760 | 0.0820 | 0.0790 |
| 1 | 1,000 | 1,000 | 0.0168 | 0.1740 | 0.0954 |
| 1 | 1,500 | 1,500 | 0.1920 | 0.1980 | 0.1950 |
| 1 | 2,000 | 2,000 | 0.2600 | 0.2640 | 0.2620 |
| 1 | 2,500 | 2,500 | 0.3460 | 0.3500 | 0.3480 |
| 1 | 3,000 | 3,000 | 0.4160 | 0.4180 | 0.4170 |
| 1 | 3,500 | 3,500 | 0.4820 | 0.4860 | 0.4840 |
| 1 | 4,000 | 4,000 | 0.5860 | 0.5880 | 0.5870 |
| 1 | 4,500 | 4,500 | 0.6860 | 0.6880 | 0.6870 |
| 1 | 5,000 | 5,000 | 0.7460 | 0.7500 | 0.7480 |
| 1 | 5,500 | 5,500 | 0.8180 | 0.8200 | 0.8190 |
| 1 | 6,000 | 6,000 | 0.9320 | 0.9360 | 0.9340 |
| 1 | 0 | 0 | 0.0760 | 0.0860 | 0.0810 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 11.0 | Pile ID: | PT-PV-123A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 125.8 |
| Location: | 45.31221, -120.82479 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 15.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.25 |
| 5 | 4.78 |
| 6 | 6.75 |
| 7 | 10.24 |
| 8 | 14.88 |
| 9 | 18.72 |
| 10 | 21.95 |
| 11 | 46.25 |
| 12 | - |
| Total Time (s) = | 125.82 |

**Field Notes**

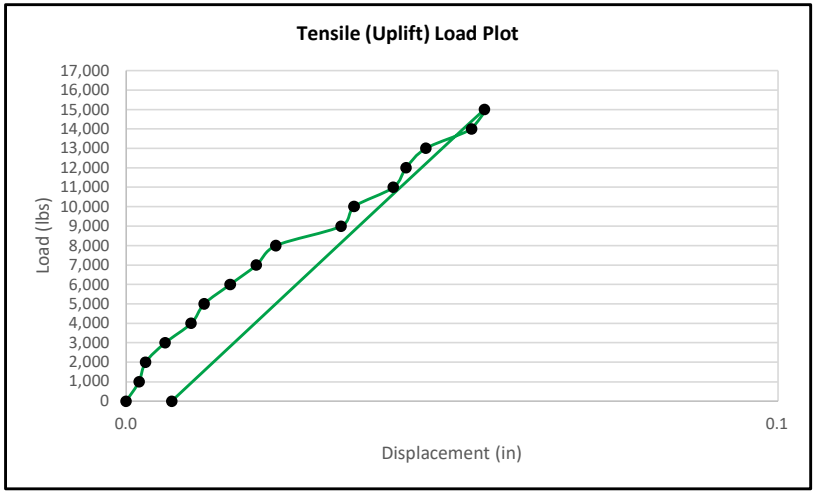
Rock encountered at 3.5 feet BGS during pre-drilling.
Pile refusal encountered at 11 feet BGS during install.

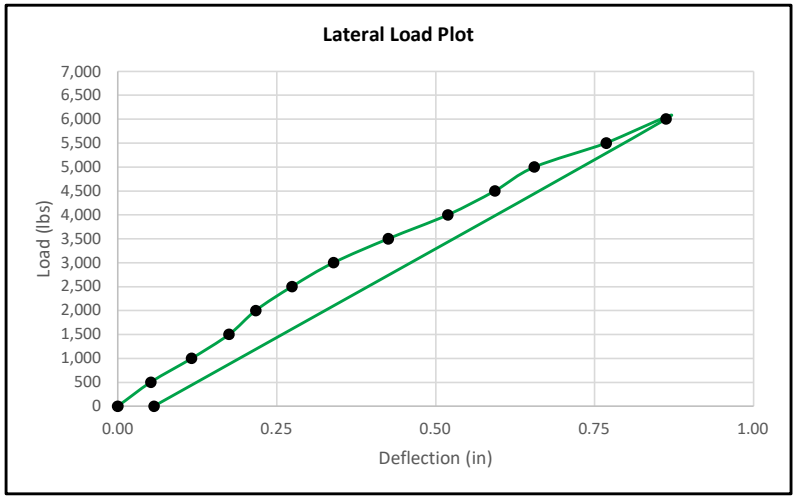
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 7,000 | 7,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 8,000 | 8,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 9,000 | 9,000 | 0.0360 | 0.0300 | 0.0330 |
| 1 | 10,000 | 10,000 | 0.0380 | 0.0320 | 0.0350 |
| 1 | 11,000 | 11,000 | 0.0440 | 0.0380 | 0.0410 |
| 1 | 12,000 | 12,000 | 0.0460 | 0.0400 | 0.0430 |
| 1 | 13,000 | 13,000 | 0.0500 | 0.0420 | 0.0460 |
| 1 | 14,000 | 14,000 | 0.0560 | 0.0500 | 0.0530 |
| 1 | 15,000 | 15,000 | 0.0580 | 0.0520 | 0.0550 |
| 1 | 0 | 0 | 0.0080 | 0.0060 | 0.0070 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0540 | 0.0500 | 0.0520 |
| 1 | 1,000 | 1,000 | 0.1280 | 0.1040 | 0.1160 |
| 1 | 1,500 | 1,500 | 0.1780 | 0.1720 | 0.1750 |
| 1 | 2,000 | 2,000 | 0.2200 | 0.2140 | 0.2170 |
| 1 | 2,500 | 2,500 | 0.2780 | 0.2700 | 0.2740 |
| 1 | 3,000 | 3,000 | 0.3440 | 0.3340 | 0.3390 |
| 1 | 3,500 | 3,500 | 0.4320 | 0.4180 | 0.4250 |
| 1 | 4,000 | 4,000 | 0.5260 | 0.5120 | 0.5190 |
| 1 | 4,500 | 4,500 | 0.6000 | 0.5860 | 0.5930 |
| 1 | 5,000 | 5,000 | 0.6640 | 0.6460 | 0.6550 |
| 1 | 5,500 | 5,500 | 0.7780 | 0.7580 | 0.7680 |
| 1 | 6,000 | 6,000 | 0.8720 | 0.8520 | 0.8620 |
| 1 | 0 | 0 | 0.0600 | 0.0540 | 0.0570 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-123B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/7/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 77.6 |
| Location: | 45.31221, -120.82479 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 8.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.19 |
| 5 | 2.1 |
| 6 | 2.62 |
| 7 | 3.4 |
| 8 | 6.62 |
| 9 | 9.69 |
| 10 | 9.41 |
| 11 | 11.99 |
| 12 | 30.57 |
| Total Time (s) = | 77.59 |

**Field Notes**

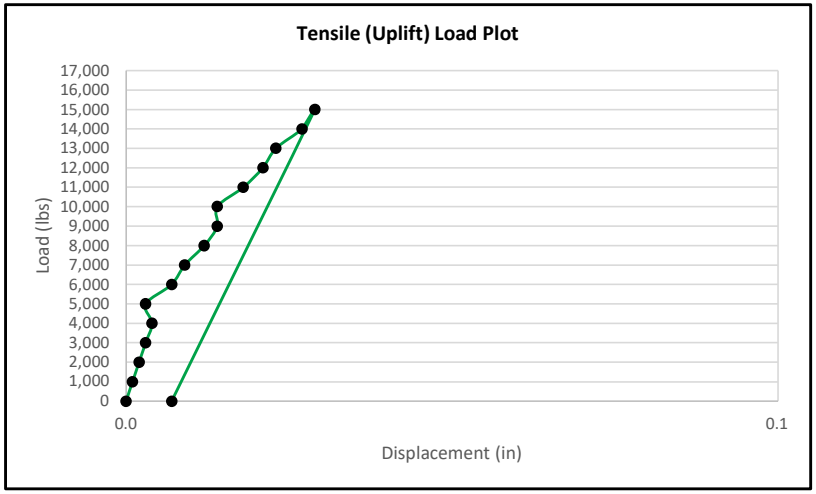
Rock encountered at 3.5 feet BGS during pre-drilling.

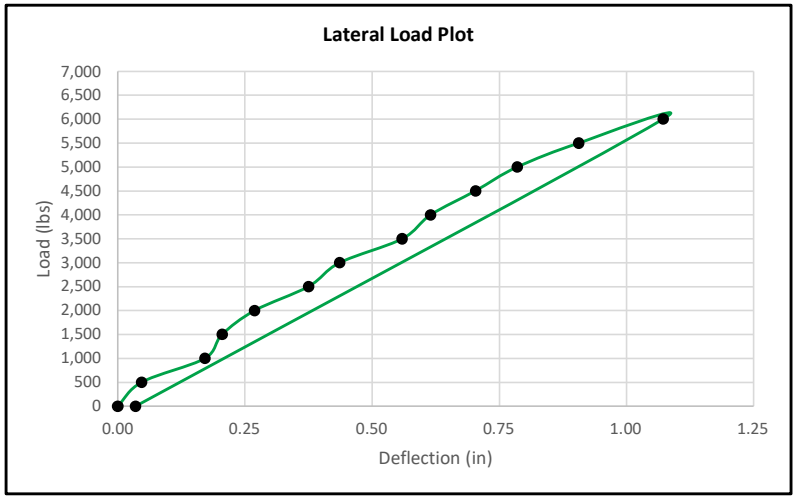
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0000 | 0.0060 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0140 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0240 | 0.0270 |
| 1 | 15,000 | 15,000 | 0.0320 | 0.0260 | 0.0290 |
| 1 | 0 | 0 | 0.0080 | 0.0060 | 0.0070 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0480 | 0.0460 | 0.0470 |
| 1 | 1,000 | 1,000 | 0.1740 | 0.1680 | 0.1710 |
| 1 | 1,500 | 1,500 | 0.2080 | 0.2020 | 0.2050 |
| 1 | 2,000 | 2,000 | 0.2740 | 0.2640 | 0.2690 |
| 1 | 2,500 | 2,500 | 0.3840 | 0.3660 | 0.3750 |
| 1 | 3,000 | 3,000 | 0.4440 | 0.4280 | 0.4360 |
| 1 | 3,500 | 3,500 | 0.5720 | 0.5460 | 0.5590 |
| 1 | 4,000 | 4,000 | 0.6300 | 0.6000 | 0.6150 |
| 1 | 4,500 | 4,500 | 0.7200 | 0.6860 | 0.7030 |
| 1 | 5,000 | 5,000 | 0.8040 | 0.7660 | 0.7850 |
| 1 | 5,500 | 5,500 | 0.9280 | 0.8840 | 0.9060 |
| 1 | 6,000 | 6,000 | 1.0960 | 1.0480 | 1.0720 |
| 1 | 0 | 0 | 0.0300 | 0.0400 | 0.0350 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 11 | Pile ID: | PT-PV-123A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/13/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 125.8 |
| Location: | 45.31221, -120.82479 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 15.7 |

**Embedment Data**

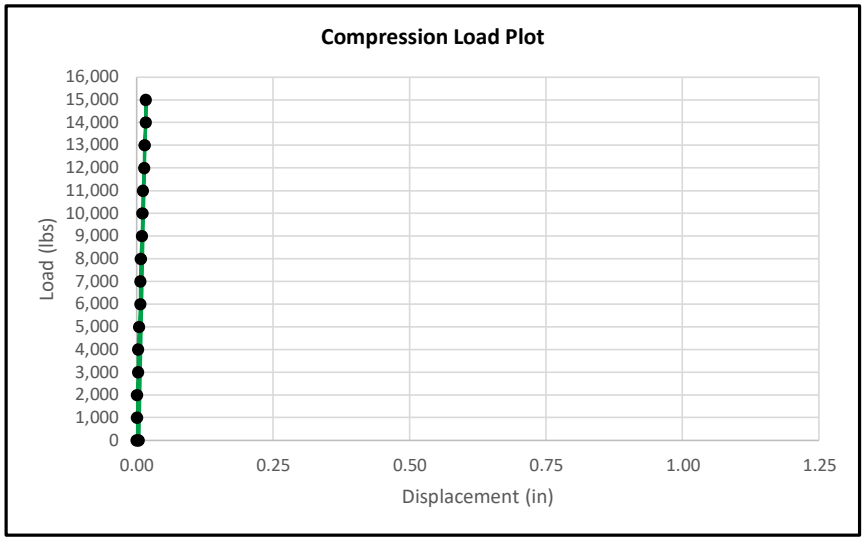
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.25 |
| 5 | 4.78 |
| 6 | 6.75 |
| 7 | 10.24 |
| 8 | 14.88 |
| 9 | 18.72 |
| 10 | 21.95 |
| 11 | 46.25 |
| 12 | - |
| Total Time (s) = | 125.82 |

**Field Notes**

Rock encountered at 3.5 feet BGS during pre-drilling.
Pile refusal encountered at 11 feet BGS during install.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0100 | 0.0140 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0100 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0120 | 0.0170 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0120 | 0.0170 |
| 1 | 0 | 0 | 0.0060 | 0.0020 | 0.0040 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-126A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 53.5 |
| Location: | 45.30239, -120.82354 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 7.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.14 |
| 3 | 4.35 |
| 4 | 5.5 |
| 5 | 5.65 |
| 6 | 8.06 |
| 7 | 13.28 |
| 8 | 15.54 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 53.52 |

**Field Notes**

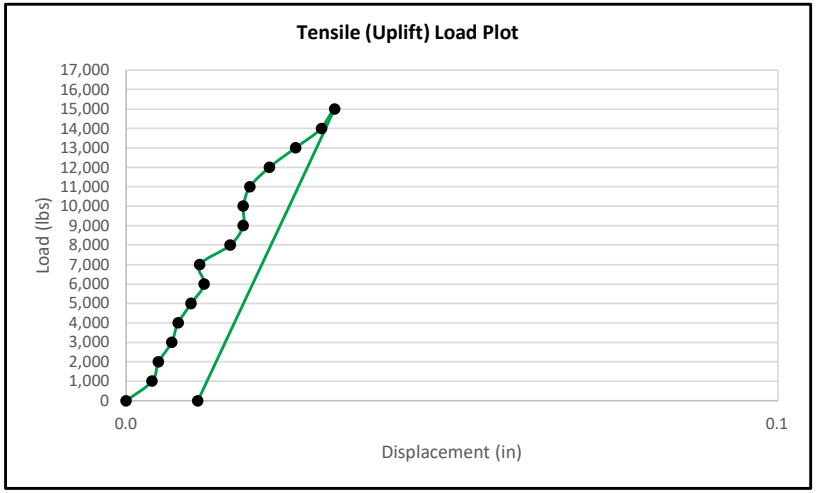
Rock encountered at 1.5 feet BGS during pre-drilling.

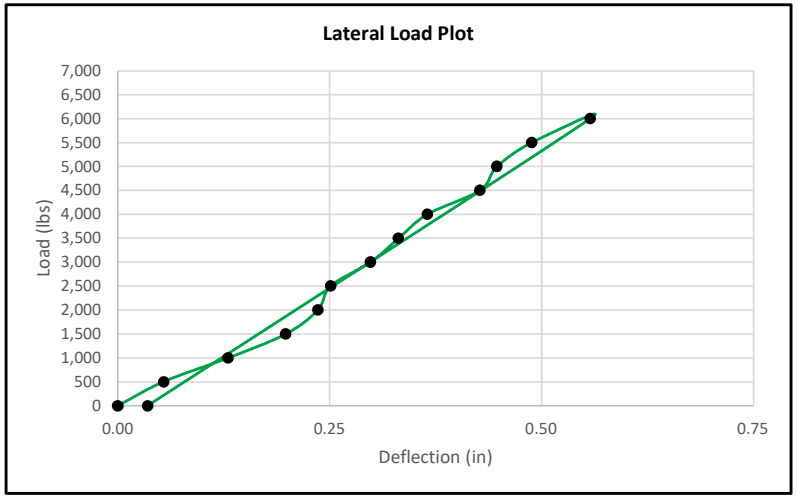
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0106 | 0.0113 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0280 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0300 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0320 | 0.0320 | 0.0320 |
| 1 | 0 | 0 | 0.0120 | 0.0100 | 0.0110 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0560 | 0.0520 | 0.0540 |
| 1 | 1,000 | 1,000 | 0.1400 | 0.1200 | 0.1300 |
| 1 | 1,500 | 1,500 | 0.2100 | 0.1860 | 0.1980 |
| 1 | 2,000 | 2,000 | 0.2480 | 0.2240 | 0.2360 |
| 1 | 2,500 | 2,500 | 0.2640 | 0.2380 | 0.2510 |
| 1 | 3,000 | 3,000 | 0.3120 | 0.2840 | 0.2980 |
| 1 | 3,500 | 3,500 | 0.3460 | 0.3160 | 0.3310 |
| 1 | 4,000 | 4,000 | 0.3820 | 0.3480 | 0.3650 |
| 1 | 4,500 | 4,500 | 0.4460 | 0.4080 | 0.4270 |
| 1 | 5,000 | 5,000 | 0.4660 | 0.4280 | 0.4470 |
| 1 | 5,500 | 5,500 | 0.5080 | 0.4680 | 0.4880 |
| 1 | 6,000 | 6,000 | 0.5780 | 0.5360 | 0.5570 |
| 1 | 0 | 0 | 0.0460 | 0.0240 | 0.0350 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-126B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/7/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 14.7 |
| Location: | 45.30239, -120.82354 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 2.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.62 |
| 4 | 1.91 |
| 5 | 2.17 |
| 6 | 1.33 |
| 7 | 2.73 |
| 8 | 5.96 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.72 |

**Field Notes**

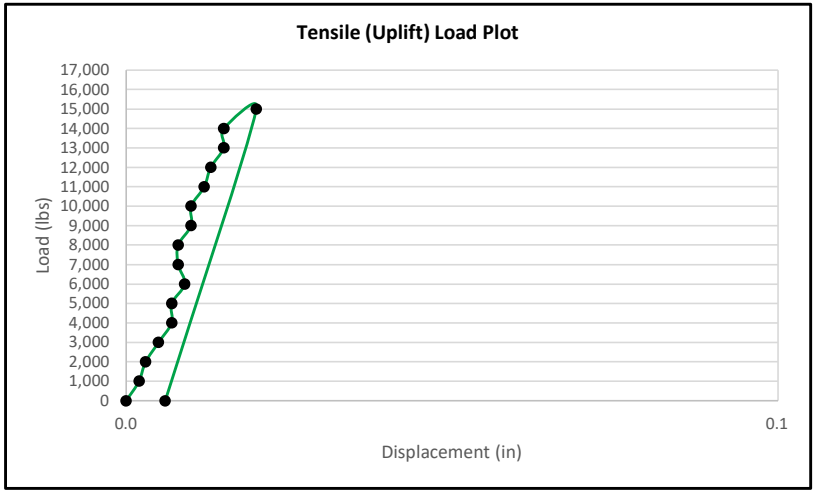
Rock encountered at 1.5 feet BGS during pre-drilling.

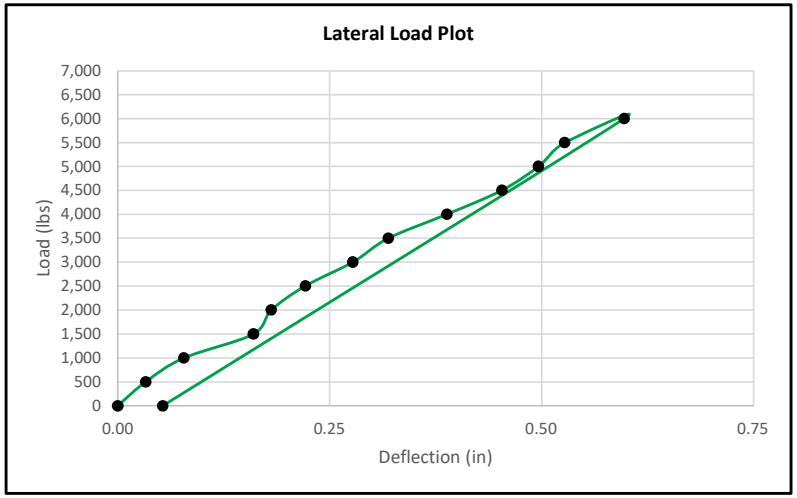
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 0 | 0 | 0.0060 | 0.0060 | 0.0060 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0340 | 0.0320 | 0.0330 |
| 1 | 1,000 | 1,000 | 0.0800 | 0.0760 | 0.0780 |
| 1 | 1,500 | 1,500 | 0.1620 | 0.1580 | 0.1600 |
| 1 | 2,000 | 2,000 | 0.1840 | 0.1780 | 0.1810 |
| 1 | 2,500 | 2,500 | 0.2240 | 0.2180 | 0.2210 |
| 1 | 3,000 | 3,000 | 0.2800 | 0.2740 | 0.2770 |
| 1 | 3,500 | 3,500 | 0.3200 | 0.3180 | 0.3190 |
| 1 | 4,000 | 4,000 | 0.3880 | 0.3880 | 0.3880 |
| 1 | 4,500 | 4,500 | 0.4500 | 0.4560 | 0.4530 |
| 1 | 5,000 | 5,000 | 0.4900 | 0.5020 | 0.4960 |
| 1 | 5,500 | 5,500 | 0.5180 | 0.5360 | 0.5270 |
| 1 | 6,000 | 6,000 | 0.5780 | 0.6160 | 0.5970 |
| 1 | 0 | 0 | 0.0340 | 0.0720 | 0.0530 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-127A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/8/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 2.9 |
| Location: | 45.29961, -120.82761 | Pre-Drill Depth (ft): | 6.0 | Avg. Installation Rate (sec/ft): | 1.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.94 |
| 6 | 1.97 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 2.91 |

**Field Notes**

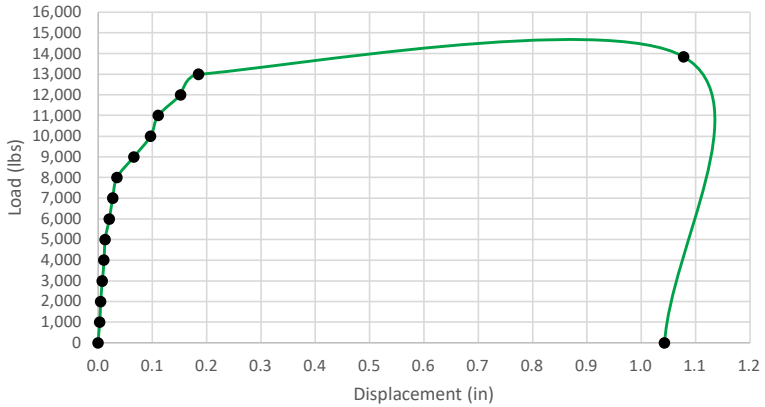
Rock encountered at 6 feet BGS during pre-drilling.

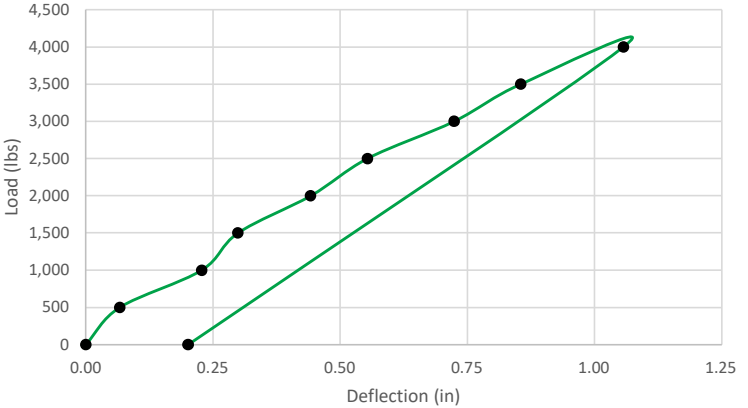
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 6,000 | 6,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 7,000 | 7,000 | 0.0260 | 0.0280 | 0.0270 |
| 1 | 8,000 | 8,000 | 0.0340 | 0.0360 | 0.0350 |
| 1 | 9,000 | 9,000 | 0.0640 | 0.0680 | 0.0660 |
| 1 | 10,000 | 10,000 | 0.0980 | 0.0960 | 0.0970 |
| 1 | 11,000 | 11,000 | 0.1120 | 0.1100 | 0.1110 |
| 1 | 12,000 | 12,000 | 0.1540 | 0.1500 | 0.1520 |
| 1 | 13,000 | 13,000 | 0.1860 | 0.1840 | 0.1850 |
| 1 | 14,000 | 13,850 | 1.0800 | 1.0760 | 1.0780 |
| 1 | 0 | 0 | 1.0460 | 1.0400 | 1.0430 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0660 | 0.0680 | 0.0670 |
| 1 | 1,000 | 1,000 | 0.2280 | 0.2280 | 0.2280 |
| 1 | 1,500 | 1,500 | 0.3000 | 0.2980 | 0.2990 |
| 1 | 2,000 | 2,000 | 0.4440 | 0.4400 | 0.4420 |
| 1 | 2,500 | 2,500 | 0.5580 | 0.5500 | 0.5540 |
| 1 | 3,000 | 3,000 | 0.7300 | 0.7180 | 0.7240 |
| 1 | 3,500 | 3,500 | 0.8620 | 0.8480 | 0.8550 |
| 1 | 4,000 | 4,000 | 1.0660 | 1.0480 | 1.0570 |
| 1 | 0 | 0 | 0.2060 | 0.1960 | 0.2010 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-127B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/8/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 11.5 |
| Location: | 45.29961, -120.82761 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.8 |

**Embedment Data**

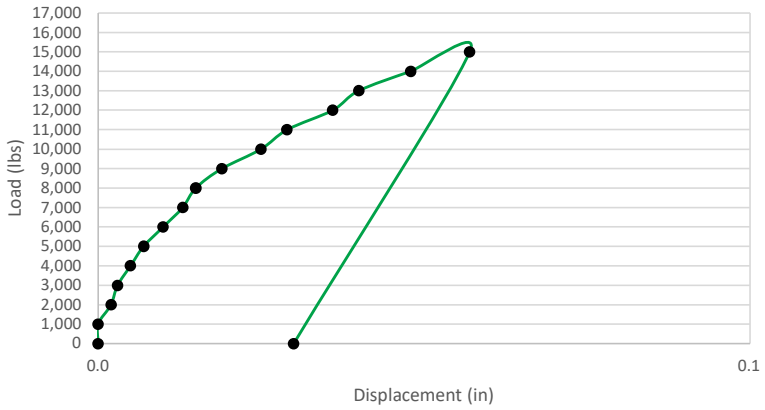
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.38 |
| 5 | 2.84 |
| 6 | 6.23 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 11.45 |

**Field Notes**

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 10,000 | 10,000 | 0.0280 | 0.0220 | 0.0250 |
| 1 | 11,000 | 11,000 | 0.0320 | 0.0260 | 0.0290 |
| 1 | 12,000 | 12,000 | 0.0400 | 0.0320 | 0.0360 |
| 1 | 13,000 | 13,000 | 0.0440 | 0.0360 | 0.0400 |
| 1 | 14,000 | 14,000 | 0.0520 | 0.0440 | 0.0480 |
| 1 | 15,000 | 15,000 | 0.0620 | 0.0520 | 0.0570 |
| 1 | 0 | 0 | 0.0300 | 0.0300 | 0.0300 |

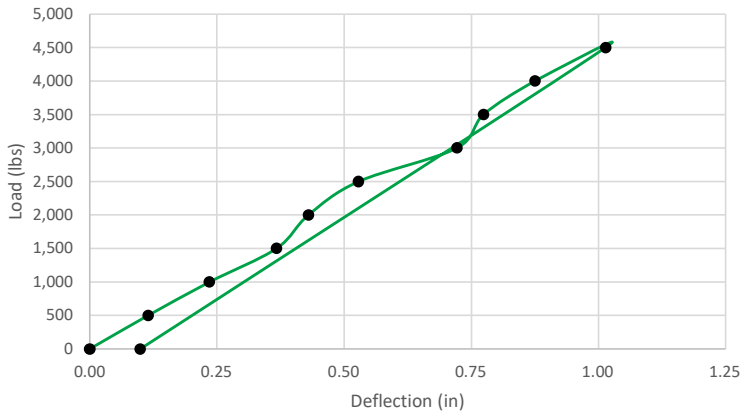
**Tensile (Uplift) Load Plot**




**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1160 | 0.1140 | 0.1150 |
| 1 | 1,000 | 1,000 | 0.2380 | 0.2320 | 0.2350 |
| 1 | 1,500 | 1,500 | 0.3700 | 0.3640 | 0.3670 |
| 1 | 2,000 | 2,000 | 0.4320 | 0.4280 | 0.4300 |
| 1 | 2,500 | 2,500 | 0.5300 | 0.5260 | 0.5280 |
| 1 | 3,000 | 3,000 | 0.7240 | 0.7200 | 0.7220 |
| 1 | 3,500 | 3,500 | 0.7760 | 0.7720 | 0.7740 |
| 1 | 4,000 | 4,000 | 0.8760 | 0.8740 | 0.8750 |
| 1 | 4,500 | 4,500 | 1.0160 | 1.0120 | 1.0140 |
| 1 | 0 | 0 | 0.1000 | 0.0980 | 0.0990 |

**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-127C |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 6.0 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/8/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 0 |
| Location: | 45.29961, -120.82761 | Pre-Drill Depth (ft): | 6.0 | Avg. Installation Rate (sec/ft): | #DIV/0! |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 0 |

**Tensile (Uplift) Testing**

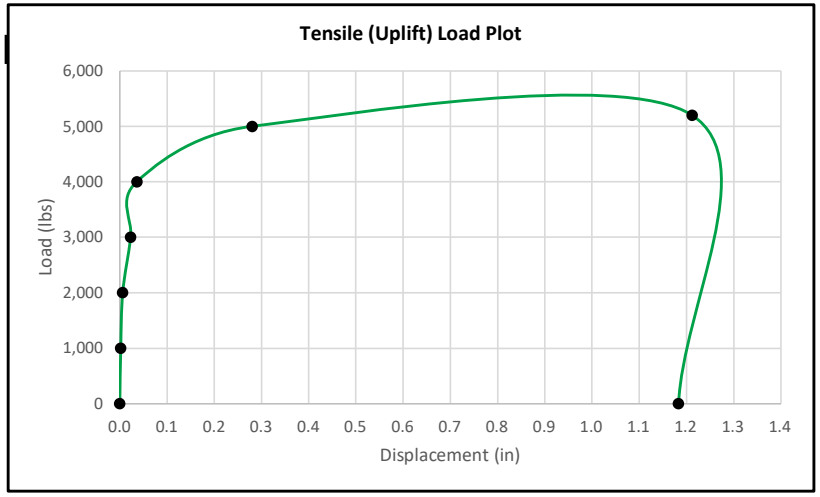
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0220 | 0.0240 | 0.0230 |
| 1 | 4,000 | 4,000 | 0.0340 | 0.0380 | 0.0360 |
| 1 | 5,000 | 5,000 | 0.2780 | 0.2820 | 0.2800 |
| 1 | 6,000 | 5,200 | 1.2120 | 1.2120 | 1.2120 |
| 1 | 0 | 0 | 1.1840 | 1.1820 | 1.1830 |

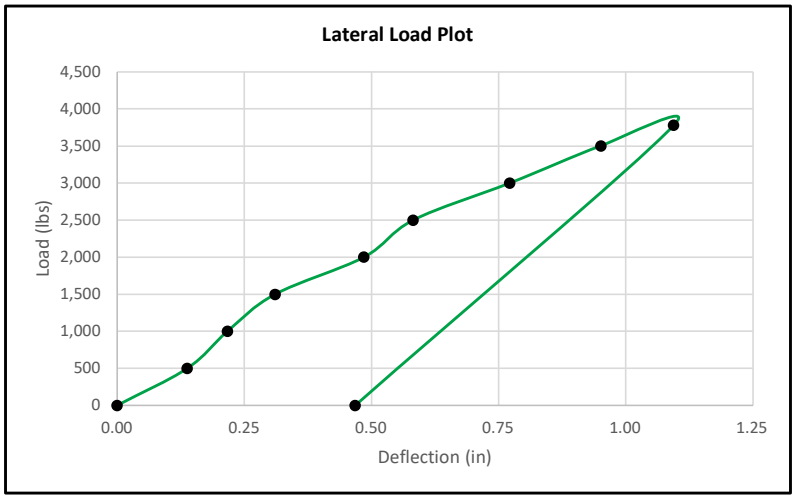
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1420 | 0.1340 | 0.1380 |
| 1 | 1,000 | 1,000 | 0.2220 | 0.2120 | 0.2170 |
| 1 | 1,500 | 1,500 | 0.3180 | 0.3030 | 0.3105 |
| 1 | 2,000 | 2,000 | 0.4900 | 0.4800 | 0.4850 |
| 1 | 2,500 | 2,500 | 0.5880 | 0.5760 | 0.5820 |
| 1 | 3,000 | 3,000 | 0.7780 | 0.7660 | 0.7720 |
| 1 | 3,500 | 3,500 | 0.9560 | 0.9460 | 0.9510 |
| 1 | 4,000 | 3,780 | 1.0960 | 1.0920 | 1.0940 |
| 1 | 0 | 0 | 0.4640 | 0.4720 | 0.4680 |

**Field Notes**

Rock encountered at 6 feet BGS during pre-drilling.



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6 | Pile ID: | PT-PV-127A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 6 | Pile Section: | W6x9 |
| Date Installed: | 10/27/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/13/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 0.0 |
| Location: | 45.29961, -120.82761 | Pre-Drill Depth (ft): | 6.0 | Avg. Installation Rate (sec/ft): | #DIV/0! |

**Embedment Data**

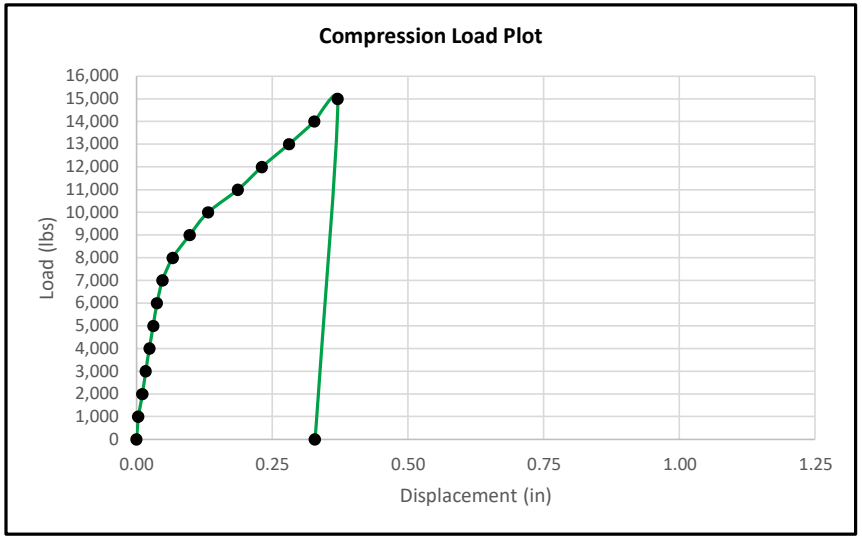
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 0 |

**Field Notes**

Rock encountered at 6 feet BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0030 | 0.0035 |
| 1 | 2,000 | 2,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 3,000 | 3,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 4,000 | 4,000 | 0.0260 | 0.0220 | 0.0240 |
| 1 | 5,000 | 5,000 | 0.0340 | 0.0280 | 0.0310 |
| 1 | 6,000 | 6,000 | 0.0400 | 0.0360 | 0.0380 |
| 1 | 7,000 | 7,000 | 0.0500 | 0.0460 | 0.0480 |
| 1 | 8,000 | 8,000 | 0.0680 | 0.0660 | 0.0670 |
| 1 | 9,000 | 9,000 | 0.0980 | 0.0980 | 0.0980 |
| 1 | 10,000 | 10,000 | 0.1320 | 0.1320 | 0.1320 |
| 1 | 11,000 | 11,000 | 0.1860 | 0.1880 | 0.1870 |
| 1 | 12,000 | 12,000 | 0.2300 | 0.2320 | 0.2310 |
| 1 | 13,000 | 13,000 | 0.2780 | 0.2840 | 0.2810 |
| 1 | 14,000 | 14,000 | 0.3240 | 0.3320 | 0.3280 |
| 1 | 15,000 | 15,000 | 0.3660 | 0.3760 | 0.3710 |
| 1 | 0 | 0 | 0.3300 | 0.3280 | 0.3290 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-128A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/28/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 91.0 |
| Location: | 45.30044, -120.83495 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 11.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 2.9 |
| 4 | 5.25 |
| 5 | 7.08 |
| 6 | 9 |
| 7 | 12.97 |
| 8 | 13.45 |
| 9 | 15.83 |
| 10 | 24.56 |
| 11 | |
| 12 | |
| Total Time (s) = | 91.04 |

**Field Notes**

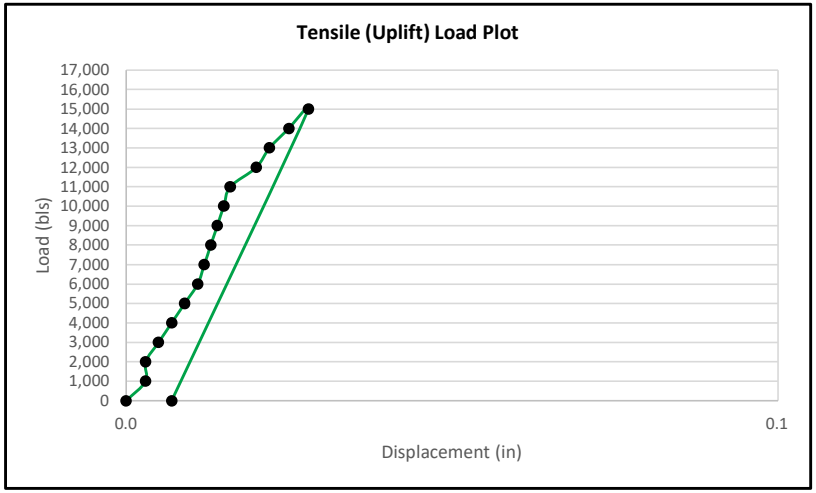
Rock encountered at 1.5 feet BGS during pre-drilling.

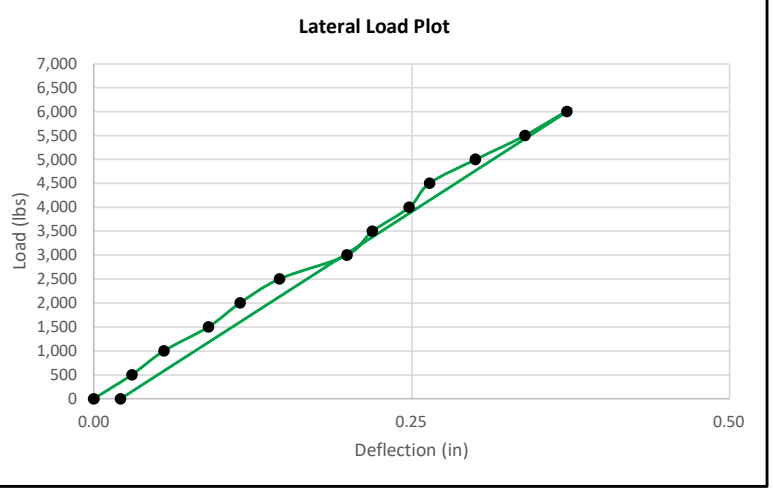
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0280 | 0.0250 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 0 | 0 | 0.0080 | 0.0060 | 0.0070 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0300 | 0.0300 | 0.0300 |
| 1 | 1,000 | 1,000 | 0.0560 | 0.0540 | 0.0550 |
| 1 | 1,500 | 1,500 | 0.0920 | 0.0880 | 0.0900 |
| 1 | 2,000 | 2,000 | 0.1180 | 0.1120 | 0.1150 |
| 1 | 2,500 | 2,500 | 0.1500 | 0.1420 | 0.1460 |
| 1 | 3,000 | 3,000 | 0.2040 | 0.1940 | 0.1990 |
| 1 | 3,500 | 3,500 | 0.2240 | 0.2140 | 0.2190 |
| 1 | 4,000 | 4,000 | 0.2540 | 0.2420 | 0.2480 |
| 1 | 4,500 | 4,500 | 0.2700 | 0.2580 | 0.2640 |
| 1 | 5,000 | 5,000 | 0.3080 | 0.2920 | 0.3000 |
| 1 | 5,500 | 5,500 | 0.3460 | 0.3320 | 0.3390 |
| 1 | 6,000 | 6,000 | 0.3800 | 0.3640 | 0.3720 |
| 1 | 0 | 0 | 0.0220 | 0.0200 | 0.0210 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-128B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 10/28/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 93.6 |
| Location: | 45.30044, -120.83495 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 10.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.33 |
| 3 | 2.68 |
| 4 | 3.96 |
| 5 | 6.87 |
| 6 | 7.43 |
| 7 | 10.03 |
| 8 | 19.27 |
| 9 | 23.27 |
| 10 | 19.74 |
| 11 | |
| 12 | |
| Total Time (s) = | 93.58 |

**Field Notes**

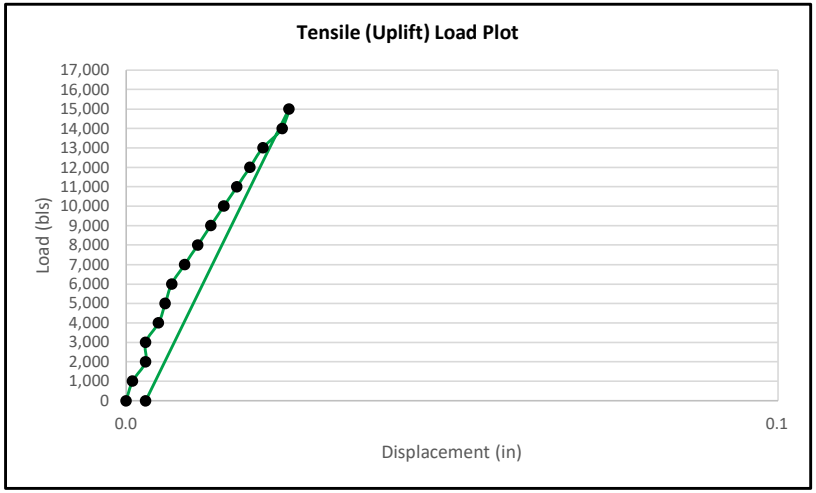
Rock encountered at 1.5 feet BGS during pre-drilling.

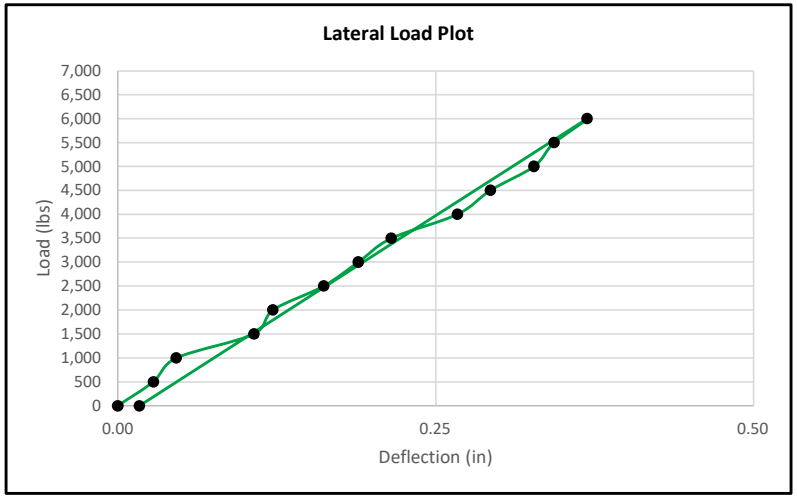
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0280 | 0.0280 | 0.0280 |
| 1 | 1,000 | 1,000 | 0.0200 | 0.0720 | 0.0460 |
| 1 | 1,500 | 1,500 | 0.1080 | 0.1060 | 0.1070 |
| 1 | 2,000 | 2,000 | 0.1240 | 0.1200 | 0.1220 |
| 1 | 2,500 | 2,500 | 0.1620 | 0.1620 | 0.1620 |
| 1 | 3,000 | 3,000 | 0.1900 | 0.1880 | 0.1890 |
| 1 | 3,500 | 3,500 | 0.2160 | 0.2140 | 0.2150 |
| 1 | 4,000 | 4,000 | 0.2680 | 0.2660 | 0.2670 |
| 1 | 4,500 | 4,500 | 0.2940 | 0.2920 | 0.2930 |
| 1 | 5,000 | 5,000 | 0.3280 | 0.3260 | 0.3270 |
| 1 | 5,500 | 5,500 | 0.3440 | 0.3420 | 0.3430 |
| 1 | 6,000 | 6,000 | 0.3700 | 0.3680 | 0.3690 |
| 1 | 0 | 0 | 0.0180 | 0.0160 | 0.0170 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 5.5 | Pile ID: | PT-PV-130A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 10/28/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/8/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 46.4 |
| Location: | 45.29666, -120.83348 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 10.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.66 |
| 3 | 2.47 |
| 4 | 5 |
| 5 | 37.27 |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 46.4 |

**Field Notes**

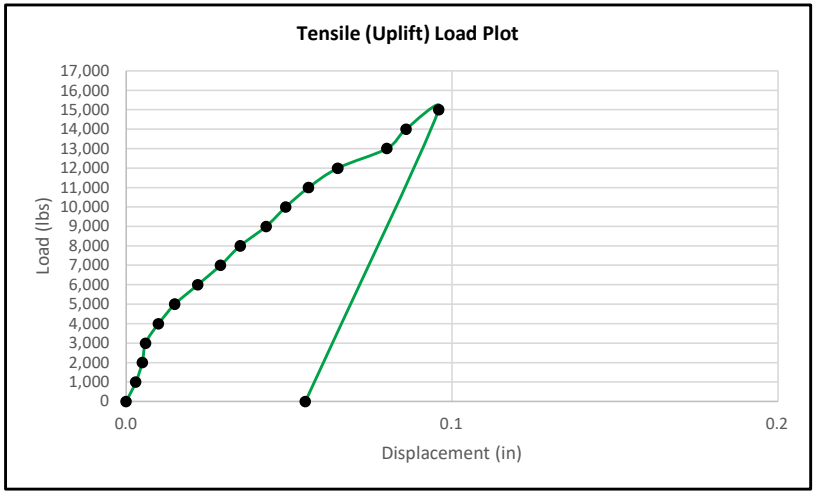
Rock encountered at 3.5 feet BGS during pre-drilling
Pile refusal encountered at 5.5 feet BGS

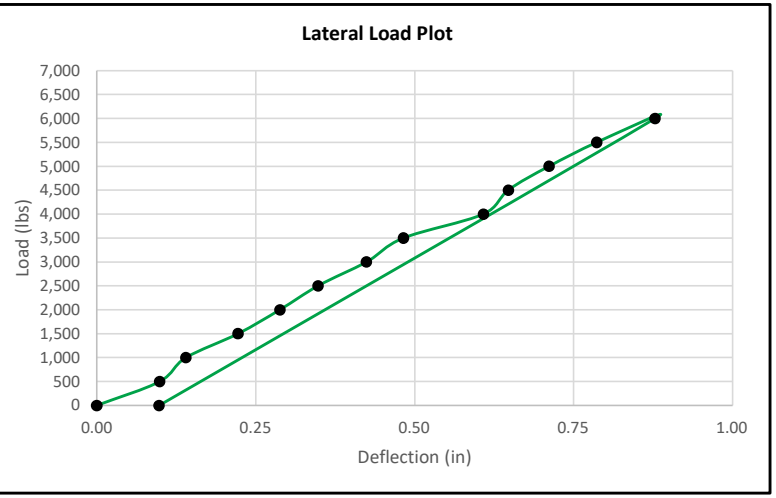
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 6,000 | 6,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 7,000 | 7,000 | 0.0320 | 0.0260 | 0.0290 |
| 1 | 8,000 | 8,000 | 0.0380 | 0.0320 | 0.0350 |
| 1 | 9,000 | 9,000 | 0.0480 | 0.0380 | 0.0430 |
| 1 | 10,000 | 10,000 | 0.0540 | 0.0440 | 0.0490 |
| 1 | 11,000 | 11,000 | 0.0620 | 0.0500 | 0.0560 |
| 1 | 12,000 | 12,000 | 0.0720 | 0.0580 | 0.0650 |
| 1 | 13,000 | 13,000 | 0.0880 | 0.0720 | 0.0800 |
| 1 | 14,000 | 14,000 | 0.0920 | 0.0800 | 0.0860 |
| 1 | 15,000 | 15,000 | 0.1020 | 0.0900 | 0.0960 |
| 1 | 0 | 0 | 0.0560 | 0.0540 | 0.0550 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0980 | 0.1000 | 0.0990 |
| 1 | 1,000 | 1,000 | 0.1380 | 0.1420 | 0.1400 |
| 1 | 1,500 | 1,500 | 0.2200 | 0.2240 | 0.2220 |
| 1 | 2,000 | 2,000 | 0.2880 | 0.2880 | 0.2880 |
| 1 | 2,500 | 2,500 | 0.3480 | 0.3480 | 0.3480 |
| 1 | 3,000 | 3,000 | 0.4220 | 0.4260 | 0.4240 |
| 1 | 3,500 | 3,500 | 0.4800 | 0.4840 | 0.4820 |
| 1 | 4,000 | 4,000 | 0.6080 | 0.6080 | 0.6080 |
| 1 | 4,500 | 4,500 | 0.6480 | 0.6460 | 0.6470 |
| 1 | 5,000 | 5,000 | 0.7120 | 0.7100 | 0.7110 |
| 1 | 5,500 | 5,500 | 0.7860 | 0.7860 | 0.7860 |
| 1 | 6,000 | 6,000 | 0.8800 | 0.8760 | 0.8780 |
| 1 | 0 | 0 | 0.1000 | 0.0960 | 0.0980 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.5 | Pile ID: | PT-PV-130B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/28/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/8/2025 | Pre-Drill Diameter (in): | 6.5 | Total Drive Time (sec): | 76.8 |
| Location: | 45.29666, -120.83348 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 17.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 4.49 |
| 4 | 8.1 |
| 5 | 37.33 |
| 6 | 26.92 |
| 7 | - |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 76.84 |

**Field Notes**

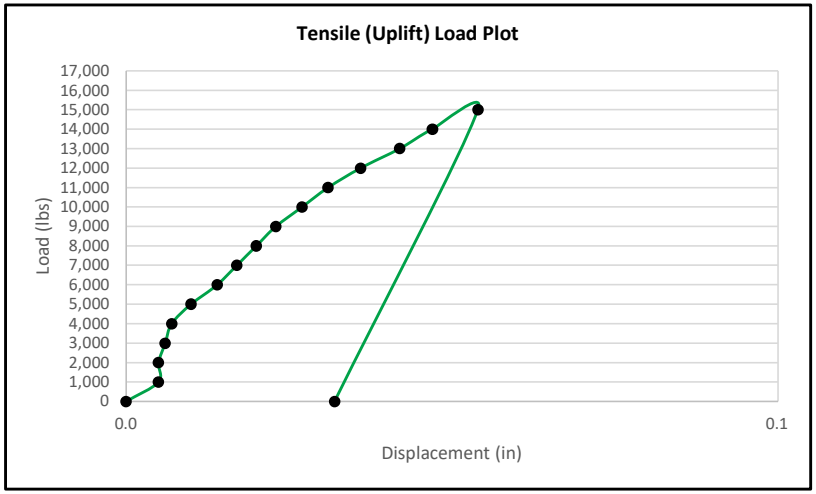
Rock encountered at 3.5 feet BGS during pre-drilling.
Pile refusal encountered at 6.5 feet BGS durihng install.

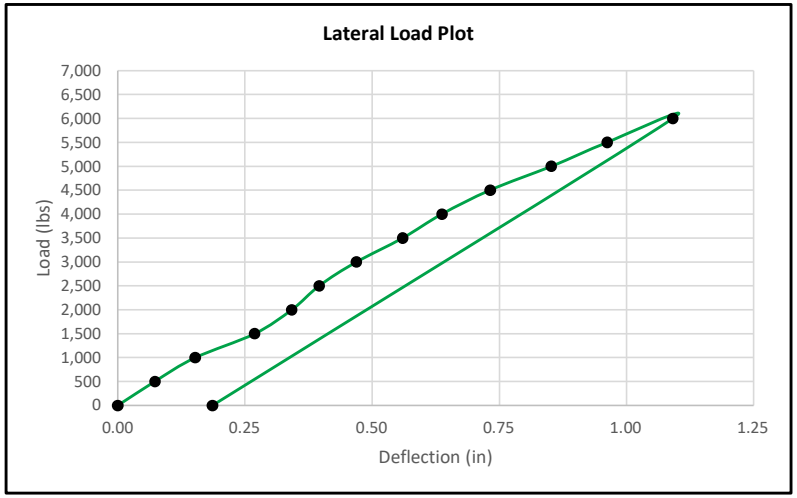
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 10,000 | 10,000 | 0.0240 | 0.0300 | 0.0270 |
| 1 | 11,000 | 11,000 | 0.0280 | 0.0340 | 0.0310 |
| 1 | 12,000 | 12,000 | 0.0320 | 0.0400 | 0.0360 |
| 1 | 13,000 | 13,000 | 0.0380 | 0.0460 | 0.0420 |
| 1 | 14,000 | 14,000 | 0.0440 | 0.0500 | 0.0470 |
| 1 | 15,000 | 15,000 | 0.0500 | 0.0580 | 0.0540 |
| 1 | 0 | 0 | 0.0320 | 0.0320 | 0.0320 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0760 | 0.0700 | 0.0730 |
| 1 | 1,000 | 1,000 | 0.1560 | 0.1480 | 0.1520 |
| 1 | 1,500 | 1,500 | 0.2740 | 0.2640 | 0.2690 |
| 1 | 2,000 | 2,000 | 0.3480 | 0.3360 | 0.3420 |
| 1 | 2,500 | 2,500 | 0.4020 | 0.3900 | 0.3960 |
| 1 | 3,000 | 3,000 | 0.4760 | 0.4620 | 0.4690 |
| 1 | 3,500 | 3,500 | 0.5660 | 0.5540 | 0.5600 |
| 1 | 4,000 | 4,000 | 0.6420 | 0.6320 | 0.6370 |
| 1 | 4,500 | 4,500 | 0.7360 | 0.7280 | 0.7320 |
| 1 | 5,000 | 5,000 | 0.8540 | 0.8500 | 0.8520 |
| 1 | 5,500 | 5,500 | 0.9640 | 0.9600 | 0.9620 |
| 1 | 6,000 | 6,000 | 1.0920 | 1.0900 | 1.0910 |
| 1 | 0 | 0 | 0.1680 | 0.2040 | 0.1860 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-132 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 84.5 |
| Location: | 45.29265, -120.82738 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 15.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.6 |
| 4 | 2.32 |
| 5 | 4.84 |
| 6 | 7.7 |
| 7 | 19.35 |
| 8 | 49.69 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 84.5 |

**Field Notes**

Rock encountered at 2.75 feet BGS during pre-drilling.

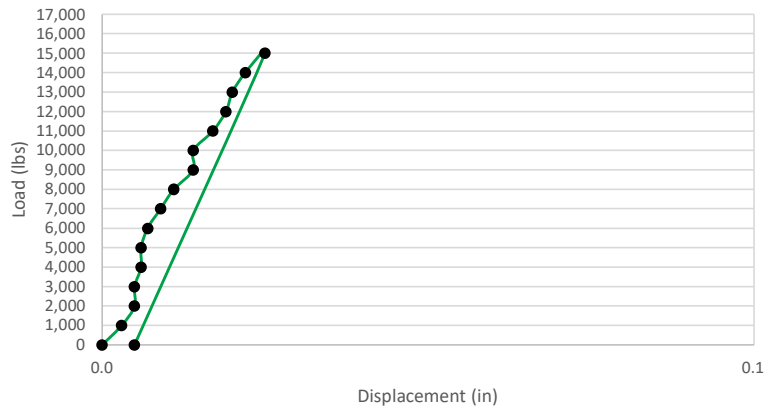
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0280 | 0.0250 |
| 1 | 0 | 0 | 0.0060 | 0.0040 | 0.0050 |

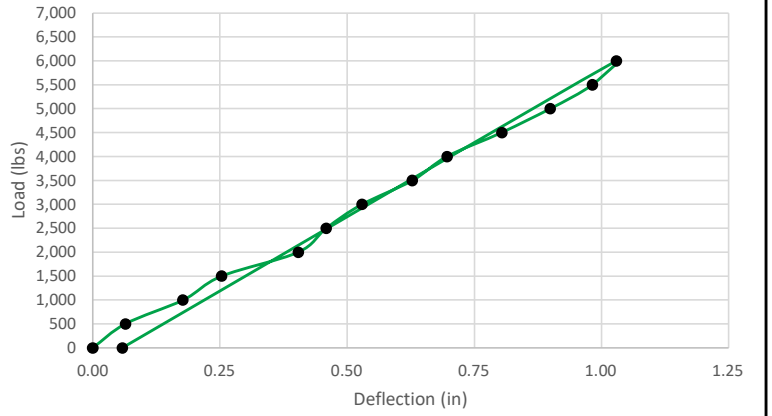
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0660 | 0.0620 | 0.0640 |
| 1 | 1,000 | 1,000 | 0.1840 | 0.1700 | 0.1770 |
| 1 | 1,500 | 1,500 | 0.2620 | 0.2440 | 0.2530 |
| 1 | 2,000 | 2,000 | 0.4140 | 0.3940 | 0.4040 |
| 1 | 2,500 | 2,500 | 0.4700 | 0.4480 | 0.4590 |
| 1 | 3,000 | 3,000 | 0.5400 | 0.5180 | 0.5290 |
| 1 | 3,500 | 3,500 | 0.6400 | 0.6160 | 0.6280 |
| 1 | 4,000 | 4,000 | 0.7080 | 0.6840 | 0.6960 |
| 1 | 4,500 | 4,500 | 0.8160 | 0.7920 | 0.8040 |
| 1 | 5,000 | 5,000 | 0.9120 | 0.8860 | 0.8990 |
| 1 | 5,500 | 5,500 | 0.9960 | 0.9680 | 0.9820 |
| 1 | 6,000 | 6,000 | 1.0440 | 1.0140 | 1.0290 |
| 1 | 0 | 0 | 0.0560 | 0.0600 | 0.0580 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-132A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/15/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 84.5 |
| Installed Coordinates: | 45.29265, -120.82738 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 15.4 |

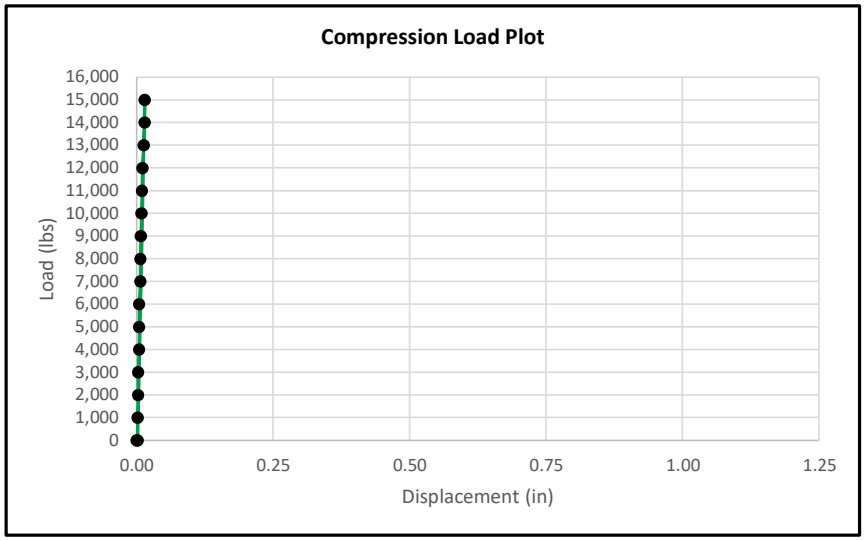
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.6 |
| 4 | 2.32 |
| 5 | 4.84 |
| 6 | 7.7 |
| 7 | 19.35 |
| 8 | 49.69 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 84.5 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 15,000 | 15,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-134 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 53.28 |
| Location: | 45.29244, -120.84291 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 7.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.9 |
| 5 | 7.67 |
| 6 | 5.39 |
| 7 | 5.75 |
| 8 | 7.79 |
| 9 | 9.68 |
| 10 | 14.1 |
| 11 | |
| 12 | |
| Total Time (s) = | 53.28 |

**Field Notes**

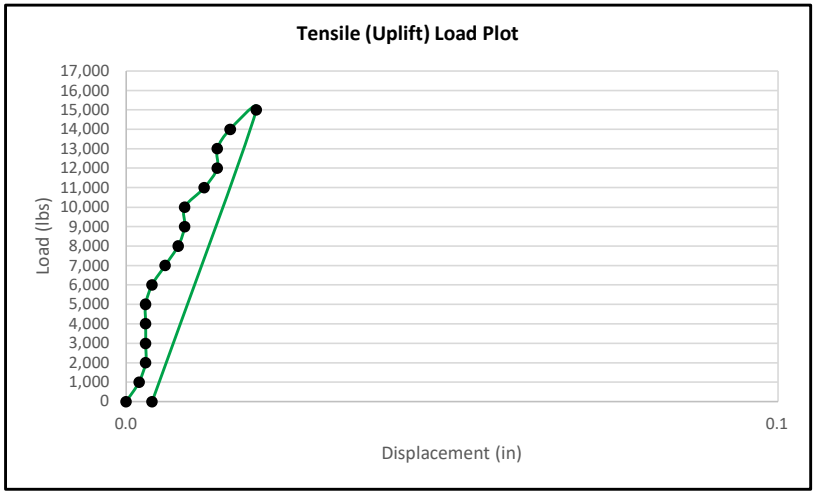
Rock encountered at 3.5 feet BGS during pre-drilling.

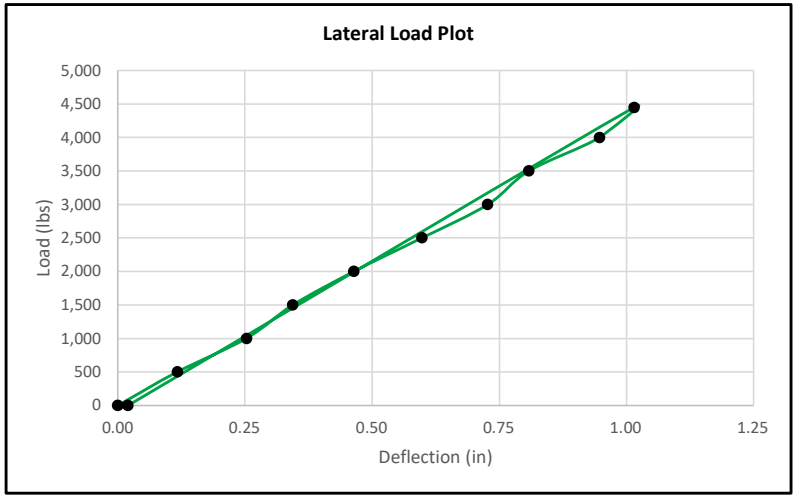
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 0 | 0 | 0.0060 | 0.0020 | 0.0040 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1160 | 0.1180 | 0.1170 |
| 1 | 1,000 | 1,000 | 0.2560 | 0.2500 | 0.2530 |
| 1 | 1,500 | 1,500 | 0.3480 | 0.3400 | 0.3440 |
| 1 | 2,000 | 2,000 | 0.4680 | 0.4600 | 0.4640 |
| 1 | 2,500 | 2,500 | 0.6040 | 0.5920 | 0.5980 |
| 1 | 3,000 | 3,000 | 0.7340 | 0.7200 | 0.7270 |
| 1 | 3,500 | 3,500 | 0.8160 | 0.8000 | 0.8080 |
| 1 | 4,000 | 4,000 | 0.9540 | 0.9400 | 0.9470 |
| 1 | 4,500 | 4,450 | 1.0200 | 1.0100 | 1.0150 |
| 1 | 0 | 0 | 0.0200 | 0.0200 | 0.0200 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-136 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 45.2 |
| Location: | 45.28812, -120.83456 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 12.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.72 |
| 6 | 2.44 |
| 7 | 12.06 |
| 8 | 28.94 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 45.16 |

**Field Notes**

Rock encountered at 4.75 feet BGS duirng pre-drilling.

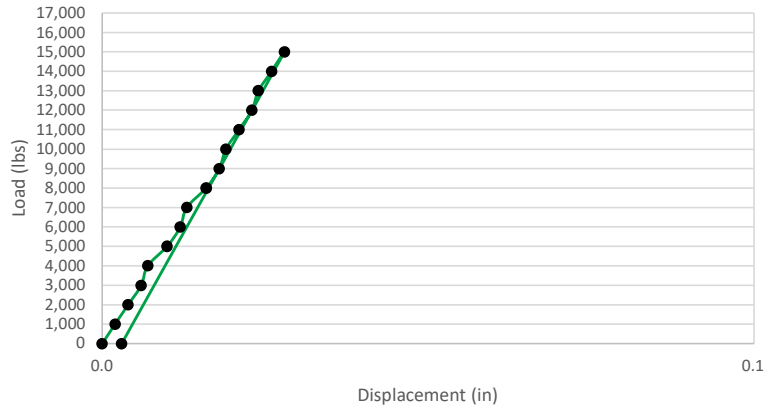
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0280 | 0.0260 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0280 | 0.0280 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

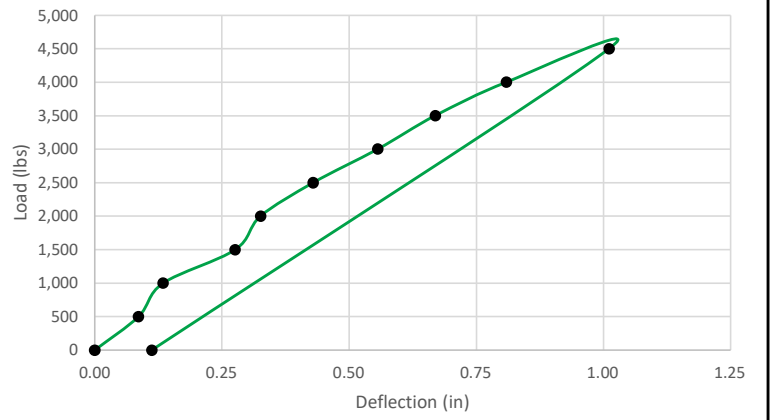
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0820 | 0.0900 | 0.0860 |
| 1 | 1,000 | 1,000 | 0.1280 | 0.1400 | 0.1340 |
| 1 | 1,500 | 1,500 | 0.2680 | 0.2840 | 0.2760 |
| 1 | 2,000 | 2,000 | 0.3180 | 0.3340 | 0.3260 |
| 1 | 2,500 | 2,500 | 0.4220 | 0.4360 | 0.4290 |
| 1 | 3,000 | 3,000 | 0.5500 | 0.5620 | 0.5560 |
| 1 | 3,500 | 3,500 | 0.6640 | 0.6740 | 0.6690 |
| 1 | 4,000 | 4,000 | 0.8040 | 0.8140 | 0.8090 |
| 1 | 4,500 | 4,500 | 1.0080 | 1.0140 | 1.0110 |
| 1 | 0 | 0 | 0.1180 | 0.1060 | 0.1120 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-137 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 117.6 |
| Location: | 45.28904, -120.84052 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 14.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 5.44 |
| 4 | 3.88 |
| 5 | 2.24 |
| 6 | 6.32 |
| 7 | 6.68 |
| 8 | 7.45 |
| 9 | 36.67 |
| 10 | 48.89 |
| 11 | |
| 12 | |
| Total Time (s) = | 117.57 |

**Field Notes**

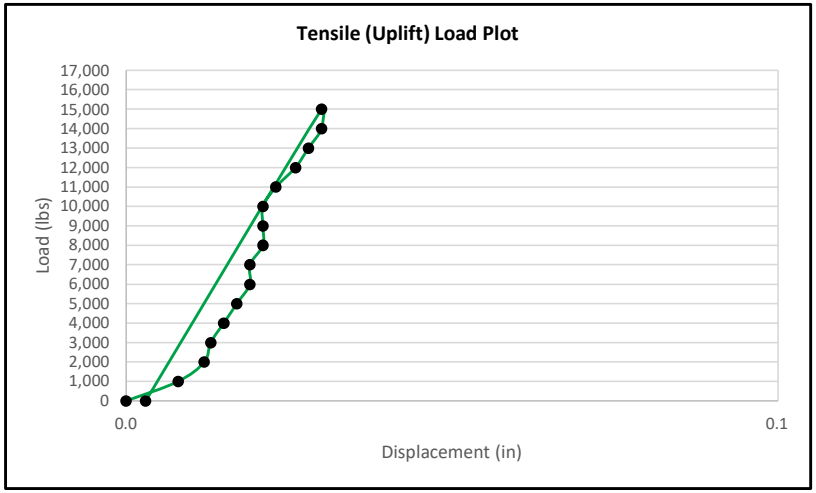
Rock encountered at 2.5 feet BGS during pre-drilling.

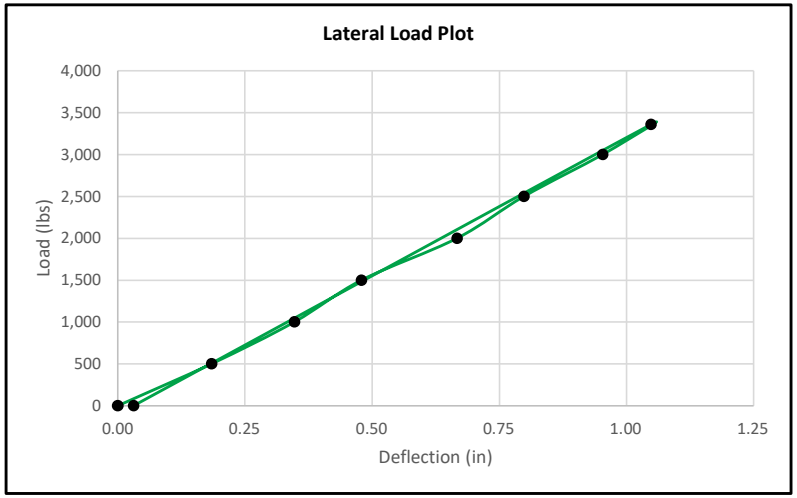
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 5,000 | 5,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 8,000 | 8,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0220 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0240 | 0.0230 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0280 | 0.0260 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0320 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0320 | 0.0300 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1920 | 0.1760 | 0.1840 |
| 1 | 1,000 | 1,000 | 0.3540 | 0.3400 | 0.3470 |
| 1 | 1,500 | 1,500 | 0.4900 | 0.4680 | 0.4790 |
| 1 | 2,000 | 2,000 | 0.6820 | 0.6520 | 0.6670 |
| 1 | 2,500 | 2,500 | 0.8140 | 0.7820 | 0.7980 |
| 1 | 3,000 | 3,000 | 0.9740 | 0.9320 | 0.9530 |
| 1 | 3,500 | 3,360 | 1.0660 | 1.0300 | 1.0480 |
| 1 | 0 | 0 | 0.0280 | 0.0340 | 0.0310 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-141 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 13.3 |
| Location: | 45.28385, -120.84802 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 3.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.08 |
| 6 | 2.42 |
| 7 | 3.85 |
| 8 | 5.96 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 13.31 |

**Field Notes**

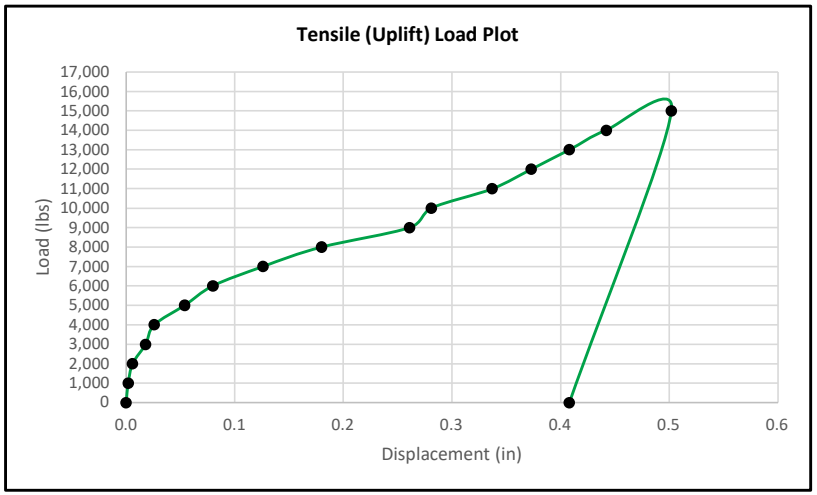
Rock encountered at 6.5 feet BGS during pre-drilling.

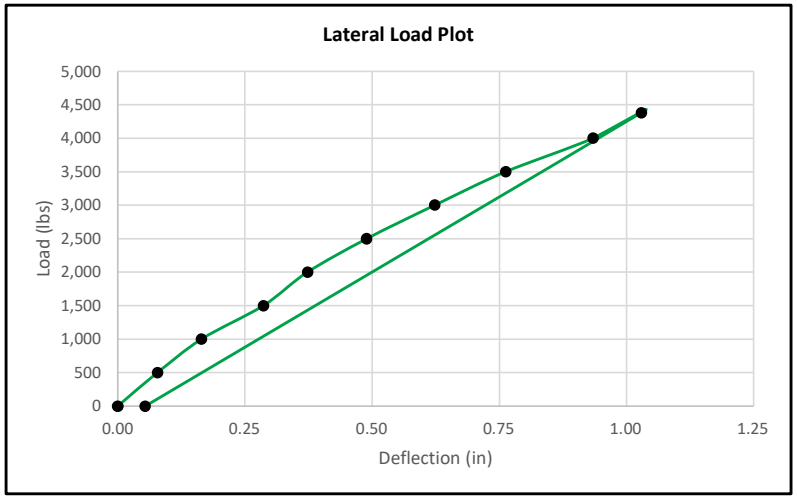
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 4,000 | 4,000 | 0.0220 | 0.0300 | 0.0260 |
| 1 | 5,000 | 5,000 | 0.0480 | 0.0600 | 0.0540 |
| 1 | 6,000 | 6,000 | 0.0720 | 0.0880 | 0.0800 |
| 1 | 7,000 | 7,000 | 0.1180 | 0.1340 | 0.1260 |
| 1 | 8,000 | 8,000 | 0.1720 | 0.1880 | 0.1800 |
| 1 | 9,000 | 9,000 | 0.2640 | 0.2580 | 0.2610 |
| 1 | 10,000 | 10,000 | 0.2860 | 0.2760 | 0.2810 |
| 1 | 11,000 | 11,000 | 0.3440 | 0.3300 | 0.3370 |
| 1 | 12,000 | 12,000 | 0.3800 | 0.3660 | 0.3730 |
| 1 | 13,000 | 13,000 | 0.4160 | 0.4000 | 0.4080 |
| 1 | 14,000 | 14,000 | 0.4500 | 0.4340 | 0.4420 |
| 1 | 15,000 | 15,000 | 0.5100 | 0.4940 | 0.5020 |
| 1 | 0 | 0 | 0.4080 | 0.4080 | 0.4080 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0700 | 0.0860 | 0.0780 |
| 1 | 1,000 | 1,000 | 0.1600 | 0.1680 | 0.1640 |
| 1 | 1,500 | 1,500 | 0.2800 | 0.2920 | 0.2860 |
| 1 | 2,000 | 2,000 | 0.3660 | 0.3800 | 0.3730 |
| 1 | 2,500 | 2,500 | 0.4800 | 0.4980 | 0.4890 |
| 1 | 3,000 | 3,000 | 0.6120 | 0.6340 | 0.6230 |
| 1 | 3,500 | 3,500 | 0.7500 | 0.7760 | 0.7630 |
| 1 | 4,000 | 4,000 | 0.9180 | 0.9500 | 0.9340 |
| 1 | 4,500 | 4,380 | 1.0100 | 1.0480 | 1.0290 |
| 1 | 0 | 0 | 0.0520 | 0.0560 | 0.0540 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.5 | Pile ID: | PT-PV-142 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 133.0 |
| Location: | 45.27992, -120.82756 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 17.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 3.1 |
| 4 | 6.92 |
| 5 | 7.58 |
| 6 | 6.87 |
| 7 | 11.11 |
| 8 | 16.89 |
| 9 | 46.7 |
| 10 | 33.78 |
| 11 | |
| 12 | |
| Total Time (s) = | 132.95 |

**Field Notes**

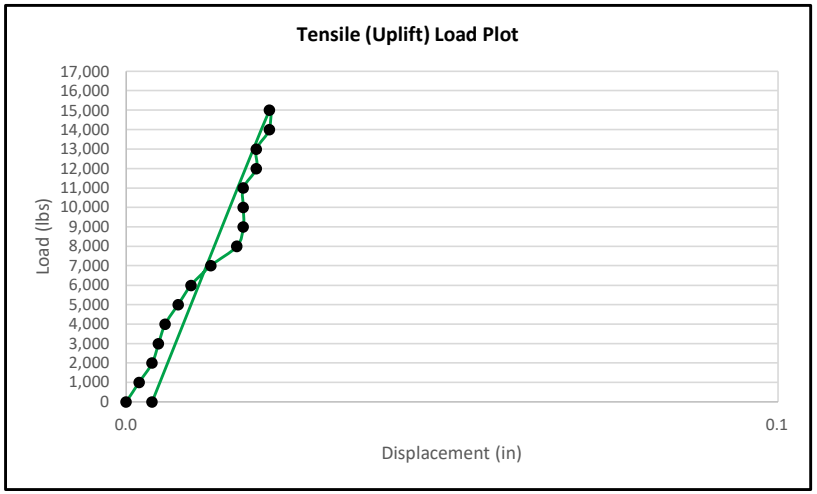
Rock encountered at 2 feet BGS during pre-drilling.
Pile refusal encounterd at 9.5 feet BGS during install.

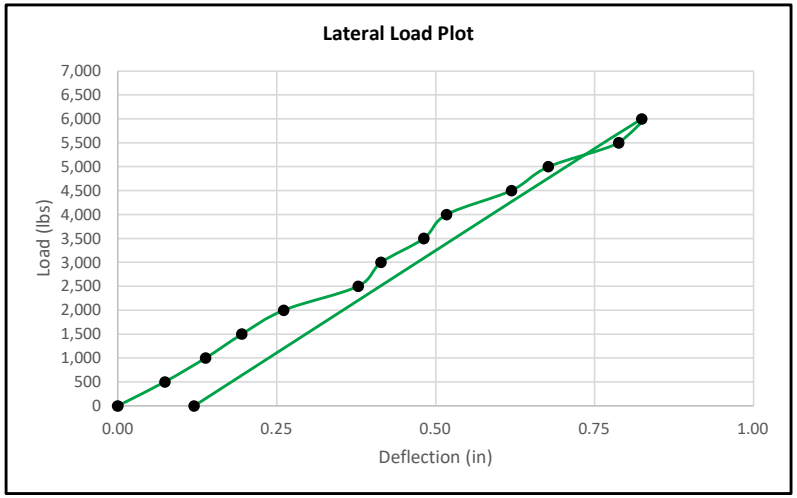
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 13,000 | 13,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 0 | 0 | 0.0040 | 0.0040 | 0.0040 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0720 | 0.0760 | 0.0740 |
| 1 | 1,000 | 1,000 | 0.1360 | 0.1400 | 0.1380 |
| 1 | 1,500 | 1,500 | 0.1940 | 0.1960 | 0.1950 |
| 1 | 2,000 | 2,000 | 0.2600 | 0.2620 | 0.2610 |
| 1 | 2,500 | 2,500 | 0.3760 | 0.3800 | 0.3780 |
| 1 | 3,000 | 3,000 | 0.4120 | 0.4160 | 0.4140 |
| 1 | 3,500 | 3,500 | 0.4780 | 0.4840 | 0.4810 |
| 1 | 4,000 | 4,000 | 0.5140 | 0.5200 | 0.5170 |
| 1 | 4,500 | 4,500 | 0.6140 | 0.6240 | 0.6190 |
| 1 | 5,000 | 5,000 | 0.6700 | 0.6840 | 0.6770 |
| 1 | 5,500 | 5,500 | 0.7740 | 0.8020 | 0.7880 |
| 1 | 6,000 | 6,000 | 0.8080 | 0.8400 | 0.8240 |
| 1 | 0 | 0 | 0.1160 | 0.1240 | 0.1200 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-144 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 44.2 |
| Location: | 45.27818, -120.84419 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 11.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 3.43 |
| 6 | 4.47 |
| 7 | 7.18 |
| 8 | 29.09 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 44.17 |

**Field Notes**

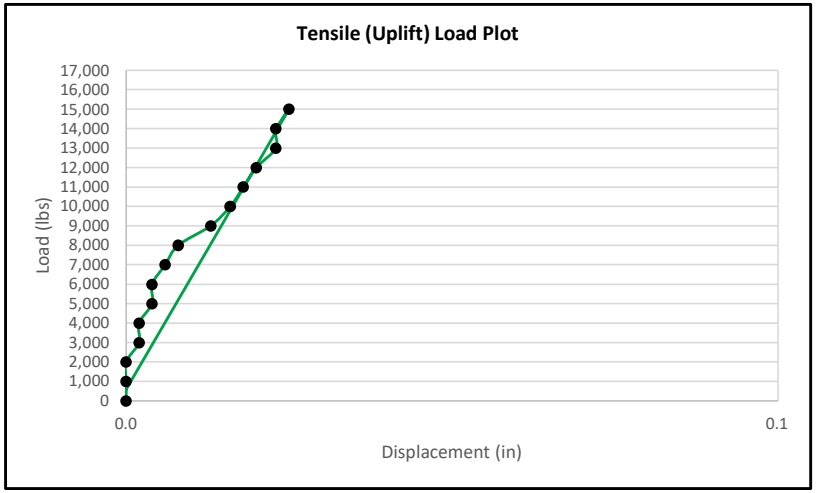
Rock encountered at 4.5 feet BGS during pre-drilling.

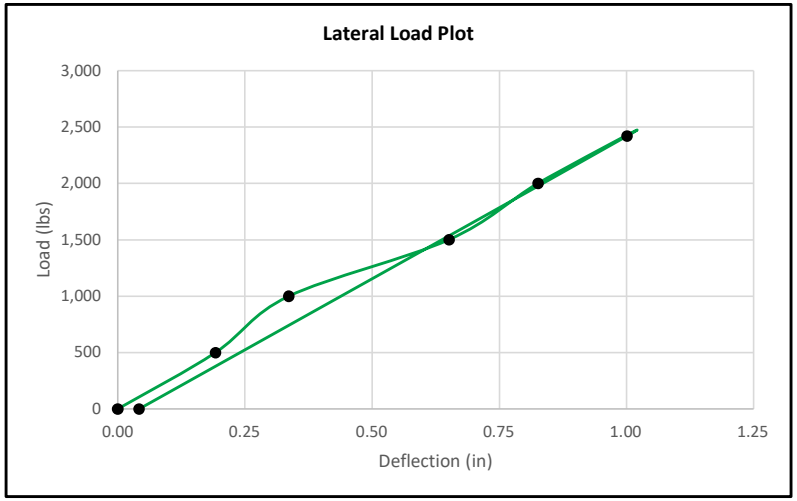
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0280 | 0.0250 |
| 1 | 0 | 0 | -0.0020 | 0.0000 | -0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1920 | 0.1920 | 0.1920 |
| 1 | 1,000 | 1,000 | 0.3360 | 0.3360 | 0.3360 |
| 1 | 1,500 | 1,500 | 0.6500 | 0.6520 | 0.6510 |
| 1 | 2,000 | 2,000 | 0.8260 | 0.8260 | 0.8260 |
| 1 | 2,500 | 2,420 | 1.0020 | 1.0000 | 1.0010 |
| 1 | 0 | 0 | 0.0380 | 0.0460 | 0.0420 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8 | Pile ID: | PT-PV-144 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/14/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 44.2 |
| Location: | 45.27818, -120.84419 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 11.0 |

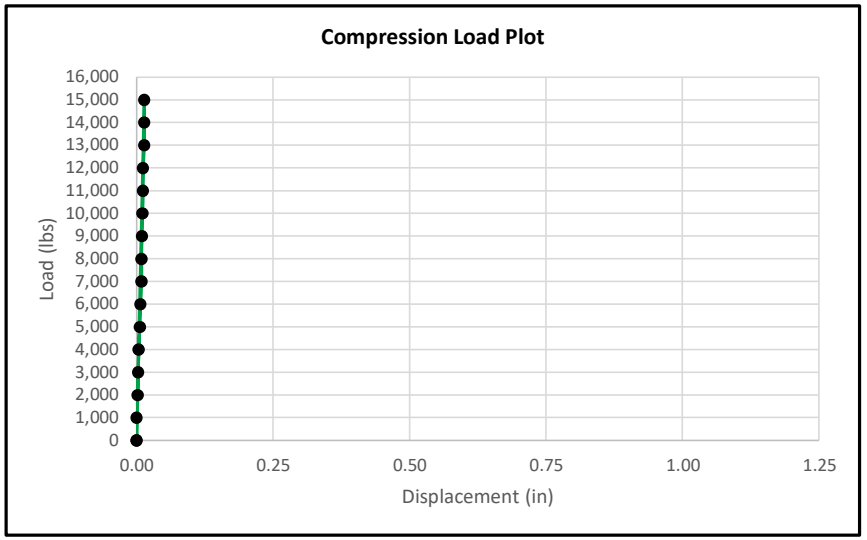
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 3.43 |
| 6 | 4.47 |
| 7 | 7.18 |
| 8 | 29.09 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 44.17 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0100 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0140 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0160 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-145 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 66.4 |
| Location: | 45.27941, -120.85734 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 22.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 3.73 |
| 5 | 29.25 |
| 6 | 33.39 |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 66.37 |

**Field Notes**

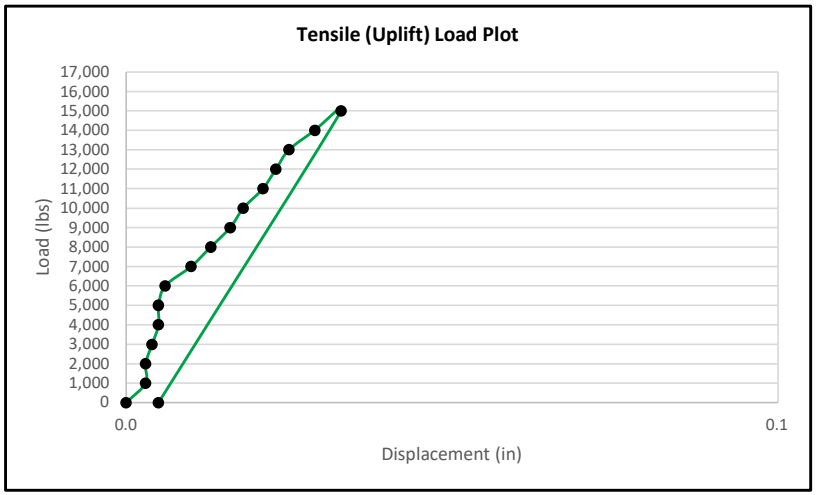
Rock encountered at 5 feet BGS during pre-drilling.
Pile refusal encountered at 6 feet BGS during install.

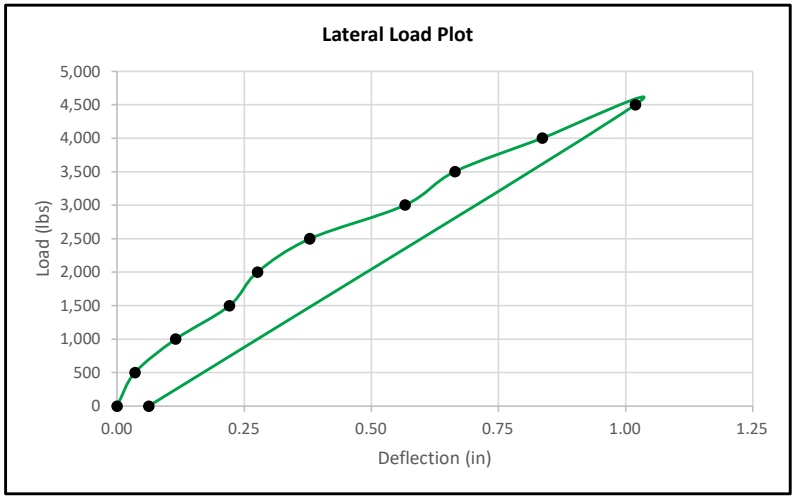
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0340 | 0.0290 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0380 | 0.0330 |
| 1 | 0 | 0 | 0.0040 | 0.0060 | 0.0050 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0500 | 0.0200 | 0.0350 |
| 1 | 1,000 | 1,000 | 0.1140 | 0.1160 | 0.1150 |
| 1 | 1,500 | 1,500 | 0.2200 | 0.2220 | 0.2210 |
| 1 | 2,000 | 2,000 | 0.2740 | 0.2780 | 0.2760 |
| 1 | 2,500 | 2,500 | 0.3760 | 0.3820 | 0.3790 |
| 1 | 3,000 | 3,000 | 0.5620 | 0.5700 | 0.5660 |
| 1 | 3,500 | 3,500 | 0.6600 | 0.6680 | 0.6640 |
| 1 | 4,000 | 4,000 | 0.8320 | 0.8400 | 0.8360 |
| 1 | 4,500 | 4,500 | 1.0140 | 1.0240 | 1.0190 |
| 1 | 0 | 0 | 0.0620 | 0.0620 | 0.0620 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-147 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 149.7 |
| Location: | 45.27498, -120.83140 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 18.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 2.05 |
| 6 | 7.83 |
| 7 | 7.53 |
| 8 | 15.68 |
| 9 | 17.19 |
| 10 | 23.45 |
| 11 | 34.35 |
| 12 | 41.65 |
| Total Time (s) = | 149.73 |

**Field Notes**

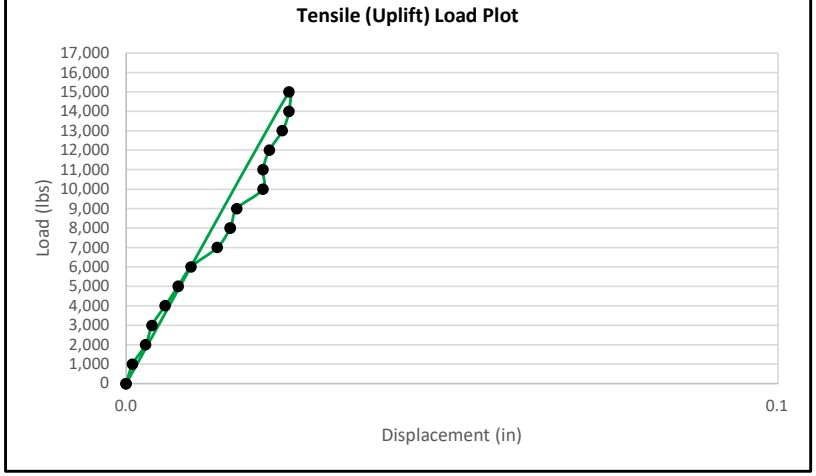
Rock encountered at 4.5 feet BGS during pre-drilling.

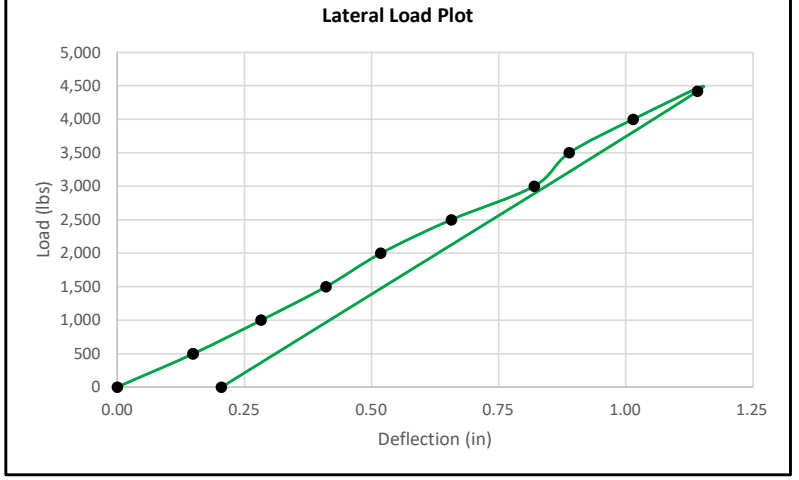
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1420 | 0.1560 | 0.1490 |
| 1 | 1,000 | 1,000 | 0.2700 | 0.2960 | 0.2830 |
| 1 | 1,500 | 1,500 | 0.3920 | 0.4300 | 0.4110 |
| 1 | 2,000 | 2,000 | 0.4940 | 0.5420 | 0.5180 |
| 1 | 2,500 | 2,500 | 0.6260 | 0.6880 | 0.6570 |
| 1 | 3,000 | 3,000 | 0.7780 | 0.8620 | 0.8200 |
| 1 | 3,500 | 3,500 | 0.8440 | 0.9340 | 0.8890 |
| 1 | 4,000 | 4,000 | 0.9600 | 1.0700 | 1.0150 |
| 1 | 4,500 | 4,420 | 1.0800 | 1.2020 | 1.1410 |
| 1 | 0 | 0 | 0.1720 | 0.2380 | 0.2050 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-151 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.5 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 73.6 |
| Location: | 45.26604, -120.83148 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 11.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.68 |
| 3 | 3.53 |
| 4 | 5.87 |
| 5 | 7.75 |
| 6 | 11.17 |
| 7 | 17.49 |
| 8 | 27.14 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 73.63 |

**Field Notes**

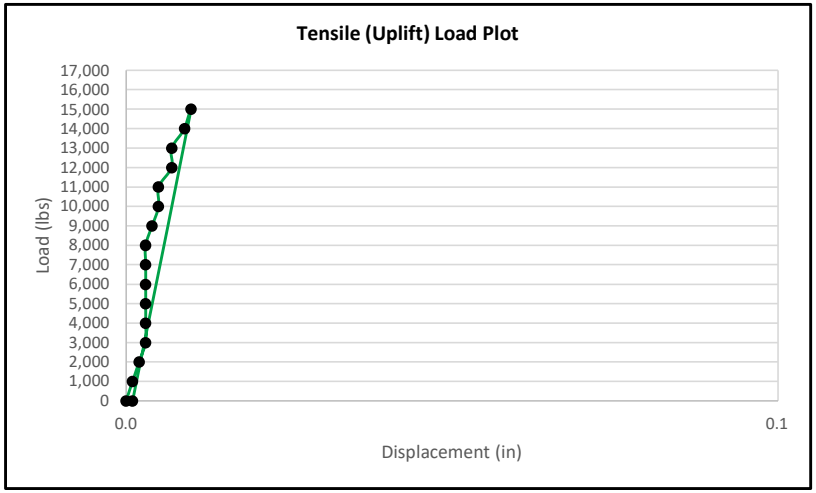
Rock encountered at 2 feet BGS during pre-drilling.

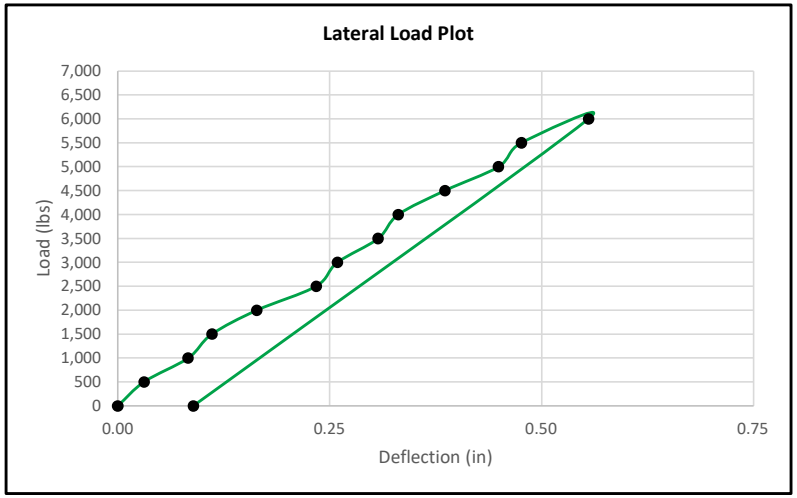
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 7,000 | 7,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 8,000 | 8,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 9,000 | 9,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 11,000 | 11,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 13,000 | 13,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 0 | 0 | 0.0020 | 0.0000 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0320 | 0.0300 | 0.0310 |
| 1 | 1,000 | 1,000 | 0.0840 | 0.0820 | 0.0830 |
| 1 | 1,500 | 1,500 | 0.1120 | 0.1100 | 0.1110 |
| 1 | 2,000 | 2,000 | 0.1640 | 0.1640 | 0.1640 |
| 1 | 2,500 | 2,500 | 0.2360 | 0.2320 | 0.2340 |
| 1 | 3,000 | 3,000 | 0.2620 | 0.2560 | 0.2590 |
| 1 | 3,500 | 3,500 | 0.3100 | 0.3040 | 0.3070 |
| 1 | 4,000 | 4,000 | 0.3340 | 0.3280 | 0.3310 |
| 1 | 4,500 | 4,500 | 0.3880 | 0.3840 | 0.3860 |
| 1 | 5,000 | 5,000 | 0.4500 | 0.4480 | 0.4490 |
| 1 | 5,500 | 5,500 | 0.4780 | 0.4740 | 0.4760 |
| 1 | 6,000 | 6,000 | 0.5500 | 0.5600 | 0.5550 |
| 1 | 0 | 0 | 0.0800 | 0.0980 | 0.0890 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-151 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.5 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/15/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 73.6 |
| Installed Coordinates: | 45.26604, -120.83148 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 11.3 |

**Embedment Data**

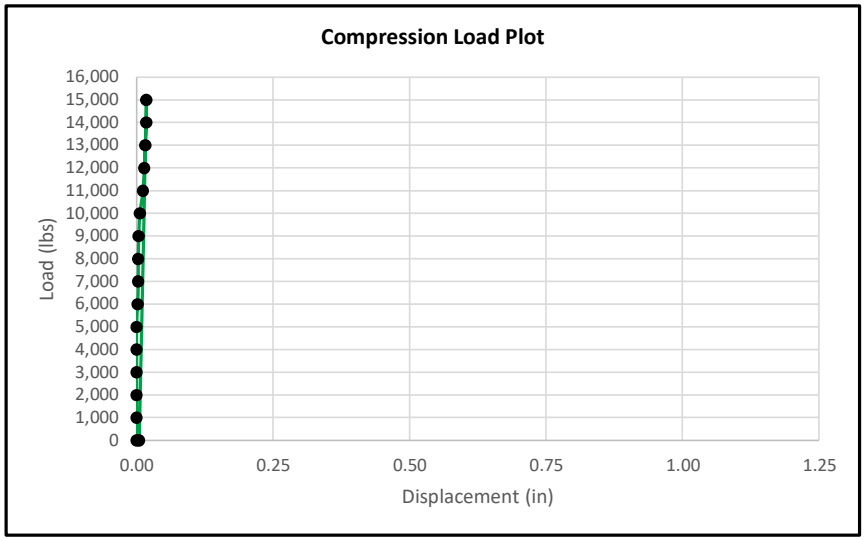
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 0.68 |
| 3 | 3.53 |
| 4 | 5.87 |
| 5 | 7.75 |
| 6 | 11.17 |
| 7 | 17.49 |
| 8 | 27.14 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 73.63 |

**Field Notes**

Rock encountered at 2 feet BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 4,000 | 4,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 5,000 | 5,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 6,000 | 6,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 8,000 | 8,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0020 | 0.0040 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0100 | 0.0140 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0100 | 0.0160 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0120 | 0.0180 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0120 | 0.0180 |
| 1 | 0 | 0 | 0.0080 | 0.0020 | 0.0050 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.5 | Pile ID: | PT-PV-154 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 143.8 |
| Location: | 45.25929, -120.82621 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 19.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.66 |
| 3 | 1.82 |
| 4 | 2.96 |
| 5 | 10.43 |
| 6 | 20.38 |
| 7 | 32.64 |
| 8 | 39.51 |
| 9 | 34.43 |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 143.83 |

**Field Notes**

Rock encountered at 2 feet BGS during pre-drilling. Pile refusal encountered at 8.5 feet BGS during install.

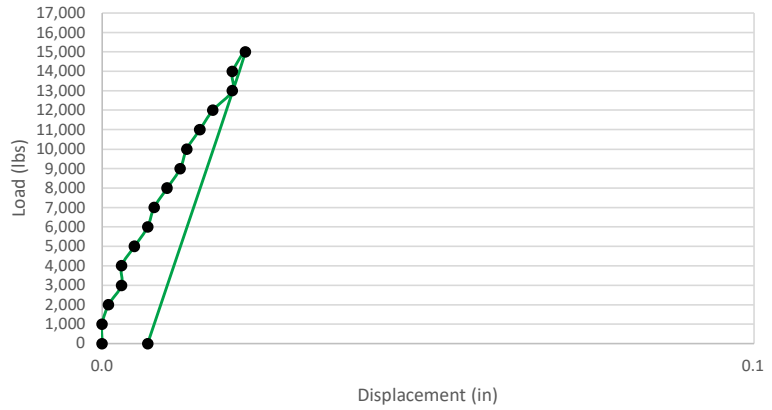
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0260 | 0.0220 |
| 1 | 0 | 0 | 0.0060 | 0.0080 | 0.0070 |

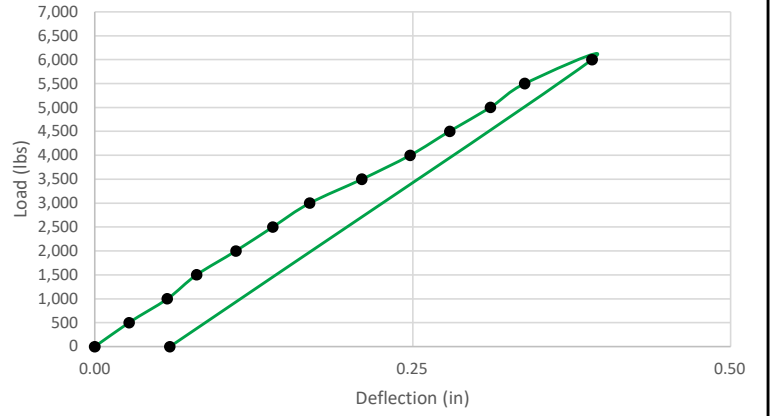
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0300 | 0.0240 | 0.0270 |
| 1 | 1,000 | 1,000 | 0.0600 | 0.0540 | 0.0570 |
| 1 | 1,500 | 1,500 | 0.0840 | 0.0760 | 0.0800 |
| 1 | 2,000 | 2,000 | 0.1160 | 0.1060 | 0.1110 |
| 1 | 2,500 | 2,500 | 0.1460 | 0.1340 | 0.1400 |
| 1 | 3,000 | 3,000 | 0.1760 | 0.1620 | 0.1690 |
| 1 | 3,500 | 3,500 | 0.2200 | 0.2000 | 0.2100 |
| 1 | 4,000 | 4,000 | 0.2600 | 0.2360 | 0.2480 |
| 1 | 4,500 | 4,500 | 0.2920 | 0.2660 | 0.2790 |
| 1 | 5,000 | 5,000 | 0.3260 | 0.2960 | 0.3110 |
| 1 | 5,500 | 5,500 | 0.3560 | 0.3200 | 0.3380 |
| 1 | 6,000 | 6,000 | 0.4100 | 0.3720 | 0.3910 |
| 1 | 0 | 0 | 0.0600 | 0.0580 | 0.0590 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-156 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/10/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 100.8 |
| Location: | 45.25592, -120.83711 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 11.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.74 |
| 5 | 6.09 |
| 6 | 8.48 |
| 7 | 9.58 |
| 8 | 8.11 |
| 9 | 10.01 |
| 10 | 11.82 |
| 11 | 12.56 |
| 12 | 33.45 |
| Total Time (s) = | 100.84 |

**Field Notes**

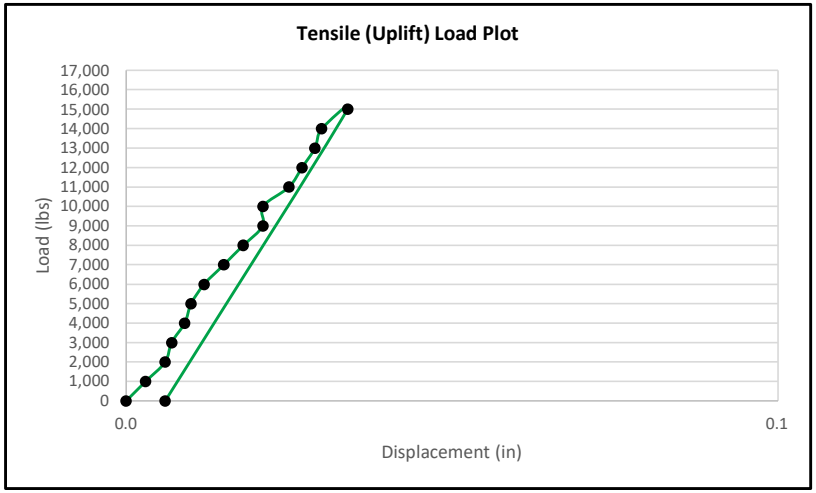
Rock encountered at 2 feet BGS during pre-drilling.

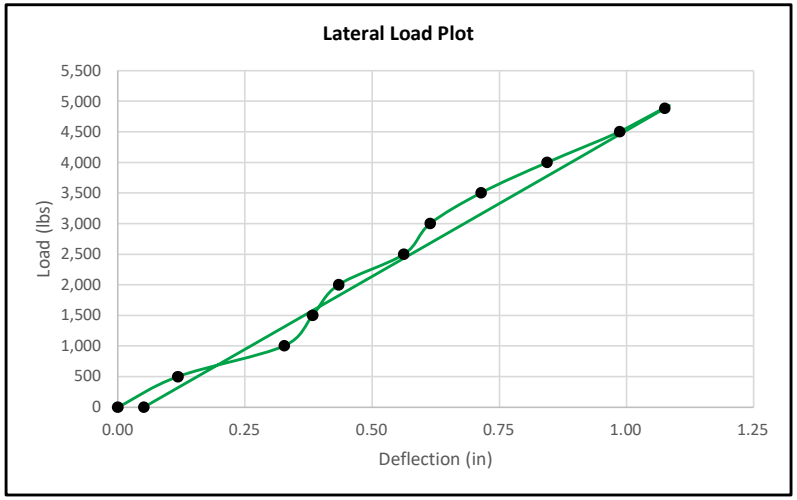
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 8,000 | 8,000 | 0.0220 | 0.0140 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 10,000 | 10,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0300 | 0.0200 | 0.0250 |
| 1 | 12,000 | 12,000 | 0.0320 | 0.0220 | 0.0270 |
| 1 | 13,000 | 13,000 | 0.0340 | 0.0240 | 0.0290 |
| 1 | 14,000 | 14,000 | 0.0360 | 0.0240 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0420 | 0.0260 | 0.0340 |
| 1 | 0 | 0 | 0.0060 | 0.0060 | 0.0060 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1180 | 0.1180 | 0.1180 |
| 1 | 1,000 | 1,000 | 0.3320 | 0.3220 | 0.3270 |
| 1 | 1,500 | 1,500 | 0.3900 | 0.3760 | 0.3830 |
| 1 | 2,000 | 2,000 | 0.4420 | 0.4260 | 0.4340 |
| 1 | 2,500 | 2,500 | 0.5720 | 0.5520 | 0.5620 |
| 1 | 3,000 | 3,000 | 0.6260 | 0.6020 | 0.6140 |
| 1 | 3,500 | 3,500 | 0.7280 | 0.7000 | 0.7140 |
| 1 | 4,000 | 4,000 | 0.8600 | 0.8280 | 0.8440 |
| 1 | 4,500 | 4,500 | 1.0060 | 0.9660 | 0.9860 |
| 1 | 5,000 | 4,880 | 1.1040 | 1.0460 | 1.0750 |
| 1 | 0 | 0 | 0.0680 | 0.0340 | 0.0510 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-157A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 2.35 |
| Location: | 45.29248, -120.85932 | Pre-Drill Depth (ft): | 6.0 | Avg. Installation Rate (sec/ft): | 1.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.88 |
| 6 | 1.47 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 2.35 |

**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 2,000 | 2,000 | 0.0320 | 0.0300 | 0.0310 |
| 1 | 3,000 | 3,000 | 0.1180 | 0.1200 | 0.1190 |
| 1 | 4,000 | 4,000 | 0.5260 | 0.5300 | 0.5280 |
| 1 | 0 | 0 | - | - | - |

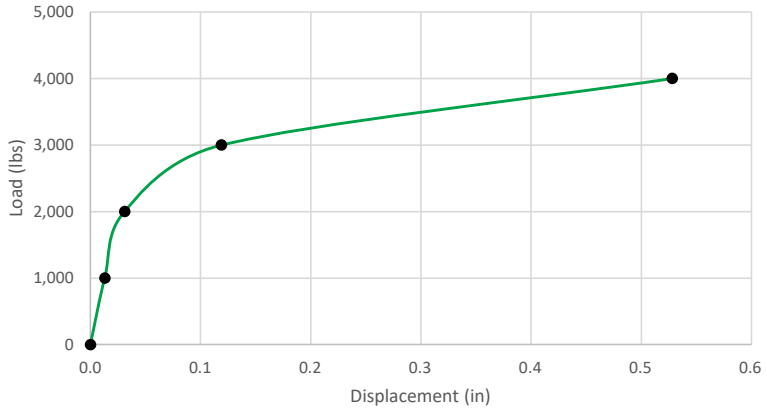
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0620 | 0.0640 | 0.0630 |
| 1 | 1,000 | 1,000 | 0.1400 | 0.1360 | 0.1380 |
| 1 | 1,500 | 1,500 | 0.2000 | 0.1960 | 0.1980 |
| 1 | 2,000 | 2,000 | 0.3160 | 0.3080 | 0.3120 |
| 1 | 2,500 | 2,500 | 0.4820 | 0.4680 | 0.4750 |
| 1 | 3,000 | 3,000 | 0.8700 | 0.8480 | 0.8590 |
| 1 | 3,500 | 3,500 | 0.9940 | 0.9700 | 0.9820 |
| 1 | 4,000 | 3,670 | 1.0840 | 1.0580 | 1.0710 |
| 1 | 0 | 0 | 0.5380 | 0.5200 | 0.5290 |

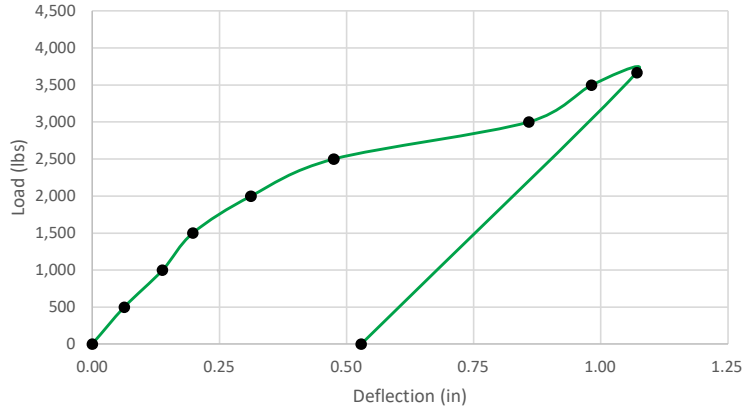
**Field Notes**

Rock encountered at 6 feet BGS during pre-drilling.
Pile displacement was significantly more than 1-inch at 4,700 lbs on the axial test, gauges came off the refrence beam.

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-157B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 8.1 |
| Location: | 45.29248, -120.85932 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.48 |
| 2 | 2.15 |
| 3 | 1.22 |
| 4 | 1.52 |
| 5 | 1.52 |
| 6 | 1.19 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 8.08 |

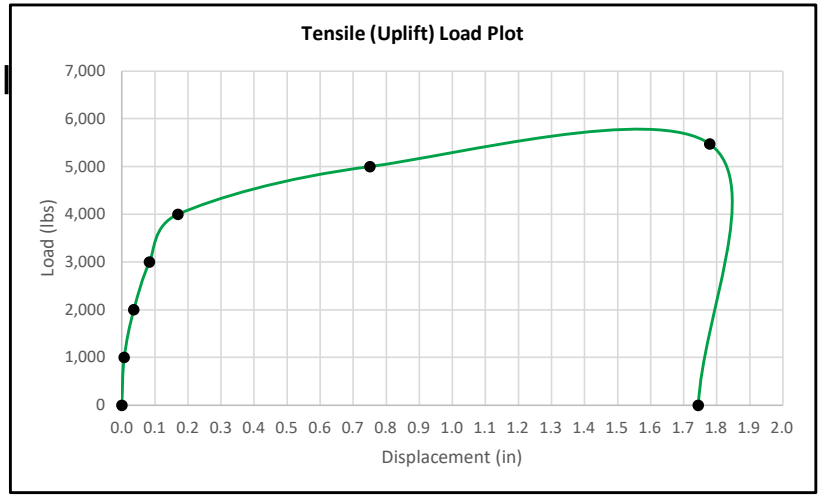
**Tensile (Uplift) Testing**

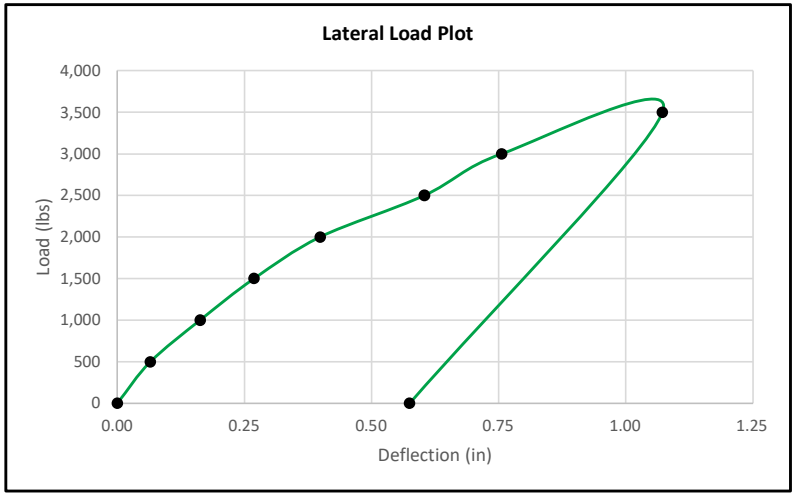
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 2,000 | 2,000 | 0.0360 | 0.0360 | 0.0360 |
| 1 | 3,000 | 3,000 | 0.0840 | 0.0840 | 0.0840 |
| 1 | 4,000 | 4,000 | 0.1700 | 0.1700 | 0.1700 |
| 1 | 5,000 | 5,000 | 0.7500 | 0.7520 | 0.7510 |
| 1 | 6,000 | 5,470 | 1.7760 | 1.7820 | 1.7790 |
| 1 | 0 | 0 | 1.7440 | 1.7440 | 1.7440 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0680 | 0.0620 | 0.0650 |
| 1 | 1,000 | 1,000 | 0.1660 | 0.1600 | 0.1630 |
| 1 | 1,500 | 1,500 | 0.2700 | 0.2680 | 0.2690 |
| 1 | 2,000 | 2,000 | 0.4000 | 0.3980 | 0.3990 |
| 1 | 2,500 | 2,500 | 0.6040 | 0.6040 | 0.6040 |
| 1 | 3,000 | 3,000 | 0.7560 | 0.7560 | 0.7560 |
| 1 | 3,500 | 3,500 | 1.0740 | 1.0700 | 1.0720 |
| 1 | 0 | 0 | 0.5760 | 0.5740 | 0.5750 |

**Field Notes**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-157B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/14/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 8.1 |
| Location: | 45.29248, -120.85932 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 1.5 |

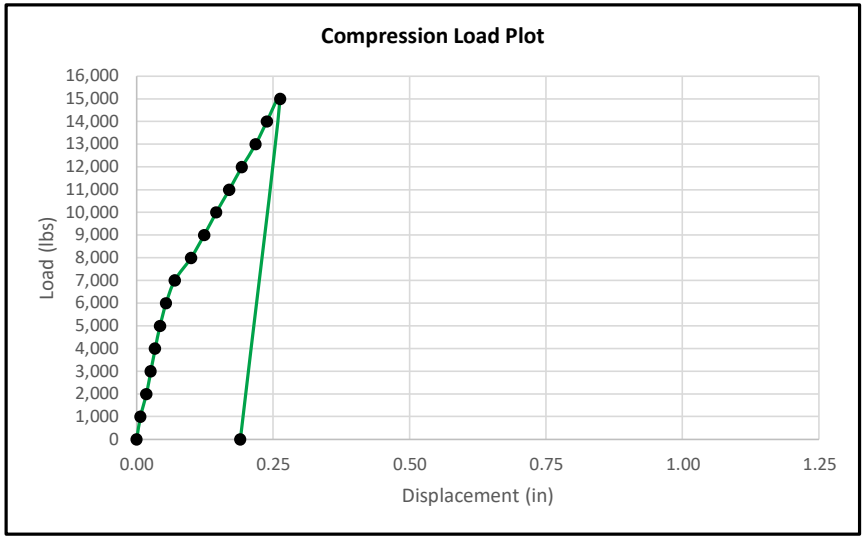
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.48 |
| 2 | 2.15 |
| 3 | 1.22 |
| 4 | 1.52 |
| 5 | 1.52 |
| 6 | 1.19 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 8.08 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 2,000 | 2,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 3,000 | 3,000 | 0.0260 | 0.0260 | 0.0260 |
| 1 | 4,000 | 4,000 | 0.0340 | 0.0340 | 0.0340 |
| 1 | 5,000 | 5,000 | 0.0420 | 0.0440 | 0.0430 |
| 1 | 6,000 | 6,000 | 0.0520 | 0.0560 | 0.0540 |
| 1 | 7,000 | 7,000 | 0.0680 | 0.0720 | 0.0700 |
| 1 | 8,000 | 8,000 | 0.0980 | 0.1020 | 0.1000 |
| 1 | 9,000 | 9,000 | 0.1200 | 0.1280 | 0.1240 |
| 1 | 10,000 | 10,000 | 0.1420 | 0.1500 | 0.1460 |
| 1 | 11,000 | 11,000 | 0.1660 | 0.1740 | 0.1700 |
| 1 | 12,000 | 12,000 | 0.1880 | 0.1980 | 0.1930 |
| 1 | 13,000 | 13,000 | 0.2120 | 0.2240 | 0.2180 |
| 1 | 14,000 | 14,000 | 0.2340 | 0.2440 | 0.2390 |
| 1 | 15,000 | 15,000 | 0.2560 | 0.2700 | 0.2630 |
| 1 | 0 | 0 | 0.1900 | 0.1900 | 0.1900 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-160 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 113.8 |
| Location: | 45.28562, -120.85819 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 16.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.39 |
| 5 | 2.51 |
| 6 | 4.99 |
| 7 | 12.67 |
| 8 | 19.44 |
| 9 | 29.64 |
| 10 | 43.18 |
| 11 | |
| 12 | |
| Total Time (s) = | 113.82 |

**Field Notes**

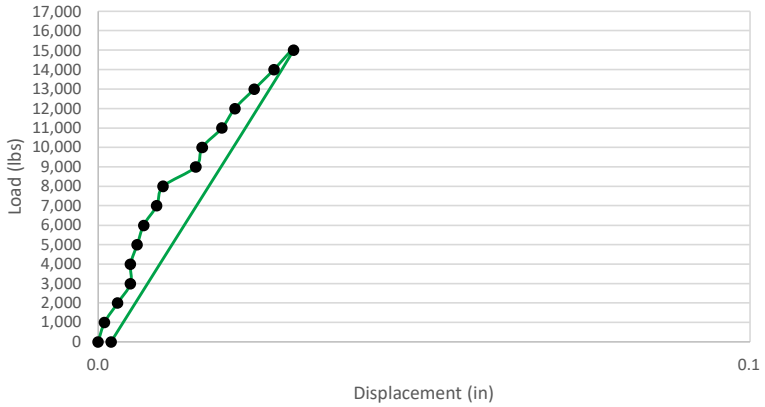
Rock encountered at 5 feet BGS during pre-drilling.

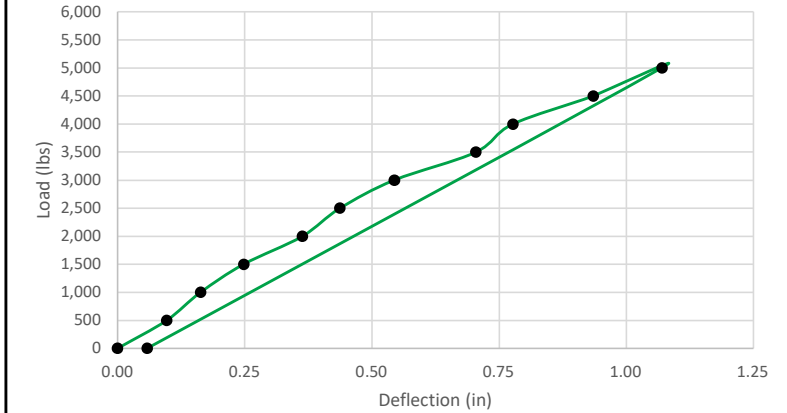
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0200 | 0.0240 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0240 | 0.0270 |
| 1 | 15,000 | 15,000 | 0.0340 | 0.0260 | 0.0300 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1040 | 0.0880 | 0.0960 |
| 1 | 1,000 | 1,000 | 0.1740 | 0.1520 | 0.1630 |
| 1 | 1,500 | 1,500 | 0.2600 | 0.2360 | 0.2480 |
| 1 | 2,000 | 2,000 | 0.3780 | 0.3480 | 0.3630 |
| 1 | 2,500 | 2,500 | 0.4540 | 0.4200 | 0.4370 |
| 1 | 3,000 | 3,000 | 0.5620 | 0.5260 | 0.5440 |
| 1 | 3,500 | 3,500 | 0.7240 | 0.6840 | 0.7040 |
| 1 | 4,000 | 4,000 | 0.7980 | 0.7560 | 0.7770 |
| 1 | 4,500 | 4,500 | 0.9560 | 0.9140 | 0.9350 |
| 1 | 5,000 | 5,000 | 1.0940 | 1.0460 | 1.0700 |
| 1 | 0 | 0 | 0.0620 | 0.0540 | 0.0580 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-PV-162 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 149.1 |
| Location: | 45.28175, -120.86424 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 37.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 24.8 |
| 5 | 40.64 |
| 6 | 28.72 |
| 7 | 54.97 |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 149.13 |

**Field Notes**

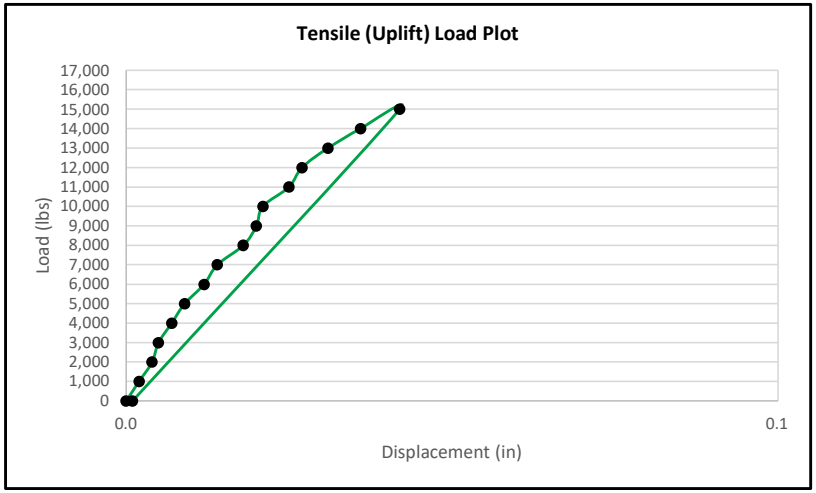
Rock encountered at 4 feet BGS during pre-drilling.
Pile refusal encountered at 7 feet BGS during install.

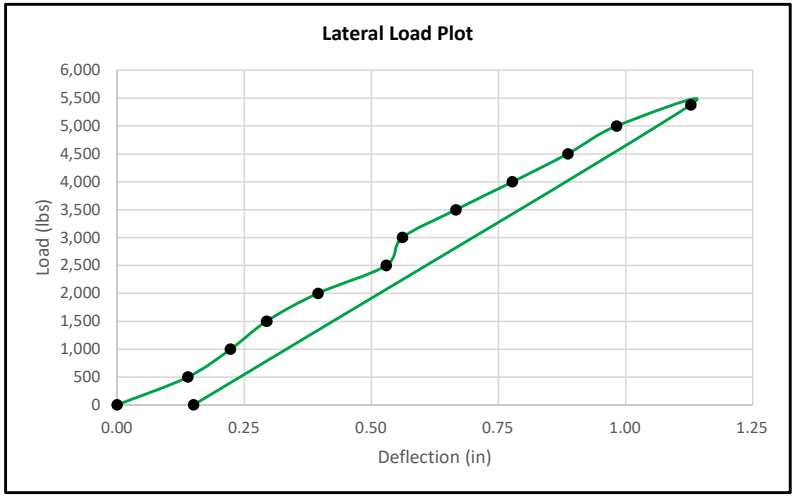
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0280 | 0.0250 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0300 | 0.0270 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0340 | 0.0310 |
| 1 | 14,000 | 14,000 | 0.0340 | 0.0380 | 0.0360 |
| 1 | 15,000 | 15,000 | 0.0400 | 0.0440 | 0.0420 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1180 | 0.1600 | 0.1390 |
| 1 | 1,000 | 1,000 | 0.1960 | 0.2500 | 0.2230 |
| 1 | 1,500 | 1,500 | 0.2560 | 0.3320 | 0.2940 |
| 1 | 2,000 | 2,000 | 0.3620 | 0.4280 | 0.3950 |
| 1 | 2,500 | 2,500 | 0.4720 | 0.5860 | 0.5290 |
| 1 | 3,000 | 3,000 | 0.5220 | 0.6000 | 0.5610 |
| 1 | 3,500 | 3,500 | 0.6020 | 0.7300 | 0.6660 |
| 1 | 4,000 | 4,000 | 0.7200 | 0.8340 | 0.7770 |
| 1 | 4,500 | 4,500 | 0.8160 | 0.9560 | 0.8860 |
| 1 | 5,000 | 5,000 | 0.9320 | 1.0320 | 0.9820 |
| 1 | 5,500 | 5,380 | 1.0980 | 1.1580 | 1.1280 |
| 1 | 0 | 0 | 0.1080 | 0.1920 | 0.1500 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-163 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 151.8 |
| Location: | 45.28482 , -120.87061 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 21.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.13 |
| 5 | 4.53 |
| 6 | 8.14 |
| 7 | 33.52 |
| 8 | 17 |
| 9 | 43 |
| 10 | 44.5 |
| 11 | |
| 12 | |
| Total Time (s) = | 151.82 |

**Field Notes**

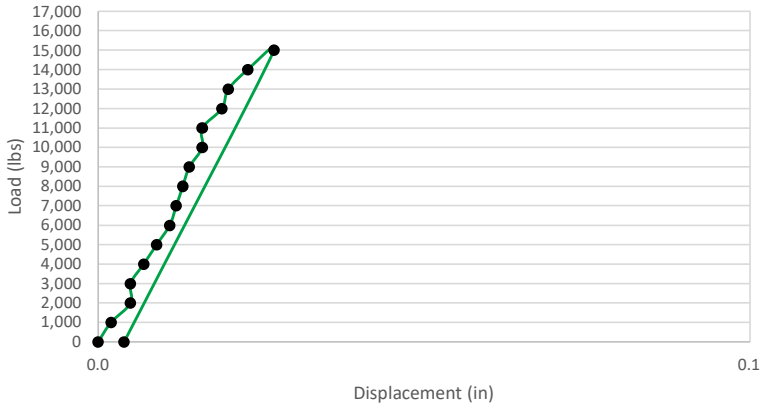
Rock encountered at 3 feet BGS during pre-drilling.
Auger offset 100 feet due to hard rock when drilling.

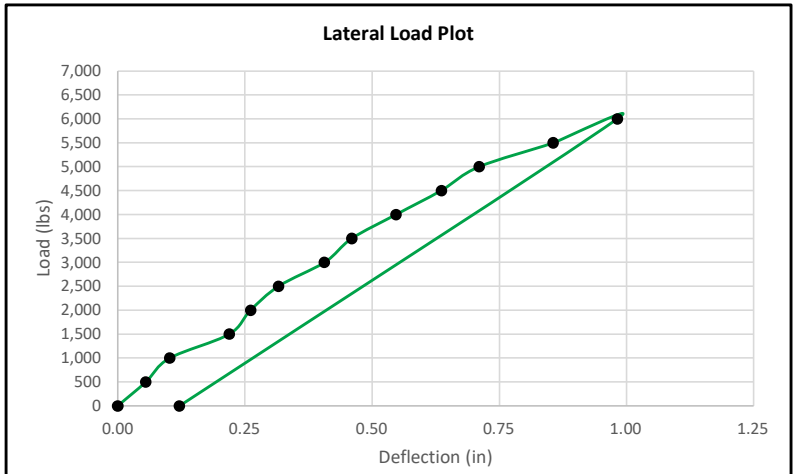
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0220 | 0.0230 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0260 | 0.0270 |
| 1 | 0 | 0 | 0.0040 | 0.0040 | 0.0040 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0600 | 0.0500 | 0.0550 |
| 1 | 1,000 | 1,000 | 0.1080 | 0.0960 | 0.1020 |
| 1 | 1,500 | 1,500 | 0.2280 | 0.2100 | 0.2190 |
| 1 | 2,000 | 2,000 | 0.2700 | 0.2520 | 0.2610 |
| 1 | 2,500 | 2,500 | 0.3260 | 0.3060 | 0.3160 |
| 1 | 3,000 | 3,000 | 0.4160 | 0.3960 | 0.4060 |
| 1 | 3,500 | 3,500 | 0.4700 | 0.4500 | 0.4600 |
| 1 | 4,000 | 4,000 | 0.5580 | 0.5360 | 0.5470 |
| 1 | 4,500 | 4,500 | 0.6480 | 0.6240 | 0.6360 |
| 1 | 5,000 | 5,000 | 0.7220 | 0.6980 | 0.7100 |
| 1 | 5,500 | 5,500 | 0.8660 | 0.8460 | 0.8560 |
| 1 | 6,000 | 6,000 | 0.9900 | 0.9740 | 0.9820 |
| 1 | 0 | 0 | 0.1160 | 0.1260 | 0.1210 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-164A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 4.1 |
| Location: | 45.28300, -120.87475 | Pre-Drill Depth (ft): | 6.0 | Avg. Installation Rate (sec/ft): | 2.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.51 |
| 6 | 2.58 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 4.09 |

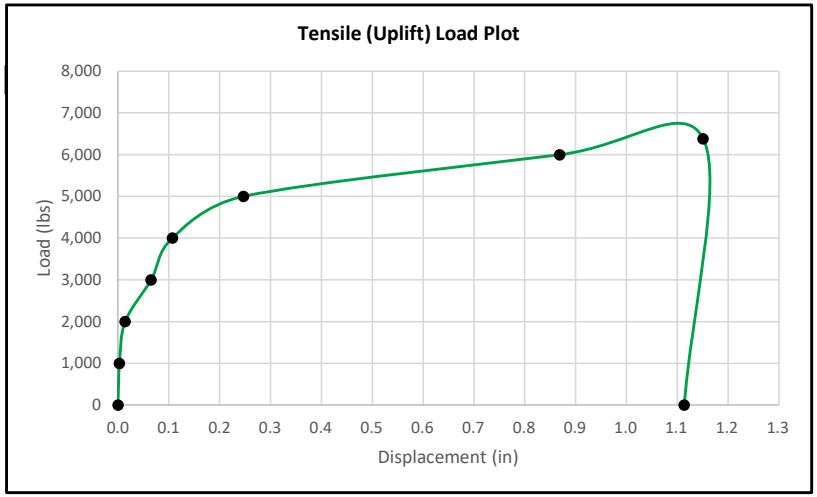
**Field Notes**

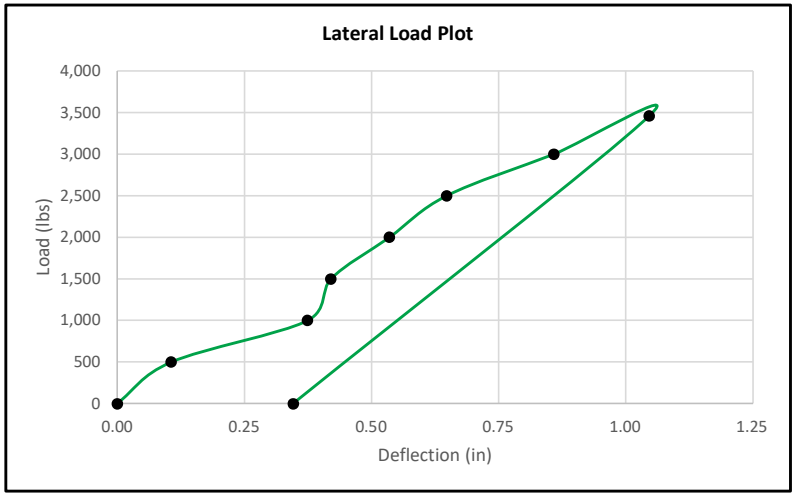
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 3,000 | 3,000 | 0.0620 | 0.0680 | 0.0650 |
| 1 | 4,000 | 4,000 | 0.1040 | 0.1100 | 0.1070 |
| 1 | 5,000 | 5,000 | 0.2440 | 0.2500 | 0.2470 |
| 1 | 6,000 | 6,000 | 0.8680 | 0.8700 | 0.8690 |
| 1 | 7,000 | 6,380 | 1.1520 | 1.1500 | 1.1510 |
| 1 | 0 | 0 | 1.1200 | 1.1080 | 1.1140 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1060 | 0.1060 | 0.1060 |
| 1 | 1,000 | 1,000 | 0.3680 | 0.3800 | 0.3740 |
| 1 | 1,500 | 1,500 | 0.4140 | 0.4260 | 0.4200 |
| 1 | 2,000 | 2,000 | 0.5280 | 0.5420 | 0.5350 |
| 1 | 2,500 | 2,500 | 0.6400 | 0.6560 | 0.6480 |
| 1 | 3,000 | 3,000 | 0.8520 | 0.8660 | 0.8590 |
| 1 | 3,500 | 3,460 | 1.0420 | 1.0500 | 1.0460 |
| 1 | 0 | 0 | 0.3700 | 0.3220 | 0.3460 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.0 | Pile ID: | PT-PV-164B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.3 |
| Location: | 45.28300, -120.87475 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.42 |
| 2 | 2.28 |
| 3 | 2.00 |
| 4 | 1.34 |
| 5 | 3.22 |
| 6 | 5.08 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.34 |

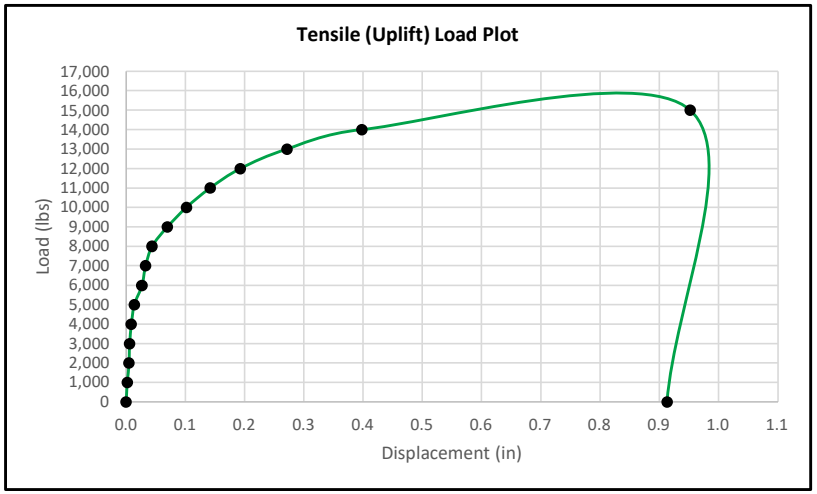
**Field Notes**

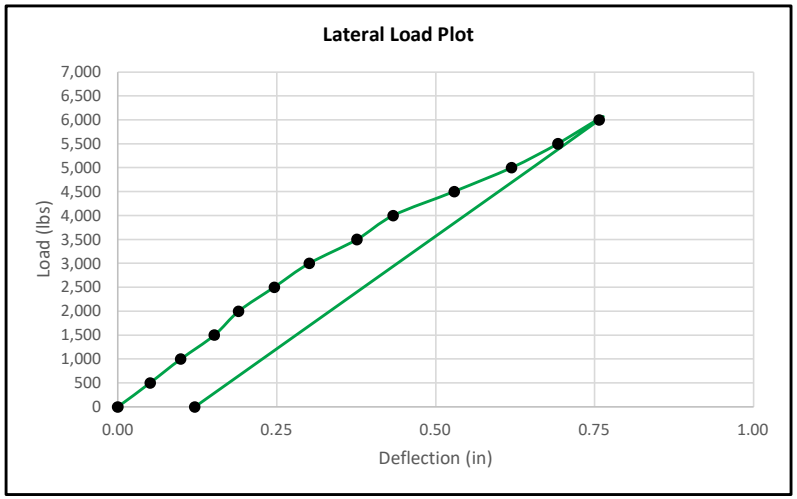
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 6,000 | 6,000 | 0.0240 | 0.0300 | 0.0270 |
| 1 | 7,000 | 7,000 | 0.0300 | 0.0360 | 0.0330 |
| 1 | 8,000 | 8,000 | 0.0400 | 0.0480 | 0.0440 |
| 1 | 9,000 | 9,000 | 0.0660 | 0.0740 | 0.0700 |
| 1 | 10,000 | 10,000 | 0.0980 | 0.1060 | 0.1020 |
| 1 | 11,000 | 11,000 | 0.1380 | 0.1460 | 0.1420 |
| 1 | 12,000 | 12,000 | 0.1880 | 0.1980 | 0.1930 |
| 1 | 13,000 | 13,000 | 0.2640 | 0.2800 | 0.2720 |
| 1 | 14,000 | 14,000 | 0.3880 | 0.4080 | 0.3980 |
| 1 | 15,000 | 15,000 | 0.9440 | 0.9600 | 0.9520 |
| 1 | 0 | 0 | 0.9120 | 0.9140 | 0.9130 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0520 | 0.0500 | 0.0510 |
| 1 | 1,000 | 1,000 | 0.1000 | 0.0980 | 0.0990 |
| 1 | 1,500 | 1,500 | 0.1540 | 0.1500 | 0.1520 |
| 1 | 2,000 | 2,000 | 0.1940 | 0.1860 | 0.1900 |
| 1 | 2,500 | 2,500 | 0.2520 | 0.2400 | 0.2460 |
| 1 | 3,000 | 3,000 | 0.3080 | 0.2940 | 0.3010 |
| 1 | 3,500 | 3,500 | 0.3860 | 0.3660 | 0.3760 |
| 1 | 4,000 | 4,000 | 0.4440 | 0.4220 | 0.4330 |
| 1 | 4,500 | 4,500 | 0.5420 | 0.5160 | 0.5290 |
| 1 | 5,000 | 5,000 | 0.6320 | 0.6060 | 0.6190 |
| 1 | 5,500 | 5,500 | 0.7060 | 0.6780 | 0.6920 |
| 1 | 6,000 | 6,000 | 0.7720 | 0.7420 | 0.7570 |
| 1 | 0 | 0 | 0.1200 | 0.1220 | 0.1210 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6 | Pile ID: | PT-PV-164B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.5 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/14/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.3 |
| Location: | 45.28300, -120.87475 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.6 |

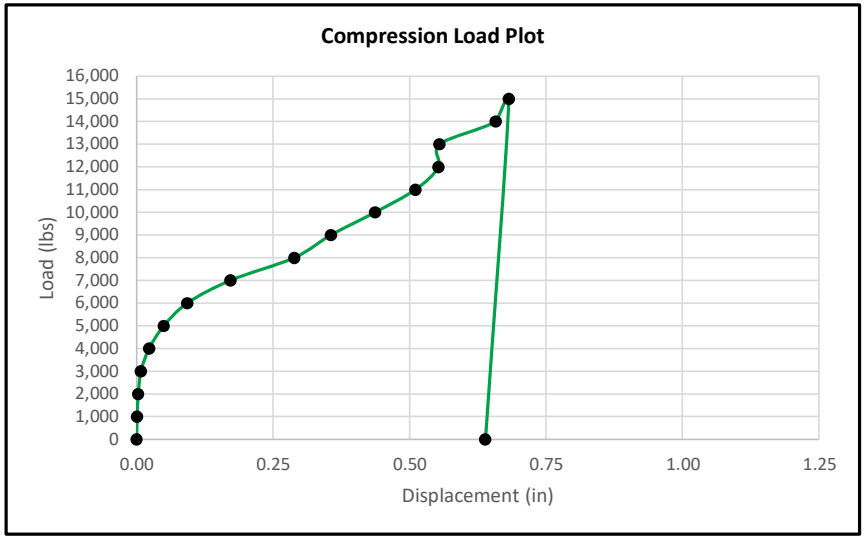
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.42 |
| 2 | 2.28 |
| 3 | 2.000 |
| 4 | 1.34 |
| 5 | 3.22 |
| 6 | 5.08 |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.34 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0280 | 0.0180 | 0.0230 |
| 1 | 5,000 | 5,000 | 0.0560 | 0.0440 | 0.0500 |
| 1 | 6,000 | 6,000 | 0.0980 | 0.0880 | 0.0930 |
| 1 | 7,000 | 7,000 | 0.1780 | 0.1660 | 0.1720 |
| 1 | 8,000 | 8,000 | 0.2960 | 0.2820 | 0.2890 |
| 1 | 9,000 | 9,000 | 0.3640 | 0.3480 | 0.3560 |
| 1 | 10,000 | 10,000 | 0.4460 | 0.4280 | 0.4370 |
| 1 | 11,000 | 11,000 | 0.5200 | 0.5020 | 0.5110 |
| 1 | 12,000 | 12,000 | 0.5640 | 0.5420 | 0.5530 |
| 1 | 13,000 | 13,000 | 0.6080 | 0.5020 | 0.5550 |
| 1 | 14,000 | 14,000 | 0.6700 | 0.6460 | 0.6580 |
| 1 | 15,000 | 15,000 | 0.6940 | 0.6700 | 0.6820 |
| 1 | 0 | 0 | 0.6400 | 0.6380 | 0.6390 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-167 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 32.0 |
| Location: | 45.29633 , -120.81145 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 3.03 |
| 5 | 2.75 |
| 6 | 4.88 |
| 7 | 8.56 |
| 8 | 12.74 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 31.96 |

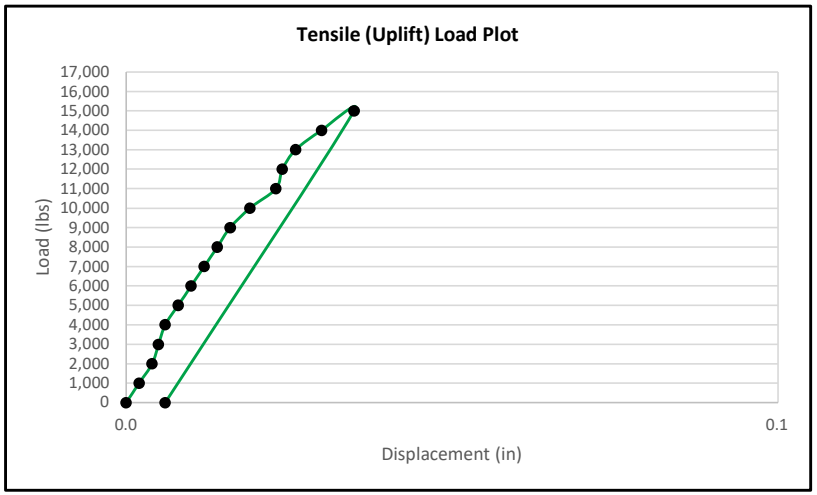
Rock encountered at 2.5 feet BGS during pre-drilling. Pile refusal encountered at 6 feet when drilling, offset 100 feet.

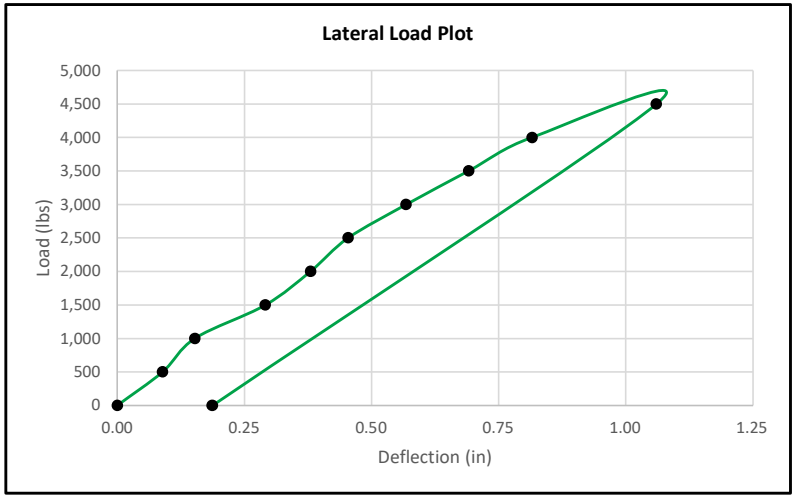
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0280 | 0.0240 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0300 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0340 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0400 | 0.0350 |
| 1 | 0 | 0 | 0.0060 | 0.0060 | 0.0060 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0900 | 0.0880 | 0.0890 |
| 1 | 1,000 | 1,000 | 0.1540 | 0.1520 | 0.1530 |
| 1 | 1,500 | 1,500 | 0.2940 | 0.2880 | 0.2910 |
| 1 | 2,000 | 2,000 | 0.3840 | 0.3760 | 0.3800 |
| 1 | 2,500 | 2,500 | 0.4580 | 0.4500 | 0.4540 |
| 1 | 3,000 | 3,000 | 0.5720 | 0.5640 | 0.5680 |
| 1 | 3,500 | 3,500 | 0.6940 | 0.6880 | 0.6910 |
| 1 | 4,000 | 4,000 | 0.8180 | 0.8140 | 0.8160 |
| 1 | 4,500 | 4,500 | 1.0580 | 1.0620 | 1.0600 |
| 1 | 0 | 0 | 0.1620 | 0.2120 | 0.1870 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-169 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 102.8 |
| Location: | 45.28723, -120.81155 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 14.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.39 |
| 5 | 6.23 |
| 6 | 10.91 |
| 7 | 12.37 |
| 8 | 10.82 |
| 9 | 19.07 |
| 10 | 42.01 |
| 11 | |
| 12 | |
| Total Time (s) = | 102.8 |

**Field Notes**

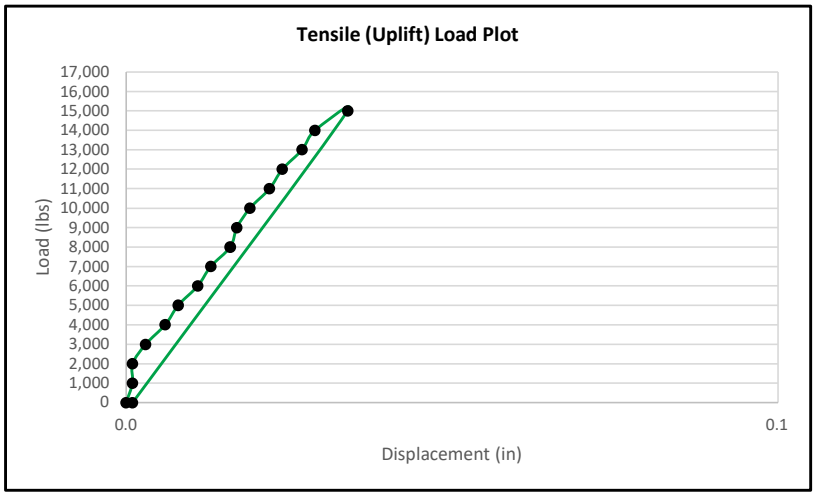
Rock encountered at 3.5 feet BGS during pre-drilling.

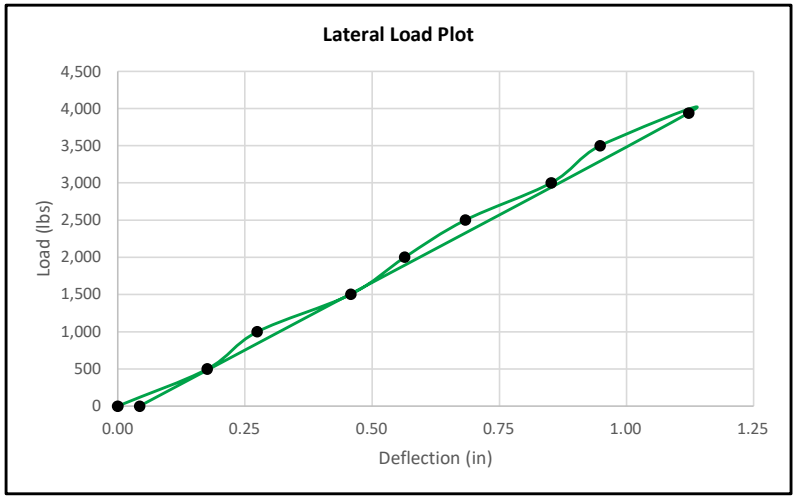
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0260 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0280 | 0.0240 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0320 | 0.0270 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0340 | 0.0290 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0400 | 0.0340 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1740 | 0.1780 | 0.1760 |
| 1 | 1,000 | 1,000 | 0.2700 | 0.2780 | 0.2740 |
| 1 | 1,500 | 1,500 | 0.4520 | 0.4640 | 0.4580 |
| 1 | 2,000 | 2,000 | 0.5600 | 0.5680 | 0.5640 |
| 1 | 2,500 | 2,500 | 0.6780 | 0.6880 | 0.6830 |
| 1 | 3,000 | 3,000 | 0.8480 | 0.8560 | 0.8520 |
| 1 | 3,500 | 3,500 | 0.9440 | 0.9520 | 0.9480 |
| 1 | 4,000 | 3,940 | 1.1180 | 1.1260 | 1.1220 |
| 1 | 0 | 0 | 0.0520 | 0.0340 | 0.0430 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-172 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 53.08 |
| Location: | 45.27555, -120.81527 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 9.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.06 |
| 4 | 1.17 |
| 5 | 5.84 |
| 6 | 6.54 |
| 7 | 11.27 |
| 8 | 27.2 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 53.08 |

**Field Notes**

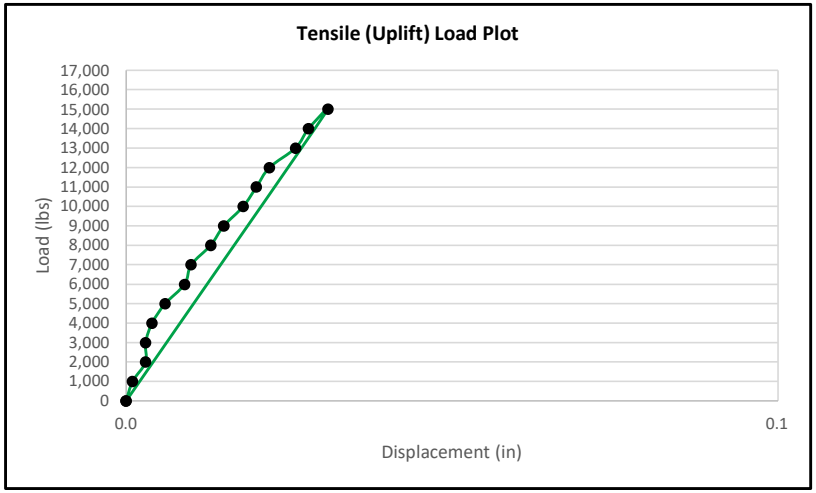
Rock encountered at 3 feet BGS during pre-drilling.
Pile refusal encountered at 3.5 feet BGS, pre-drilled an additional hole to attempt install again, second pile achieved full embedment and was tested.

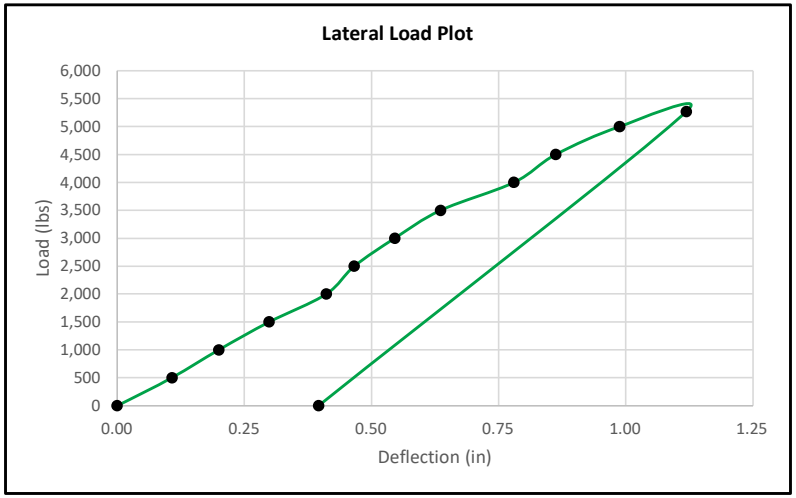
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 12,000 | 12,000 | 0.0160 | 0.0280 | 0.0220 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0320 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0340 | 0.0280 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0400 | 0.0310 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1060 | 0.1100 | 0.1080 |
| 1 | 1,000 | 1,000 | 0.1960 | 0.2040 | 0.2000 |
| 1 | 1,500 | 1,500 | 0.2940 | 0.3040 | 0.2990 |
| 1 | 2,000 | 2,000 | 0.4060 | 0.4160 | 0.4110 |
| 1 | 2,500 | 2,500 | 0.4600 | 0.4720 | 0.4660 |
| 1 | 3,000 | 3,000 | 0.5380 | 0.5540 | 0.5460 |
| 1 | 3,500 | 3,500 | 0.6260 | 0.6460 | 0.6360 |
| 1 | 4,000 | 4,000 | 0.7620 | 0.7980 | 0.7800 |
| 1 | 4,500 | 4,500 | 0.8400 | 0.8840 | 0.8620 |
| 1 | 5,000 | 5,000 | 0.9580 | 1.0180 | 0.9880 |
| 1 | 5,500 | 5,270 | 1.1100 | 1.1280 | 1.1190 |
| 1 | 0 | 0 | 0.4700 | 0.3220 | 0.3960 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-173 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 69.4 |
| Location: | 45.27368, -120.81134 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 8.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 4.5 |
| 4 | 2.79 |
| 5 | 4.18 |
| 6 | 12.06 |
| 7 | 11.74 |
| 8 | 8.24 |
| 9 | 8.23 |
| 10 | 17.64 |
| 11 | |
| 12 | |
| Total Time (s) = | 69.38 |

**Field Notes**

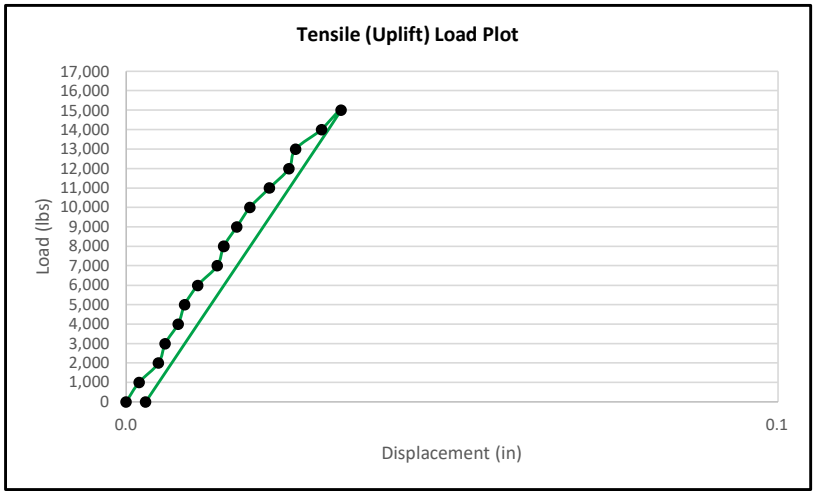
Rock encountered at 2 feet BGS during pre-drilling.

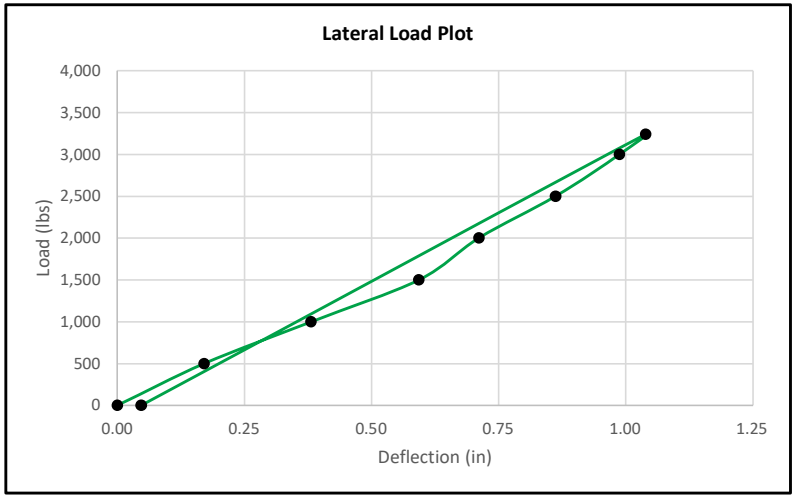
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0220 | 0.0280 | 0.0250 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0280 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0320 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0360 | 0.0330 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1700 | 0.1720 | 0.1710 |
| 1 | 1,000 | 1,000 | 0.3740 | 0.3880 | 0.3810 |
| 1 | 1,500 | 1,500 | 0.5860 | 0.6000 | 0.5930 |
| 1 | 2,000 | 2,000 | 0.7040 | 0.7180 | 0.7110 |
| 1 | 2,500 | 2,500 | 0.8540 | 0.8700 | 0.8620 |
| 1 | 3,000 | 3,000 | 0.9740 | 1.0020 | 0.9880 |
| 1 | 3,500 | 3,240 | 1.0220 | 1.0560 | 1.0390 |
| 1 | 0 | 0 | 0.0500 | 0.0440 | 0.0470 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-177 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 33.6 |
| Location: | 45.29669, -120.80215 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 7.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.68 |
| 5 | 2.38 |
| 6 | 5.54 |
| 7 | 9.25 |
| 8 | 15.72 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 33.57 |

**Field Notes**

Rock encountered at 4 feet BGS during pre-drilling.

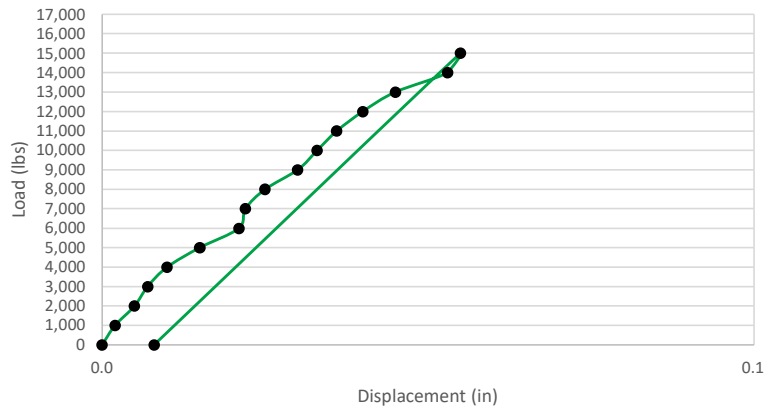
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0260 | 0.0220 |
| 1 | 8,000 | 8,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 9,000 | 9,000 | 0.0240 | 0.0360 | 0.0300 |
| 1 | 10,000 | 10,000 | 0.0280 | 0.0380 | 0.0330 |
| 1 | 11,000 | 11,000 | 0.0300 | 0.0420 | 0.0360 |
| 1 | 12,000 | 12,000 | 0.0340 | 0.0460 | 0.0400 |
| 1 | 13,000 | 13,000 | 0.0380 | 0.0520 | 0.0450 |
| 1 | 14,000 | 14,000 | 0.0440 | 0.0620 | 0.0530 |
| 1 | 15,000 | 15,000 | 0.0480 | 0.0620 | 0.0550 |
| 1 | 0 | 0 | 0.0080 | 0.0080 | 0.0080 |

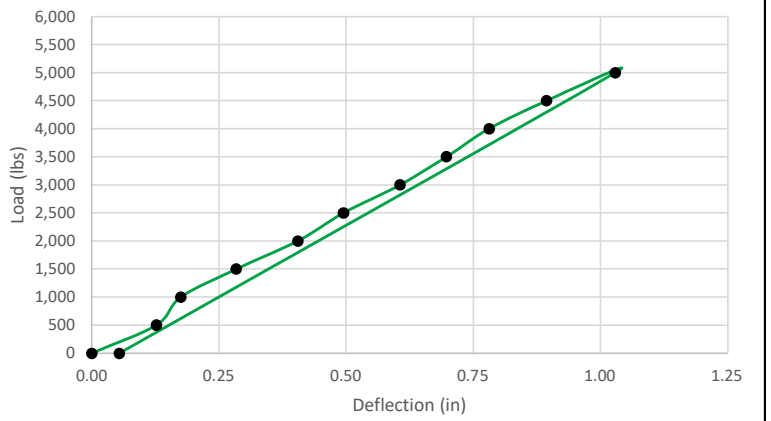
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1280 | 0.1260 | 0.1270 |
| 1 | 1,000 | 1,000 | 0.1760 | 0.1740 | 0.1750 |
| 1 | 1,500 | 1,500 | 0.2860 | 0.2820 | 0.2840 |
| 1 | 2,000 | 2,000 | 0.4080 | 0.4020 | 0.4050 |
| 1 | 2,500 | 2,500 | 0.5000 | 0.4900 | 0.4950 |
| 1 | 3,000 | 3,000 | 0.6140 | 0.5980 | 0.6060 |
| 1 | 3,500 | 3,500 | 0.7060 | 0.6880 | 0.6970 |
| 1 | 4,000 | 4,000 | 0.7920 | 0.7700 | 0.7810 |
| 1 | 4,500 | 4,500 | 0.9080 | 0.8800 | 0.8940 |
| 1 | 5,000 | 5,000 | 1.0460 | 1.0120 | 1.0290 |
| 1 | 0 | 0 | 0.0580 | 0.0500 | 0.0540 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-178 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 59.6 |
| Location: | 45.29051, -120.80674 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 8.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.25 |
| 5 | 5.19 |
| 6 | 7.26 |
| 7 | 7.89 |
| 8 | 10.33 |
| 9 | 13.26 |
| 10 | 13.38 |
| 11 | |
| 12 | |
| Total Time (s) = | 59.56 |

**Field Notes**

Rock encountered at 3 feet BGS during pre-drilling.

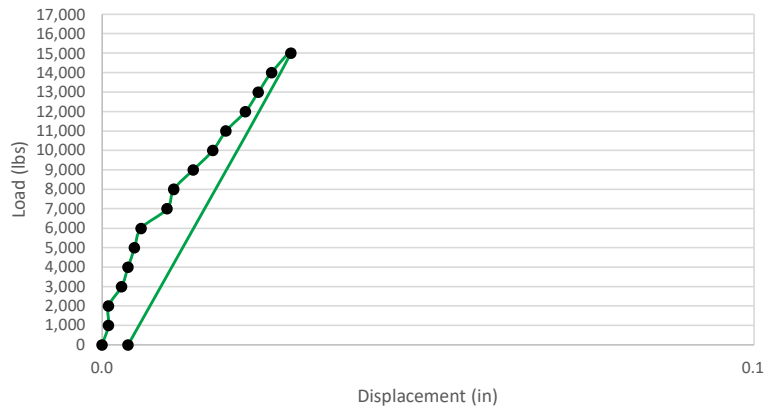
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0260 | 0.0220 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0280 | 0.0240 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0300 | 0.0260 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0320 | 0.0290 |
| 1 | 0 | 0 | 0.0020 | 0.0060 | 0.0040 |

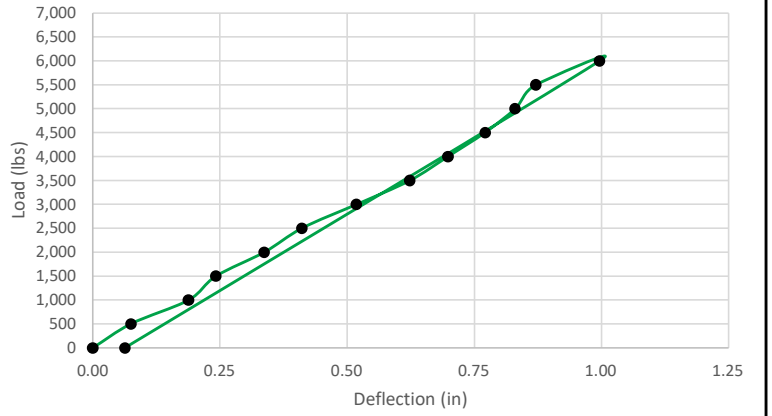
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0800 | 0.0700 | 0.0750 |
| 1 | 1,000 | 1,000 | 0.1960 | 0.1800 | 0.1880 |
| 1 | 1,500 | 1,500 | 0.2500 | 0.2340 | 0.2420 |
| 1 | 2,000 | 2,000 | 0.3460 | 0.3280 | 0.3370 |
| 1 | 2,500 | 2,500 | 0.4200 | 0.4020 | 0.4110 |
| 1 | 3,000 | 3,000 | 0.5280 | 0.5080 | 0.5180 |
| 1 | 3,500 | 3,500 | 0.6340 | 0.6120 | 0.6230 |
| 1 | 4,000 | 4,000 | 0.7100 | 0.6860 | 0.6980 |
| 1 | 4,500 | 4,500 | 0.7840 | 0.7580 | 0.7710 |
| 1 | 5,000 | 5,000 | 0.8440 | 0.8160 | 0.8300 |
| 1 | 5,500 | 5,500 | 0.8860 | 0.8560 | 0.8710 |
| 1 | 6,000 | 6,000 | 1.0100 | 0.9820 | 0.9960 |
| 1 | 0 | 0 | 0.0580 | 0.0680 | 0.0630 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-178 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/15/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 59.6 |
| Location: | 45.29051, -120.80674 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 8.5 |

**Embedment Data**

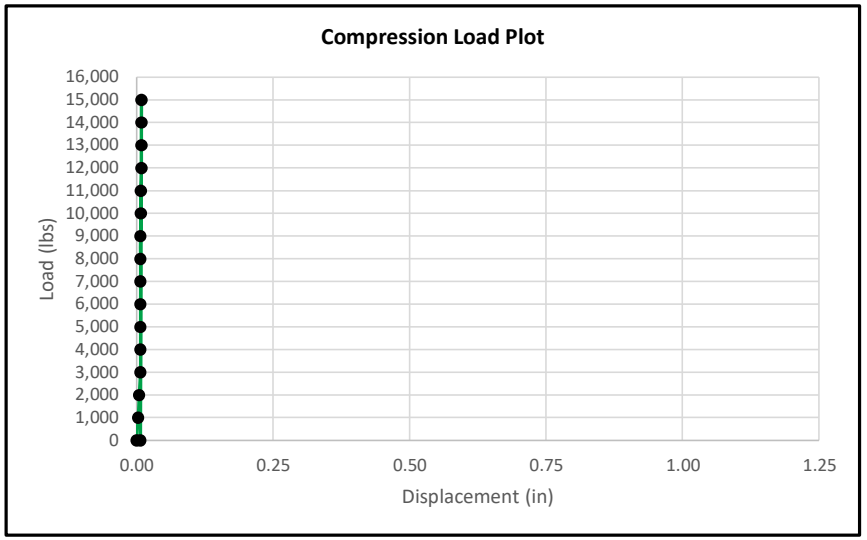
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 2.25 |
| 5 | 5.19 |
| 6 | 7.26 |
| 7 | 7.89 |
| 8 | 10.33 |
| 9 | 13.26 |
| 10 | 13.38 |
| 11 | |
| 12 | |
| Total Time (s) = | 59.56 |

**Field Notes**

Rock encountered at 3 feet BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 15,000 | 15,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 0 | 0 | 0.0080 | 0.0060 | 0.0070 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 11.0 | Pile ID: | PT-PV-179 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 122.2 |
| Location: | 45.29901, -120.79501 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 13.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.34 |
| 4 | 3.34 |
| 5 | 5.75 |
| 6 | 7.31 |
| 7 | 9.88 |
| 8 | 14.49 |
| 9 | 18.74 |
| 10 | 21.74 |
| 11 | 40.6 |
| 12 | - |
| Total Time (s) = | 122.19 |

**Field Notes**

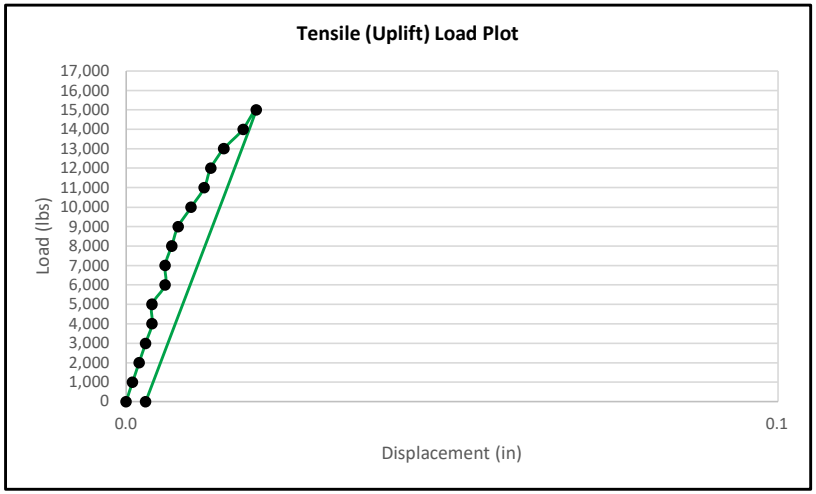
Pile refusal encountered at 11 feet BGS during install.

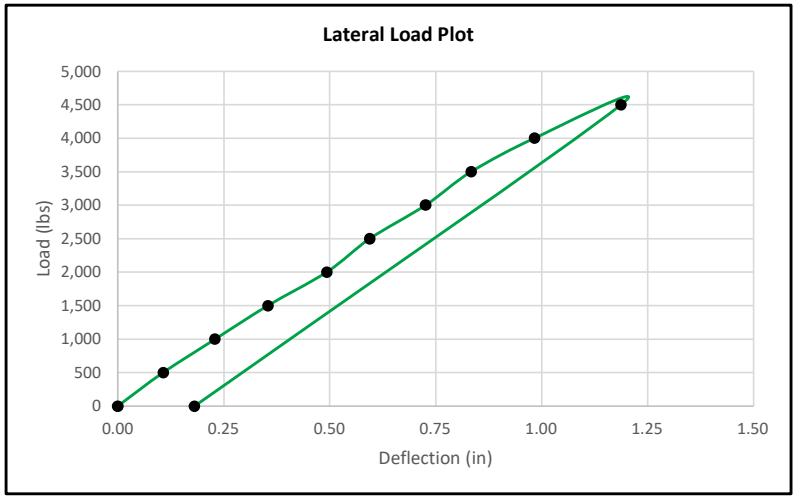
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 15,000 | 15,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1120 | 0.1020 | 0.1070 |
| 1 | 1,000 | 1,000 | 0.2340 | 0.2240 | 0.2290 |
| 1 | 1,500 | 1,500 | 0.3600 | 0.3480 | 0.3540 |
| 1 | 2,000 | 2,000 | 0.5020 | 0.4840 | 0.4930 |
| 1 | 2,500 | 2,500 | 0.6040 | 0.5840 | 0.5940 |
| 1 | 3,000 | 3,000 | 0.7400 | 0.7120 | 0.7260 |
| 1 | 3,500 | 3,500 | 0.8540 | 0.8140 | 0.8340 |
| 1 | 4,000 | 4,000 | 1.0080 | 0.9580 | 0.9830 |
| 1 | 4,500 | 4,500 | 1.2260 | 1.1480 | 1.1870 |
| 1 | 0 | 0 | 0.1980 | 0.1640 | 0.1810 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-181 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 53.1 |
| Location: | 45.28902, -120.79070 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 8.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.06 |
| 4 | 1.17 |
| 5 | 5.84 |
| 6 | 6.54 |
| 7 | 11.27 |
| 8 | 27.2 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 53.08 |

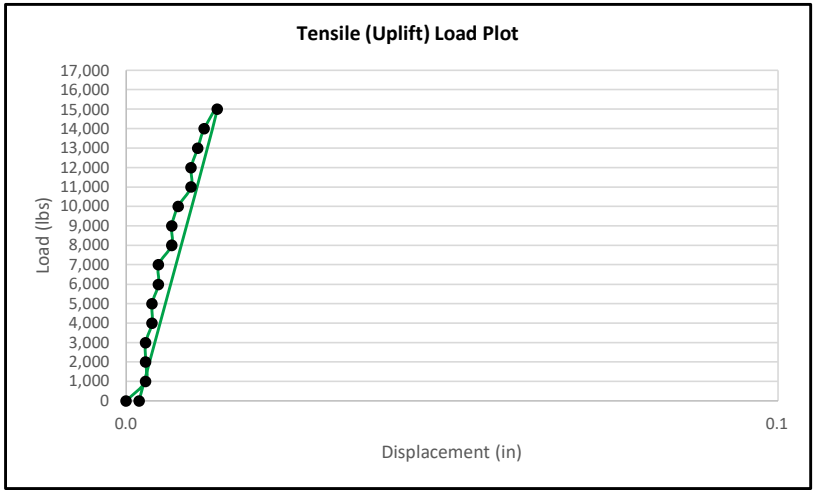
**Field Notes**

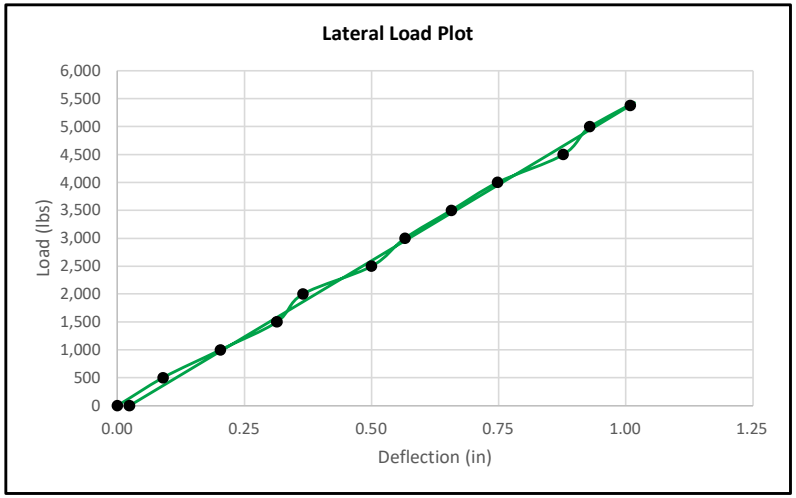
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0940 | 0.0860 | 0.0900 |
| 1 | 1,000 | 1,000 | 0.2040 | 0.2020 | 0.2030 |
| 1 | 1,500 | 1,500 | 0.3140 | 0.3140 | 0.3140 |
| 1 | 2,000 | 2,000 | 0.3640 | 0.3660 | 0.3650 |
| 1 | 2,500 | 2,500 | 0.5000 | 0.5000 | 0.5000 |
| 1 | 3,000 | 3,000 | 0.5660 | 0.5660 | 0.5660 |
| 1 | 3,500 | 3,500 | 0.6560 | 0.6580 | 0.6570 |
| 1 | 4,000 | 4,000 | 0.7480 | 0.7480 | 0.7480 |
| 1 | 4,500 | 4,500 | 0.8760 | 0.8780 | 0.8770 |
| 1 | 5,000 | 5,000 | 0.9280 | 0.9300 | 0.9290 |
| 1 | 5,500 | 5,380 | 1.0100 | 1.0080 | 1.0090 |
| 1 | 0 | 0 | 0.0320 | 0.0160 | 0.0240 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.5 | Pile ID: | PT-PV-183 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 135.7 |
| Location: | 45.29870, -120.77995 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 20.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.27 |
| 3 | 4.16 |
| 4 | 12.06 |
| 5 | 17.14 |
| 6 | 30.6 |
| 7 | 36.7 |
| 8 | 33.78 |
| 9 | - |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 135.71 |

**Field Notes**

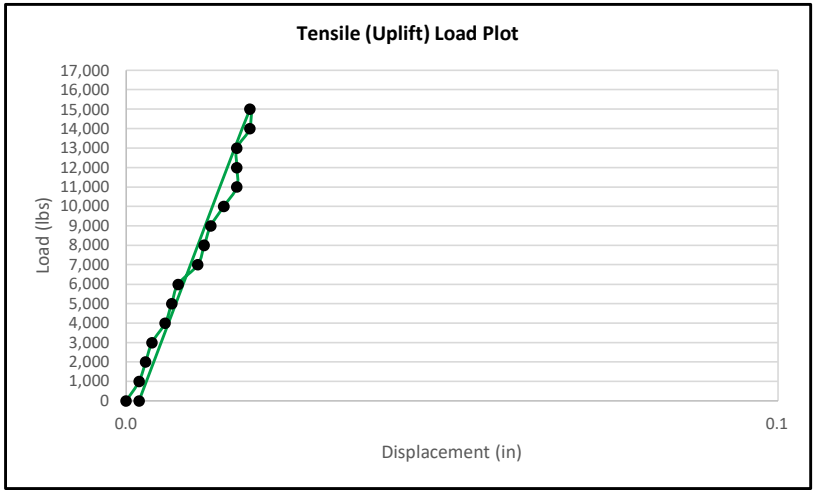
Rock encountered at 1.5 feet BGS during pre-drilling.
Pile refusal encountered at 8.5 feet BGS during install.

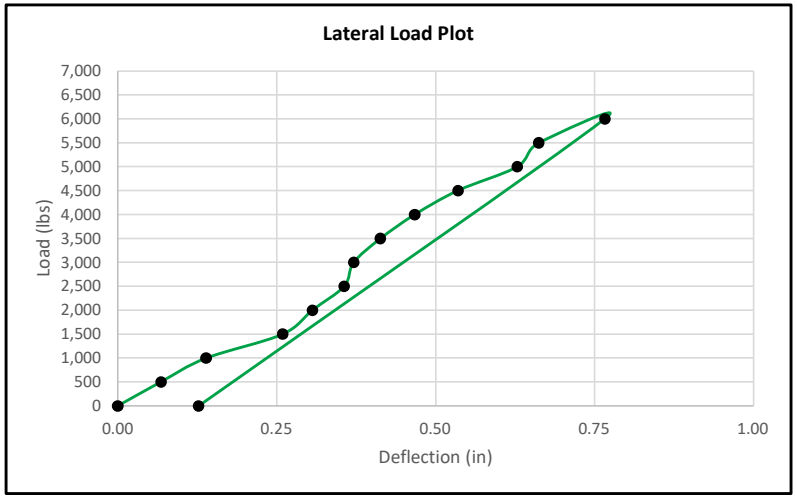
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0180 | 0.0130 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0200 | 0.0150 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 14,000 | 14,000 | 0.0140 | 0.0240 | 0.0190 |
| 1 | 15,000 | 15,000 | 0.0140 | 0.0240 | 0.0190 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0700 | 0.0660 | 0.0680 |
| 1 | 1,000 | 1,000 | 0.1420 | 0.1360 | 0.1390 |
| 1 | 1,500 | 1,500 | 0.2660 | 0.2520 | 0.2590 |
| 1 | 2,000 | 2,000 | 0.3160 | 0.2960 | 0.3060 |
| 1 | 2,500 | 2,500 | 0.3680 | 0.3440 | 0.3560 |
| 1 | 3,000 | 3,000 | 0.3840 | 0.3580 | 0.3710 |
| 1 | 3,500 | 3,500 | 0.4280 | 0.3980 | 0.4130 |
| 1 | 4,000 | 4,000 | 0.4840 | 0.4500 | 0.4670 |
| 1 | 4,500 | 4,500 | 0.5540 | 0.5160 | 0.5350 |
| 1 | 5,000 | 5,000 | 0.6560 | 0.6000 | 0.6280 |
| 1 | 5,500 | 5,500 | 0.6940 | 0.6300 | 0.6620 |
| 1 | 6,000 | 6,000 | 0.8080 | 0.7240 | 0.7660 |
| 1 | 0 | 0 | 0.1480 | 0.1060 | 0.1270 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.5 | Pile ID: | PT-PV-183 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 135.7 |
| Location: | 45.29870, -120.77995 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 20.9 |

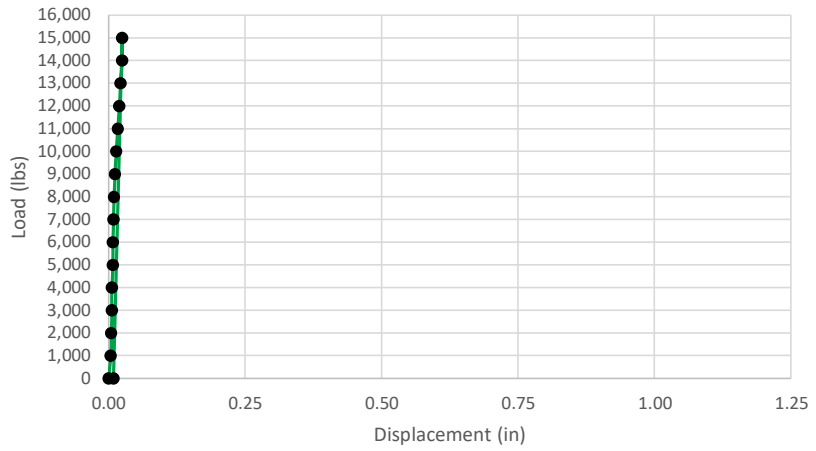
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.27 |
| 3 | 4.16 |
| 4 | 12.06 |
| 5 | 17.14 |
| 6 | 30.6 |
| 7 | 36.7 |
| 8 | 33.78 |
| 9 | - |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 135.71 |

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0160 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 13,000 | 13,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0240 | 0.0250 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0240 | 0.0250 |
| 1 | 0 | 0 | 0.0080 | 0.0100 | 0.0090 |

**Compression Load Plot**




**Field Notes**

Rock encoutnered at 1.5 feet BGS during pre-drilling.
Pile refusal encountered at 8.5 feet BGS during install.

# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-184 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 42.3 |
| Location: | 45.29904, -120.77205 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 7.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 3.89 |
| 4 | 3.68 |
| 5 | 7.28 |
| 6 | 7.18 |
| 7 | 8.31 |
| 8 | 11.91 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 42.25 |

**Field Notes**

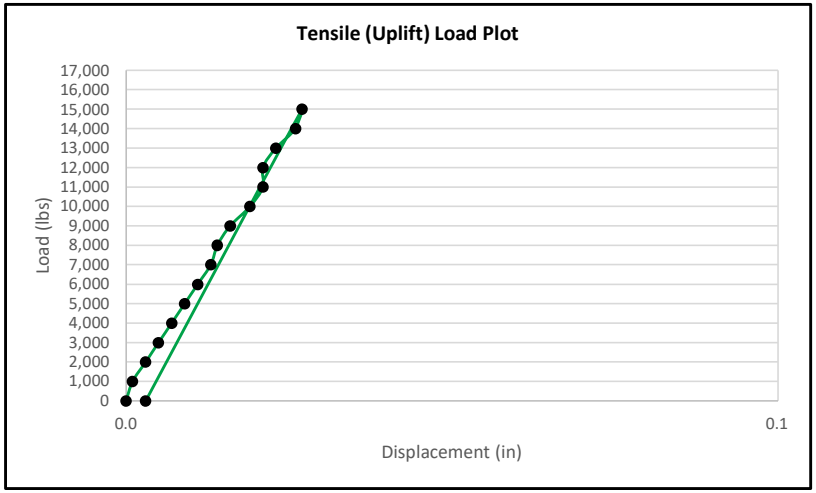
Rock encountered at 2 feet BGS during pre-drilling.

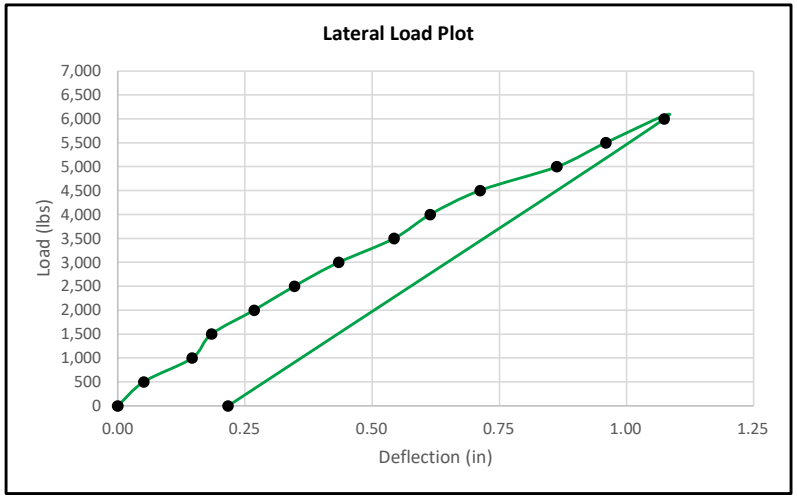
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0220 | 0.0260 |
| 1 | 15,000 | 15,000 | 0.0320 | 0.0220 | 0.0270 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0500 | 0.0520 | 0.0510 |
| 1 | 1,000 | 1,000 | 0.1480 | 0.1440 | 0.1460 |
| 1 | 1,500 | 1,500 | 0.1880 | 0.1800 | 0.1840 |
| 1 | 2,000 | 2,000 | 0.2760 | 0.2600 | 0.2680 |
| 1 | 2,500 | 2,500 | 0.3580 | 0.3360 | 0.3470 |
| 1 | 3,000 | 3,000 | 0.4500 | 0.4180 | 0.4340 |
| 1 | 3,500 | 3,500 | 0.5620 | 0.5240 | 0.5430 |
| 1 | 4,000 | 4,000 | 0.6360 | 0.5920 | 0.6140 |
| 1 | 4,500 | 4,500 | 0.7360 | 0.6880 | 0.7120 |
| 1 | 5,000 | 5,000 | 0.8960 | 0.8300 | 0.8630 |
| 1 | 5,500 | 5,500 | 1.0040 | 0.9140 | 0.9590 |
| 1 | 6,000 | 6,000 | 1.1340 | 1.0140 | 1.0740 |
| 1 | 0 | 0 | 0.2840 | 0.1500 | 0.2170 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-188 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 33.8 |
| Location: | 45.29189, -120.77235 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.01 |
| 4 | 3.64 |
| 5 | 4.99 |
| 6 | 4.88 |
| 7 | 8.11 |
| 8 | 11.14 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 33.77 |

**Field Notes**

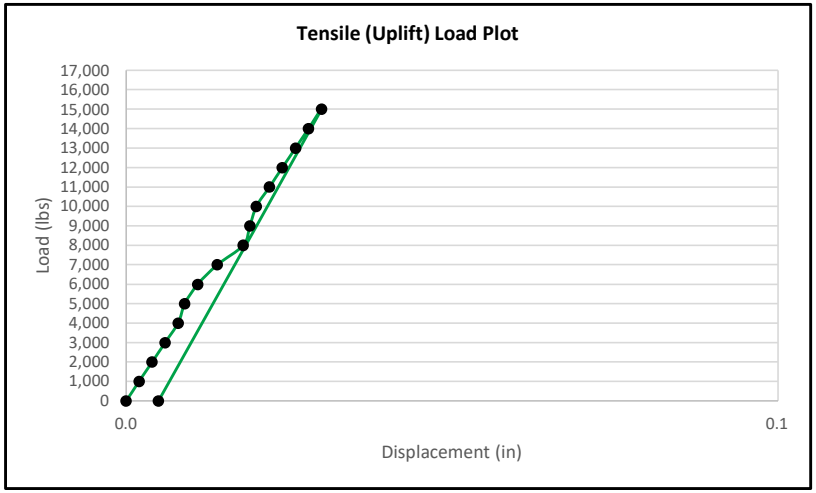
Rock encountered at 2.5 feet BGS during pre-drilling.

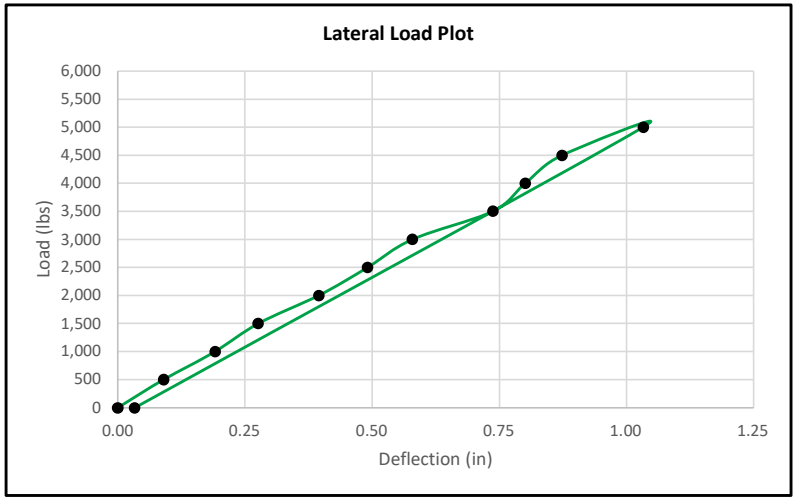
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 10,000 | 10,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 11,000 | 11,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0260 | 0.0220 | 0.0240 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0240 | 0.0260 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0260 | 0.0280 |
| 1 | 15,000 | 15,000 | 0.0320 | 0.0280 | 0.0300 |
| 1 | 0 | 0 | 0.0060 | 0.0040 | 0.0050 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0920 | 0.0880 | 0.0900 |
| 1 | 1,000 | 1,000 | 0.1920 | 0.1900 | 0.1910 |
| 1 | 1,500 | 1,500 | 0.2760 | 0.2760 | 0.2760 |
| 1 | 2,000 | 2,000 | 0.3940 | 0.3960 | 0.3950 |
| 1 | 2,500 | 2,500 | 0.4900 | 0.4920 | 0.4910 |
| 1 | 3,000 | 3,000 | 0.5780 | 0.5800 | 0.5790 |
| 1 | 3,500 | 3,500 | 0.7340 | 0.7400 | 0.7370 |
| 1 | 4,000 | 4,000 | 0.7980 | 0.8040 | 0.8010 |
| 1 | 4,500 | 4,500 | 0.8700 | 0.8760 | 0.8730 |
| 1 | 5,000 | 5,000 | 1.0280 | 1.0380 | 1.0330 |
| 1 | 0 | 0 | 0.0340 | 0.0320 | 0.0330 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-189 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/1/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 39.5 |
| Location: | 45.28766 , -120.78419 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 6.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 3.7 |
| 6 | 6.65 |
| 7 | 6.75 |
| 8 | 9.1 |
| 9 | 7.93 |
| 10 | 5.41 |
| 11 | |
| 12 | |
| Total Time (s) = | 39.54 |

**Field Notes**

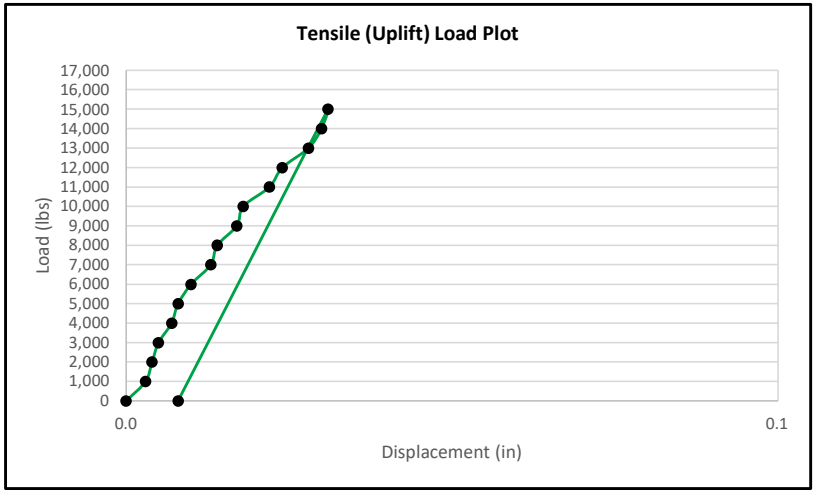
Rock encountered at 2 feet BGS during pre-drilling.
Refusal encountered at 7 feet BGS while pre-drilling, offset 50 feet.

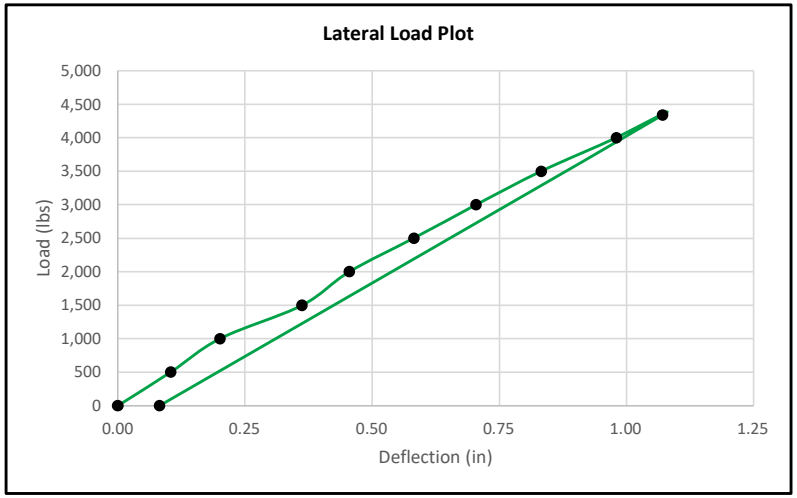
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0320 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0340 | 0.0310 |
| 1 | 0 | 0 | 0.0100 | 0.0060 | 0.0080 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | | 6 |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1120 | 0.0960 | 0.1040 |
| 1 | 1,000 | 1,000 | 0.2140 | 0.1880 | 0.2010 |
| 1 | 1,500 | 1,500 | 0.3780 | 0.3460 | 0.3620 |
| 1 | 2,000 | 2,000 | 0.4740 | 0.4360 | 0.4550 |
| 1 | 2,500 | 2,500 | 0.6020 | 0.5620 | 0.5820 |
| 1 | 3,000 | 3,000 | 0.7260 | 0.6820 | 0.7040 |
| 1 | 3,500 | 3,500 | 0.8560 | 0.8080 | 0.8320 |
| 1 | 4,000 | 4,000 | 1.0060 | 0.9540 | 0.9800 |
| 1 | 4,500 | 4,340 | 1.0980 | 1.0440 | 1.0710 |
| 1 | 0 | 0 | 0.0760 | 0.0880 | 0.0820 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-191 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 40.7 |
| Location: | 45.29571, -120.76576 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 7.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.6 |
| 4 | 3.26 |
| 5 | 5.12 |
| 6 | 10.42 |
| 7 | 8.67 |
| 8 | 12.6 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 40.67 |

**Field Notes**

Rock encountered at 3 feet BGS during pre-drilling.

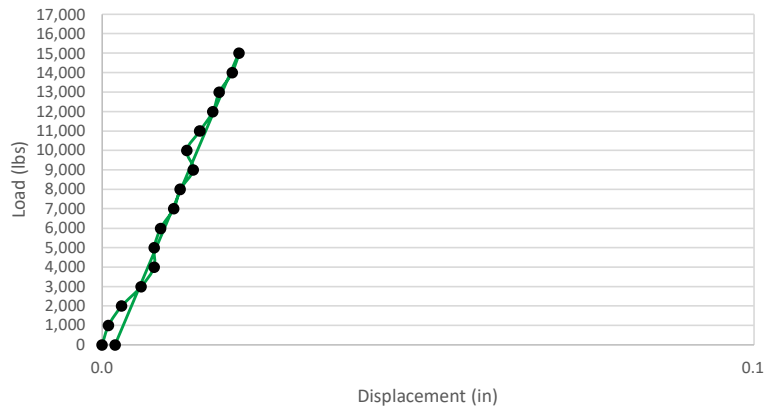
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0140 | 0.0180 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0160 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

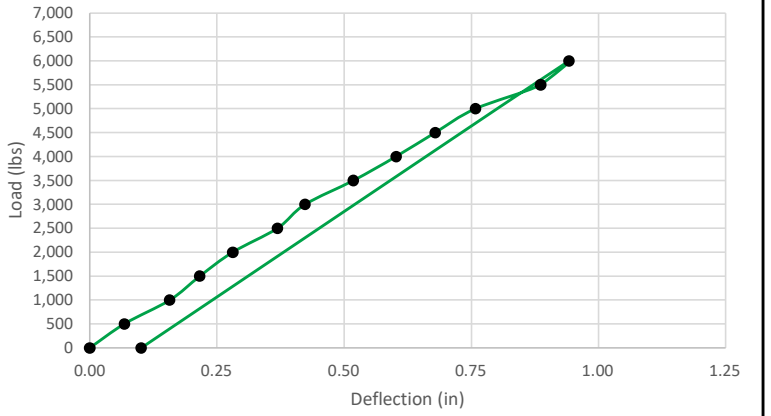
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0680 | 0.0680 | 0.0680 |
| 1 | 1,000 | 1,000 | 0.1580 | 0.1560 | 0.1570 |
| 1 | 1,500 | 1,500 | 0.2180 | 0.2140 | 0.2160 |
| 1 | 2,000 | 2,000 | 0.2820 | 0.2800 | 0.2810 |
| 1 | 2,500 | 2,500 | 0.3700 | 0.3680 | 0.3690 |
| 1 | 3,000 | 3,000 | 0.4240 | 0.4220 | 0.4230 |
| 1 | 3,500 | 3,500 | 0.5180 | 0.5180 | 0.5180 |
| 1 | 4,000 | 4,000 | 0.6020 | 0.6020 | 0.6020 |
| 1 | 4,500 | 4,500 | 0.6780 | 0.6800 | 0.6790 |
| 1 | 5,000 | 5,000 | 0.7580 | 0.7580 | 0.7580 |
| 1 | 5,500 | 5,500 | 0.8840 | 0.8880 | 0.8860 |
| 1 | 6,000 | 6,000 | 0.9380 | 0.9460 | 0.9420 |
| 1 | 0 | 0 | 0.0860 | 0.1160 | 0.1010 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-193 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/18/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 135.7 |
| Location: | 45.28837, -120.76246 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 20.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.27 |
| 5 | 4.16 |
| 6 | 12.06 |
| 7 | 17.14 |
| 8 | 30.6 |
| 9 | 36.7 |
| 10 | 33.78 |
| 11 | |
| 12 | |
| Total Time (s) = | 135.71 |

**Field Notes**

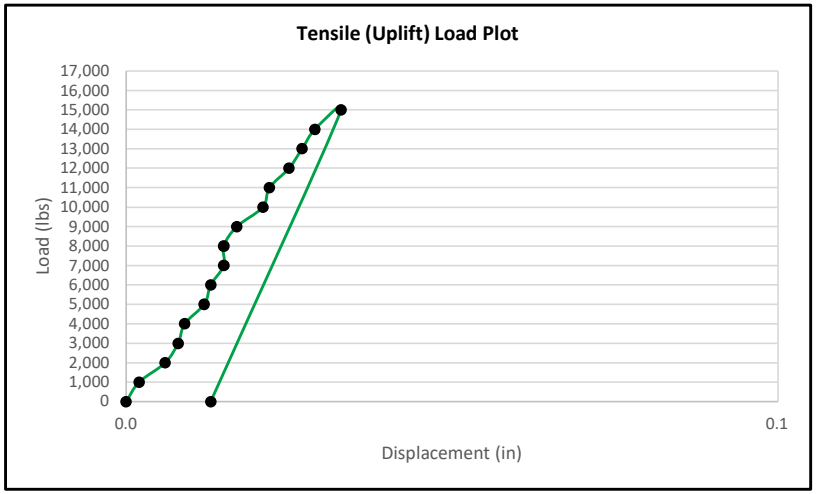
Rock encountered at 3.5 feet BGS during pre-drilling.

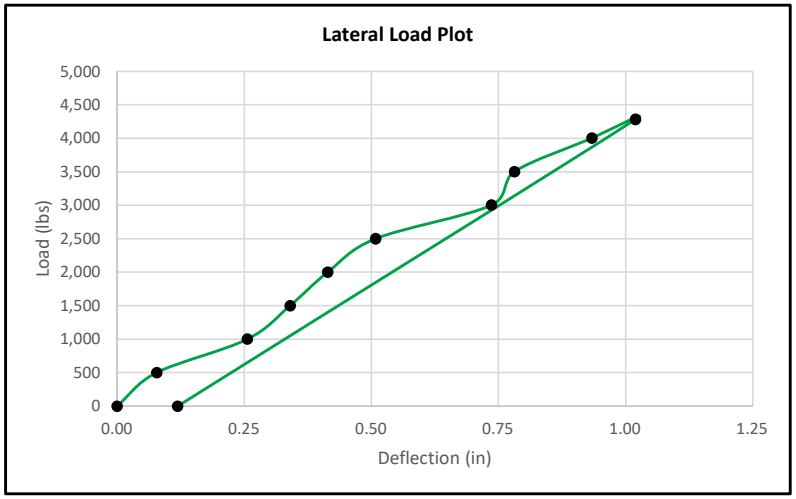
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 5,000 | 5,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 6,000 | 6,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 10,000 | 10,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0280 | 0.0160 | 0.0220 |
| 1 | 12,000 | 12,000 | 0.0320 | 0.0180 | 0.0250 |
| 1 | 13,000 | 13,000 | 0.0340 | 0.0200 | 0.0270 |
| 1 | 14,000 | 14,000 | 0.0360 | 0.0220 | 0.0290 |
| 1 | 15,000 | 15,000 | 0.0420 | 0.0240 | 0.0330 |
| 1 | 0 | 0 | 0.0140 | 0.0120 | 0.0130 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0800 | 0.0760 | 0.0780 |
| 1 | 1,000 | 1,000 | 0.2580 | 0.2540 | 0.2560 |
| 1 | 1,500 | 1,500 | 0.3400 | 0.3400 | 0.3400 |
| 1 | 2,000 | 2,000 | 0.4140 | 0.4140 | 0.4140 |
| 1 | 2,500 | 2,500 | 0.5060 | 0.5100 | 0.5080 |
| 1 | 3,000 | 3,000 | 0.7320 | 0.7400 | 0.7360 |
| 1 | 3,500 | 3,500 | 0.7760 | 0.7860 | 0.7810 |
| 1 | 4,000 | 4,000 | 0.9260 | 0.9400 | 0.9330 |
| 1 | 4,500 | 4,280 | 1.0100 | 1.0280 | 1.0190 |
| 1 | 0 | 0 | 0.1080 | 0.1300 | 0.1190 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-195 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 35.9 |
| Location: | 45.28193, -120.78175 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 7.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.52 |
| 5 | 1.84 |
| 6 | 7.99 |
| 7 | 9.84 |
| 8 | 14.73 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 35.92 |

**Field Notes**

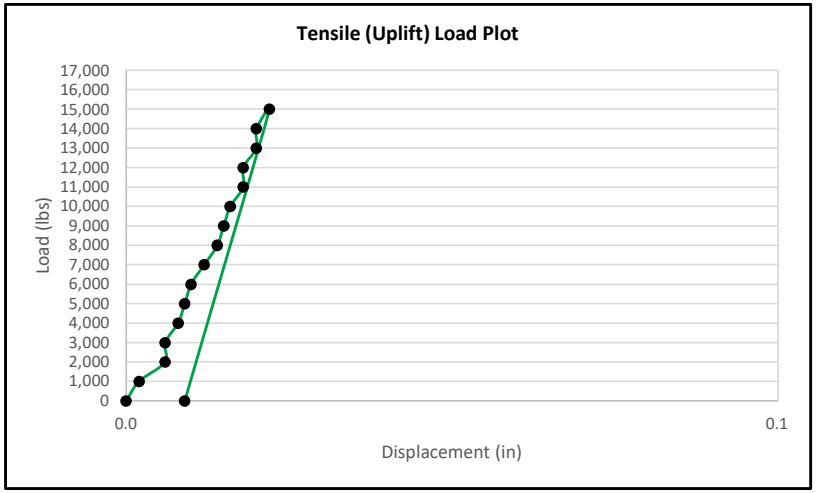
Rock encountered at 3 feet BGS during pre-drilling.

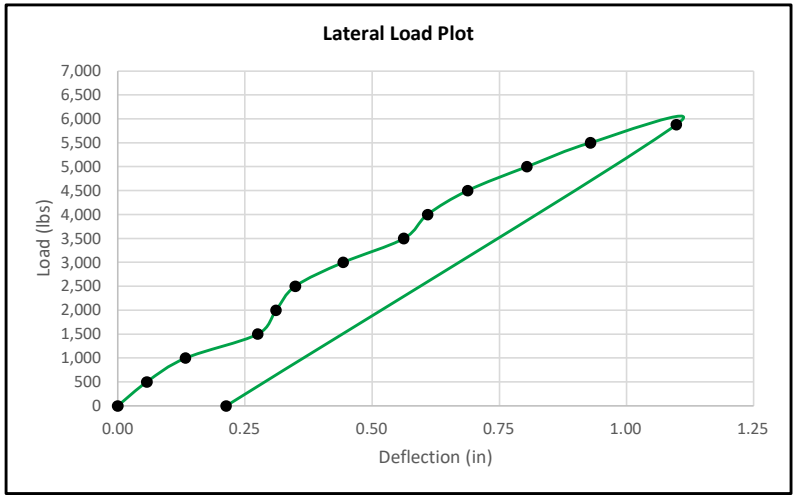
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0180 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 0 | 0 | 0.0080 | 0.0100 | 0.0090 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0540 | 0.0600 | 0.0570 |
| 1 | 1,000 | 1,000 | 0.1260 | 0.1400 | 0.1330 |
| 1 | 1,500 | 1,500 | 0.2600 | 0.2900 | 0.2750 |
| 1 | 2,000 | 2,000 | 0.2940 | 0.3280 | 0.3110 |
| 1 | 2,500 | 2,500 | 0.3300 | 0.3680 | 0.3490 |
| 1 | 3,000 | 3,000 | 0.4200 | 0.4660 | 0.4430 |
| 1 | 3,500 | 3,500 | 0.5300 | 0.5940 | 0.5620 |
| 1 | 4,000 | 4,000 | 0.5740 | 0.6440 | 0.6090 |
| 1 | 4,500 | 4,500 | 0.6460 | 0.7300 | 0.6880 |
| 1 | 5,000 | 5,000 | 0.7540 | 0.8540 | 0.8040 |
| 1 | 5,500 | 5,500 | 0.8740 | 0.9840 | 0.9290 |
| 1 | 6,000 | 5,880 | 1.0680 | 1.1280 | 1.0980 |
| 1 | 0 | 0 | 0.1760 | 0.2500 | 0.2130 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 6.50 | Pile ID: | PT-PV-197 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 95.4 |
| Location: | 45.27816, -120.78740 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 17.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 3.17 |
| 3 | 19.51 |
| 4 | 23.74 |
| 5 | 27.7 |
| 6 | 21.25 |
| 7 | - |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 95.37 |

**Field Notes**

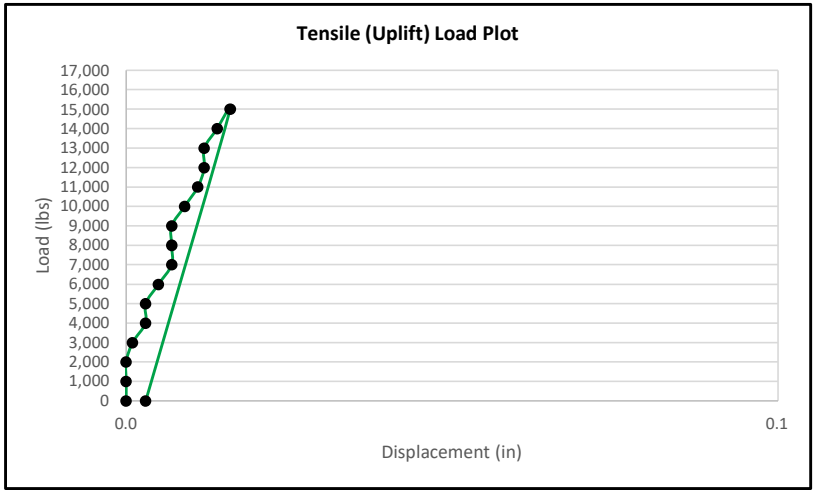
Rock encountered at 3 feet BGS during pre-drilling.
Pile refusal encountered at 7 feet BGS during install.

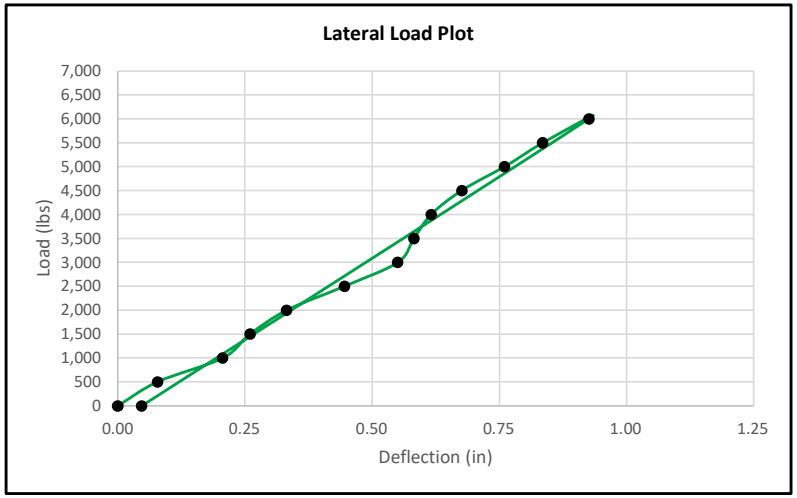
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0800 | 0.0760 | 0.0780 |
| 1 | 1,000 | 1,000 | 0.2040 | 0.2080 | 0.2060 |
| 1 | 1,500 | 1,500 | 0.2580 | 0.2620 | 0.2600 |
| 1 | 2,000 | 2,000 | 0.3320 | 0.3320 | 0.3320 |
| 1 | 2,500 | 2,500 | 0.4220 | 0.4700 | 0.4460 |
| 1 | 3,000 | 3,000 | 0.5520 | 0.5480 | 0.5500 |
| 1 | 3,500 | 3,500 | 0.5840 | 0.5800 | 0.5820 |
| 1 | 4,000 | 4,000 | 0.6180 | 0.6140 | 0.6160 |
| 1 | 4,500 | 4,500 | 0.6800 | 0.6720 | 0.6760 |
| 1 | 5,000 | 5,000 | 0.7660 | 0.7540 | 0.7600 |
| 1 | 5,500 | 5,500 | 0.8460 | 0.8240 | 0.8350 |
| 1 | 6,000 | 6,000 | 0.9460 | 0.9060 | 0.9260 |
| 1 | 0 | 0 | 0.0640 | 0.0300 | 0.0470 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-198 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 51.93 |
| Location: | 45.28087, -120.77567 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 8.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 2.3 |
| 6 | 2.63 |
| 7 | 4.94 |
| 8 | 8.9 |
| 9 | 14.06 |
| 10 | 19.1 |
| 11 | |
| 12 | |
| Total Time (s) = | 51.93 |

**Field Notes**

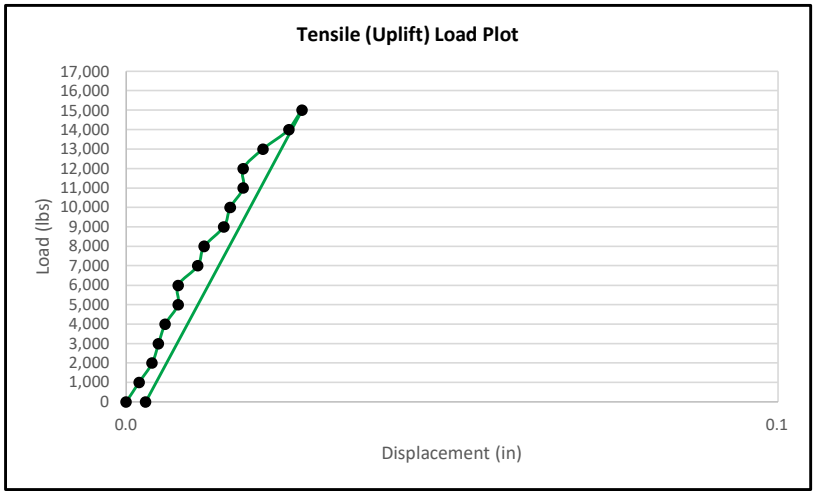
Rock encountered at 3.5 feet BGS during pre-drilling

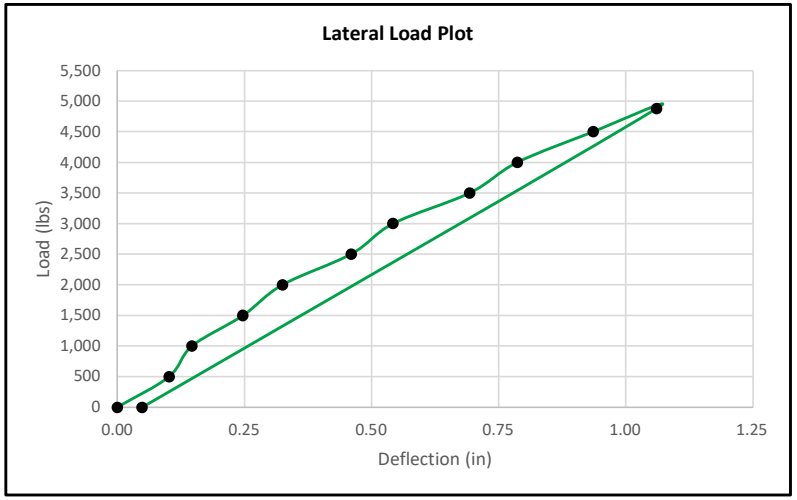
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0200 | 0.0150 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0200 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0260 | 0.0210 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0320 | 0.0270 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1060 | 0.0980 | 0.1020 |
| 1 | 1,000 | 1,000 | 0.1500 | 0.1440 | 0.1470 |
| 1 | 1,500 | 1,500 | 0.2500 | 0.2440 | 0.2470 |
| 1 | 2,000 | 2,000 | 0.3280 | 0.3220 | 0.3250 |
| 1 | 2,500 | 2,500 | 0.4640 | 0.4560 | 0.4600 |
| 1 | 3,000 | 3,000 | 0.5460 | 0.5380 | 0.5420 |
| 1 | 3,500 | 3,500 | 0.6980 | 0.6880 | 0.6930 |
| 1 | 4,000 | 4,000 | 0.7920 | 0.7820 | 0.7870 |
| 1 | 4,500 | 4,500 | 0.9420 | 0.9300 | 0.9360 |
| 1 | 5,000 | 4,880 | 1.0680 | 1.0540 | 1.0610 |
| 1 | 0 | 0 | 0.0460 | 0.0520 | 0.0490 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-198 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/15/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 51.9 |
| Installed Coordinates: | 45.28087, -120.77567 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 8.7 |

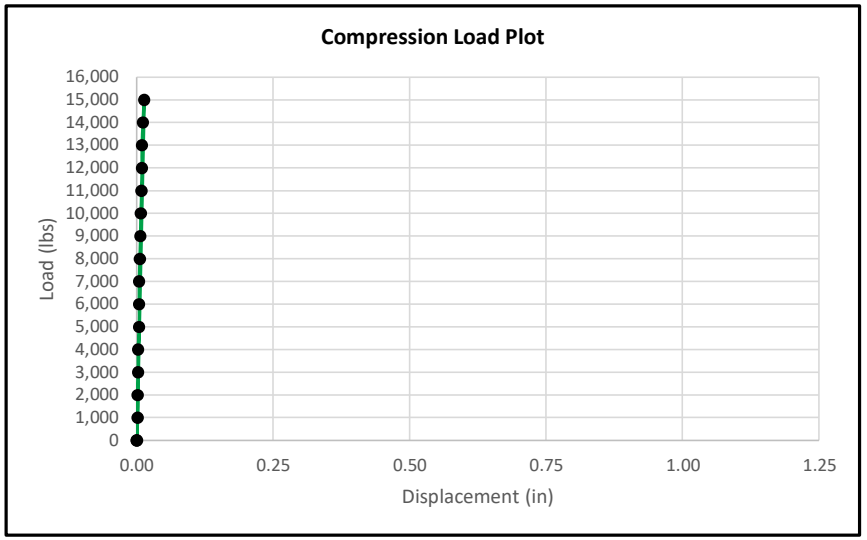
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 2.3 |
| 6 | 2.63 |
| 7 | 4.94 |
| 8 | 8.9 |
| 9 | 14.06 |
| 10 | 19.1 |
| 11 | |
| 12 | |
| Total Time (s) = | 51.93 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 14,000 | 14,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-203 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.9 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 43.13 |
| Location: | 45.28525, -120.74876 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.99 |
| 2 | 1.39 |
| 3 | 2.78 |
| 4 | 6.25 |
| 5 | 6.6 |
| 6 | 10.01 |
| 7 | 7.7 |
| 8 | 7.41 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 43.13 |

**Field Notes**

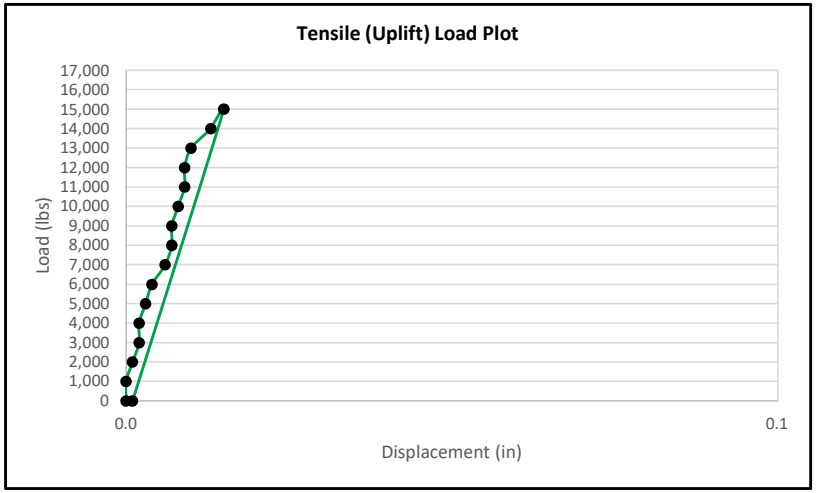
Rock encountered at 1 foot BGS during pre-drilling.

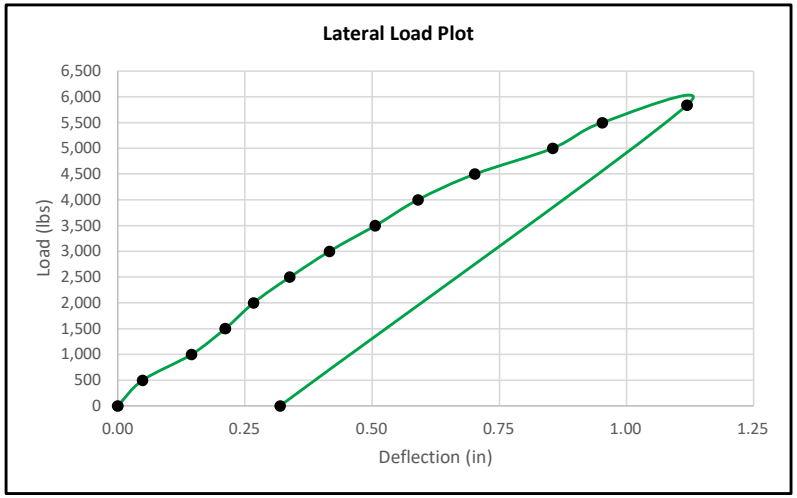
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 10,000 | 10,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 13,000 | 13,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 14,000 | 14,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0180 | 0.0150 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0520 | 0.0460 | 0.0490 |
| 1 | 1,000 | 1,000 | 0.1460 | 0.1440 | 0.1450 |
| 1 | 1,500 | 1,500 | 0.2140 | 0.2080 | 0.2110 |
| 1 | 2,000 | 2,000 | 0.2720 | 0.2620 | 0.2670 |
| 1 | 2,500 | 2,500 | 0.3440 | 0.3320 | 0.3380 |
| 1 | 3,000 | 3,000 | 0.4240 | 0.4080 | 0.4160 |
| 1 | 3,500 | 3,500 | 0.5140 | 0.4980 | 0.5060 |
| 1 | 4,000 | 4,000 | 0.5980 | 0.5820 | 0.5900 |
| 1 | 4,500 | 4,500 | 0.7140 | 0.6900 | 0.7020 |
| 1 | 5,000 | 5,000 | 0.8760 | 0.8340 | 0.8550 |
| 1 | 5,500 | 5,500 | 0.9640 | 0.9400 | 0.9520 |
| 1 | 6,000 | 5,840 | 1.1380 | 1.1000 | 1.1190 |
| 1 | 0 | 0 | 0.2620 | 0.3760 | 0.3190 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-203 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 0.9 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 43.1 |
| Location: | 45.28525, -120.74876 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.1 |

**Embedment Data**

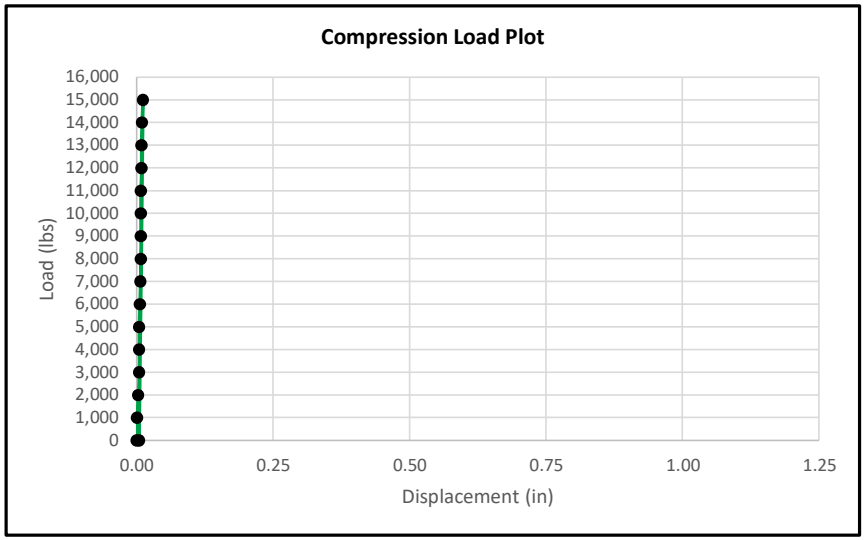
| Depth (ft) | Time (s) |
|---|---|
| 1 | 0.99 |
| 2 | 1.39 |
| 3 | 2.78 |
| 4 | 6.25 |
| 5 | 6.6 |
| 6 | 10.01 |
| 7 | 7.7 |
| 8 | 7.41 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 43.13 |

**Field Notes**

Rock encountered at 1 foot BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 12,000 | 12,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 13,000 | 13,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 14,000 | 14,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 15,000 | 15,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 0 | 0 | 0.0060 | 0.0040 | 0.0050 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-204 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 67.13 |
| Location: | 45.28333, -120.75945 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 9.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 1.78 |
| 5 | 2.99 |
| 6 | 3.1 |
| 7 | 5.49 |
| 8 | 6.09 |
| 9 | 9.81 |
| 10 | 37.87 |
| 11 | |
| 12 | |
| Total Time (s) = | 67.13 |

**Field Notes**

Rock encountered at 2 feet BGS during pre-drilling.

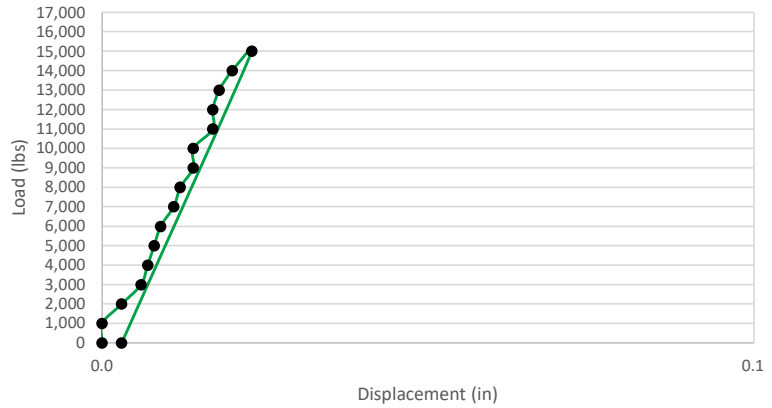
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0200 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

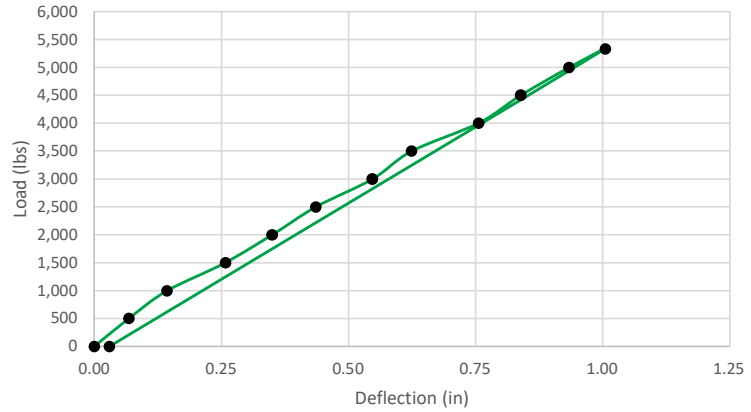
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0700 | 0.0660 | 0.0680 |
| 1 | 1,000 | 1,000 | 0.1440 | 0.1420 | 0.1430 |
| 1 | 1,500 | 1,500 | 0.2580 | 0.2580 | 0.2580 |
| 1 | 2,000 | 2,000 | 0.3500 | 0.3500 | 0.3500 |
| 1 | 2,500 | 2,500 | 0.4360 | 0.4360 | 0.4360 |
| 1 | 3,000 | 3,000 | 0.5480 | 0.5460 | 0.5470 |
| 1 | 3,500 | 3,500 | 0.6240 | 0.6240 | 0.6240 |
| 1 | 4,000 | 4,000 | 0.7560 | 0.7560 | 0.7560 |
| 1 | 4,500 | 4,500 | 0.8380 | 0.8400 | 0.8390 |
| 1 | 5,000 | 5,000 | 0.9320 | 0.9360 | 0.9340 |
| 1 | 5,500 | 5,330 | 1.0040 | 1.0060 | 1.0050 |
| 1 | 0 | 0 | 0.0260 | 0.0340 | 0.0300 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.75 | Pile ID: | PT-PV-205 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.0 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 99.6 |
| Location: | 45.27909, -120.76566 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 12.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 4.15 |
| 5 | 6.67 |
| 6 | 5.18 |
| 7 | 7.08 |
| 8 | 9.42 |
| 9 | 12.53 |
| 10 | 19.49 |
| 11 | 35.05 |
| 12 | - |
| Total Time (s) = | 99.57 |

**Field Notes**

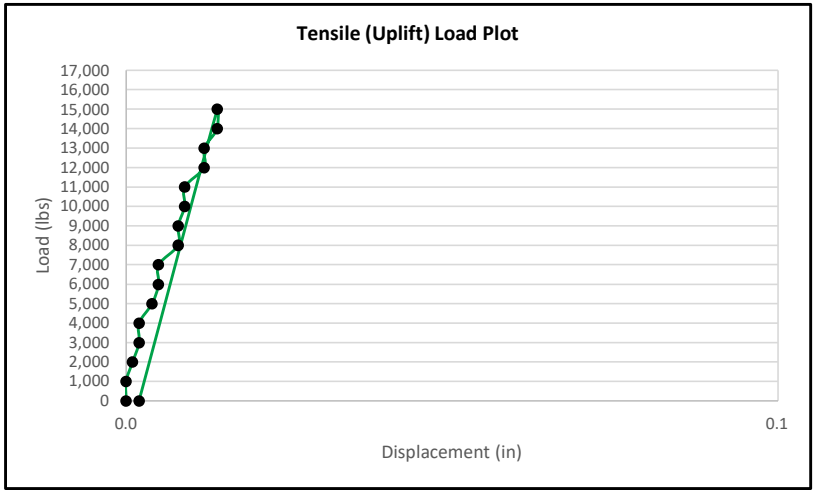
Rock encountered at 2.5 feet BGS during pre-drilling.
Pile refusal encountered at 10.75 feet BGS during install.

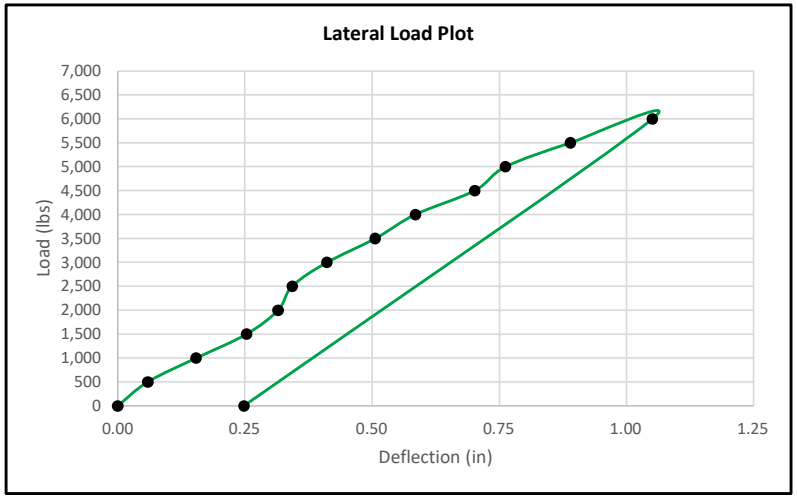
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 13,000 | 13,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 14,000 | 14,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0540 | 0.0590 |
| 1 | 1,000 | 1,000 | 0.1580 | 0.1500 | 0.1540 |
| 1 | 1,500 | 1,500 | 0.2540 | 0.2520 | 0.2530 |
| 1 | 2,000 | 2,000 | 0.3140 | 0.3160 | 0.3150 |
| 1 | 2,500 | 2,500 | 0.3420 | 0.3440 | 0.3430 |
| 1 | 3,000 | 3,000 | 0.4060 | 0.4160 | 0.4110 |
| 1 | 3,500 | 3,500 | 0.4960 | 0.5160 | 0.5060 |
| 1 | 4,000 | 4,000 | 0.5720 | 0.5980 | 0.5850 |
| 1 | 4,500 | 4,500 | 0.6840 | 0.7200 | 0.7020 |
| 1 | 5,000 | 5,000 | 0.7380 | 0.7860 | 0.7620 |
| 1 | 5,500 | 5,500 | 0.8500 | 0.9300 | 0.8900 |
| 1 | 6,000 | 6,000 | 0.9940 | 1.1080 | 1.0510 |
| 1 | 0 | 0 | 0.1940 | 0.3020 | 0.2480 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-206 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 24.6 |
| Location: | 45.27814, -120.74953 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 5.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.76 |
| 5 | 4.4 |
| 6 | 5.47 |
| 7 | 5.7 |
| 8 | 8.24 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 24.57 |

**Field Notes**

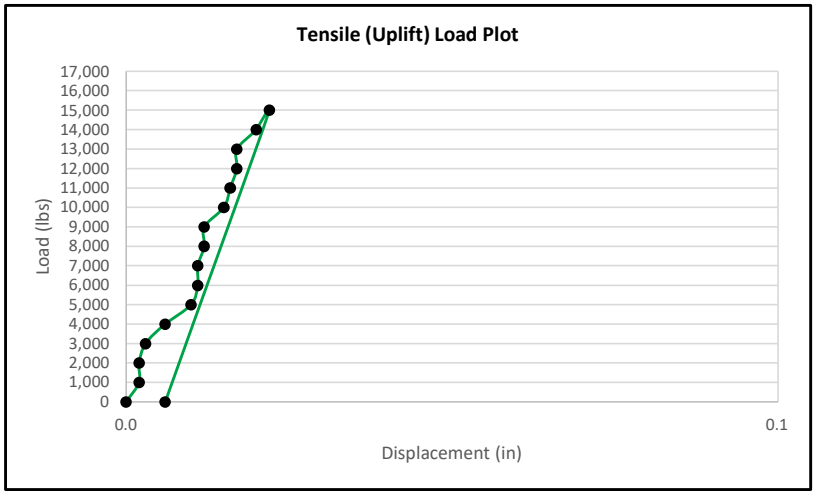
Rock encountered at 2 feet BGS during pre-drilling.

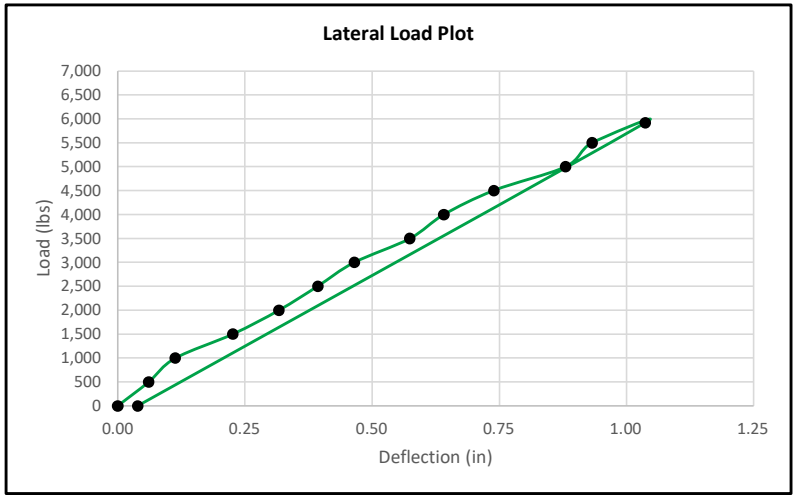
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 12,000 | 12,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 0 | 0 | 0.0080 | 0.0040 | 0.0060 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0580 | 0.0640 | 0.0610 |
| 1 | 1,000 | 1,000 | 0.1100 | 0.1160 | 0.1130 |
| 1 | 1,500 | 1,500 | 0.2220 | 0.2300 | 0.2260 |
| 1 | 2,000 | 2,000 | 0.3140 | 0.3200 | 0.3170 |
| 1 | 2,500 | 2,500 | 0.3920 | 0.3940 | 0.3930 |
| 1 | 3,000 | 3,000 | 0.4640 | 0.4660 | 0.4650 |
| 1 | 3,500 | 3,500 | 0.5740 | 0.5740 | 0.5740 |
| 1 | 4,000 | 4,000 | 0.6400 | 0.6420 | 0.6410 |
| 1 | 4,500 | 4,500 | 0.7380 | 0.7400 | 0.7390 |
| 1 | 5,000 | 5,000 | 0.8780 | 0.8820 | 0.8800 |
| 1 | 5,500 | 5,500 | 0.9300 | 0.9340 | 0.9320 |
| 1 | 6,000 | 5,920 | 1.0320 | 1.0420 | 1.0370 |
| 1 | 0 | 0 | 0.0340 | 0.0440 | 0.0390 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-207 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 41.2 |
| Location: | 45.27461, -120.75271 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 6.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.36 |
| 5 | 1.46 |
| 6 | 5.55 |
| 7 | 7.71 |
| 8 | 7.43 |
| 9 | 7.17 |
| 10 | 11.56 |
| 11 | |
| 12 | |
| Total Time (s) = | 41.24 |

**Field Notes**

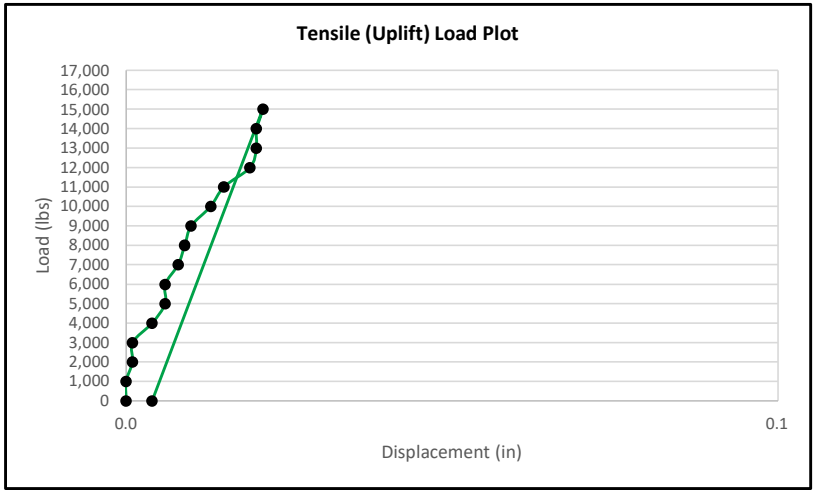
Rock encountered at 2 feet BGS during pre-drilling.

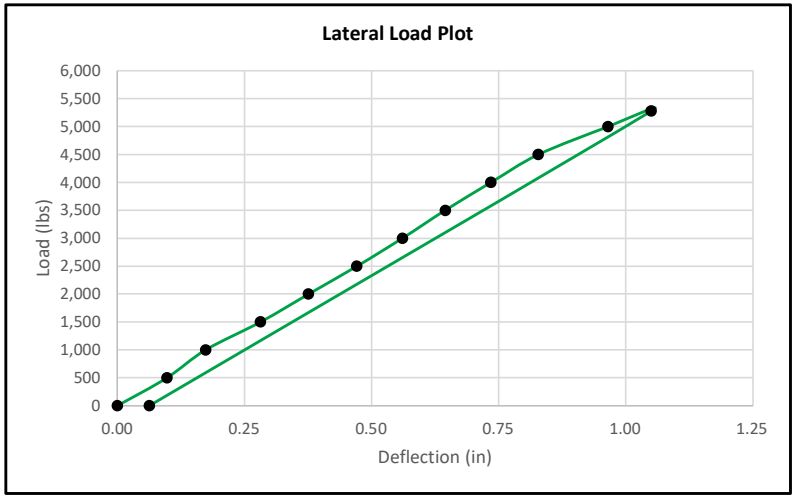
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0120 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0200 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0220 | 0.0200 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 0 | 0 | 0.0020 | 0.0060 | 0.0040 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0980 | 0.0980 | 0.0980 |
| 1 | 1,000 | 1,000 | 0.1740 | 0.1740 | 0.1740 |
| 1 | 1,500 | 1,500 | 0.2800 | 0.2840 | 0.2820 |
| 1 | 2,000 | 2,000 | 0.3700 | 0.3820 | 0.3760 |
| 1 | 2,500 | 2,500 | 0.4640 | 0.4780 | 0.4710 |
| 1 | 3,000 | 3,000 | 0.5540 | 0.5680 | 0.5610 |
| 1 | 3,500 | 3,500 | 0.6380 | 0.6520 | 0.6450 |
| 1 | 4,000 | 4,000 | 0.7260 | 0.7440 | 0.7350 |
| 1 | 4,500 | 4,500 | 0.8180 | 0.8380 | 0.8280 |
| 1 | 5,000 | 5,000 | 0.9600 | 0.9700 | 0.9650 |
| 1 | 5,500 | 5,280 | 1.0420 | 1.0580 | 1.0500 |
| 1 | 0 | 0 | 0.0620 | 0.0640 | 0.0630 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-207 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/2/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 41.2 |
| Installed Coordinates: | 45.27461, -120.75271 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 6.3 |

**Embedment Data**

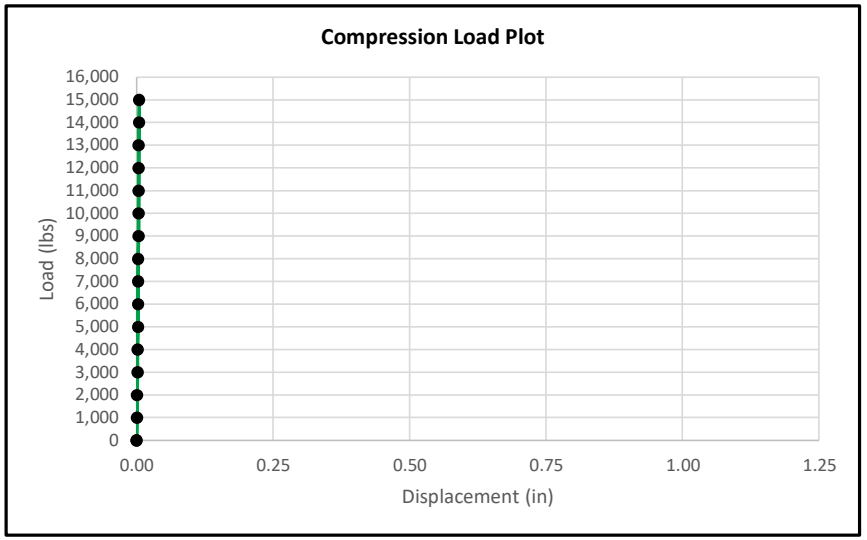
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.36 |
| 5 | 1.46 |
| 6 | 5.55 |
| 7 | 7.71 |
| 8 | 7.43 |
| 9 | 7.17 |
| 10 | 11.56 |
| 11 | |
| 12 | |
| Total Time (s) = | 41.24 |

**Field Notes**

Rock encountered at 2 feet BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 7,000 | 7,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 8,000 | 8,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 9,000 | 9,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 10,000 | 10,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 11,000 | 11,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 12,000 | 12,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 13,000 | 13,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 14,000 | 14,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 15,000 | 15,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-210 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/3/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 17.0 |
| Location: | 45.27037, -120.73261 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.41 |
| 6 | 2.77 |
| 7 | 4.11 |
| 8 | 9.66 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 16.95 |

**Field Notes**

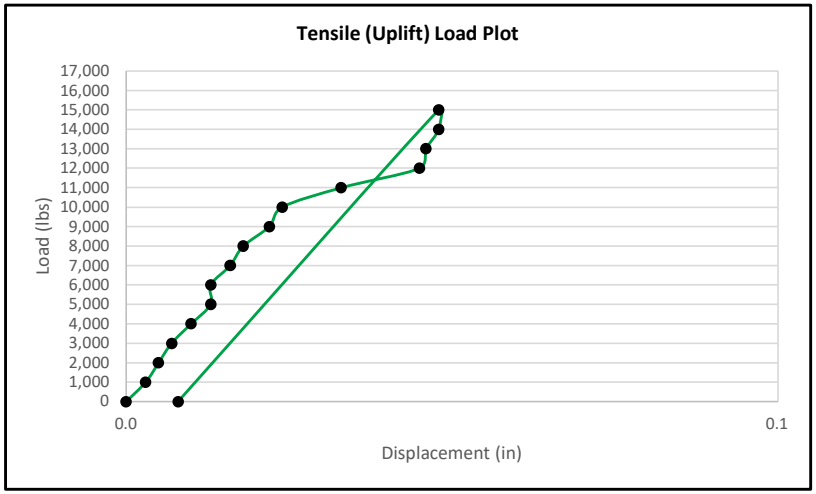
Rock encountered at 4.5 feet BGS during pre-drilling.

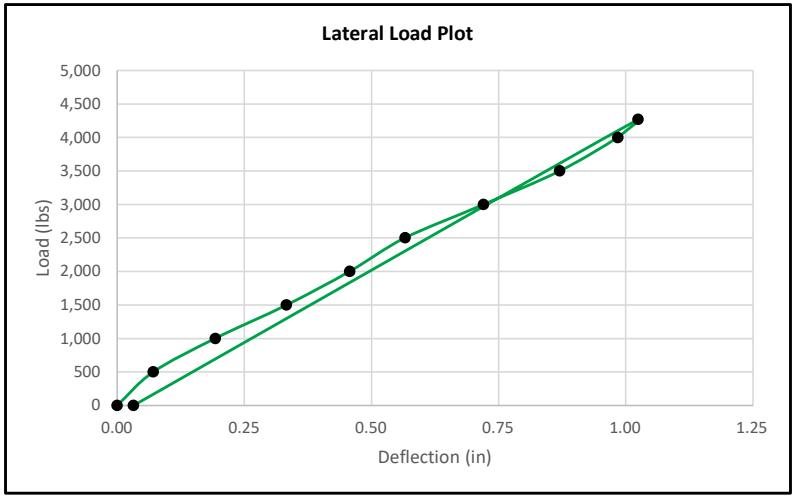
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 8,000 | 8,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0260 | 0.0180 | 0.0220 |
| 1 | 10,000 | 10,000 | 0.0280 | 0.0200 | 0.0240 |
| 1 | 11,000 | 11,000 | 0.0360 | 0.0300 | 0.0330 |
| 1 | 12,000 | 12,000 | 0.0520 | 0.0380 | 0.0450 |
| 1 | 13,000 | 13,000 | 0.0520 | 0.0400 | 0.0460 |
| 1 | 14,000 | 14,000 | 0.0540 | 0.0420 | 0.0480 |
| 1 | 15,000 | 15,000 | 0.0540 | 0.0420 | 0.0480 |
| 1 | 0 | 0 | 0.0080 | 0.0080 | 0.0080 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0700 | 0.0720 | 0.0710 |
| 1 | 1,000 | 1,000 | 0.1960 | 0.1900 | 0.1930 |
| 1 | 1,500 | 1,500 | 0.3360 | 0.3300 | 0.3330 |
| 1 | 2,000 | 2,000 | 0.4600 | 0.4540 | 0.4570 |
| 1 | 2,500 | 2,500 | 0.5680 | 0.5640 | 0.5660 |
| 1 | 3,000 | 3,000 | 0.7240 | 0.7160 | 0.7200 |
| 1 | 3,500 | 3,500 | 0.8700 | 0.8700 | 0.8700 |
| 1 | 4,000 | 4,000 | 0.9900 | 0.9780 | 0.9840 |
| 1 | 4,500 | 4,270 | 1.0280 | 1.0200 | 1.0240 |
| 1 | 0 | 0 | 0.0540 | 0.0100 | 0.0320 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-211 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/3/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/16/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 35.81 |
| Location: | 45.26657, -120.73687 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 6.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.42 |
| 4 | 2.66 |
| 5 | 3.49 |
| 6 | 4.11 |
| 7 | 9.08 |
| 8 | 15.05 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 35.81 |

**Field Notes**

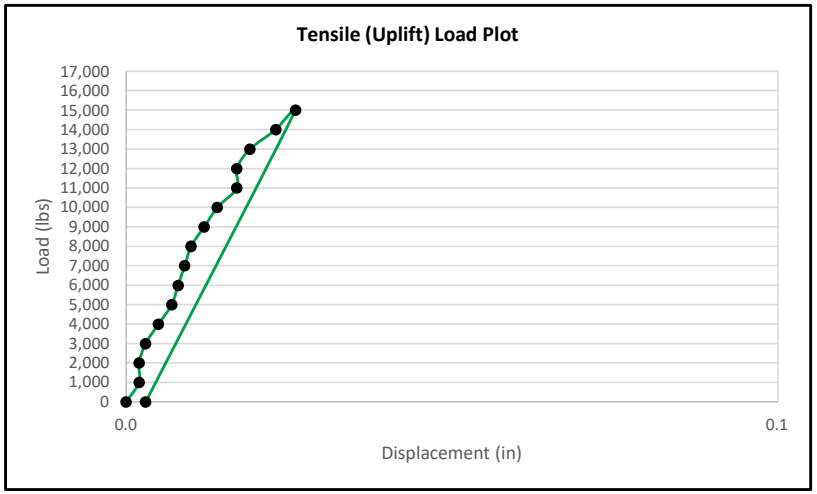
Rock encountered at 2.5 feet BGS during pre-drilling.

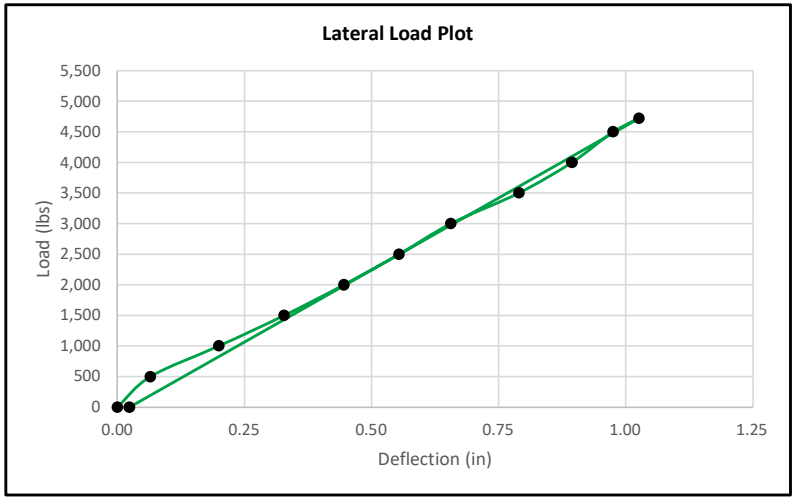
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0060 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 14,000 | 14,000 | 0.0260 | 0.0200 | 0.0230 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0220 | 0.0260 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0620 | 0.0680 | 0.0650 |
| 1 | 1,000 | 1,000 | 0.1920 | 0.2080 | 0.2000 |
| 1 | 1,500 | 1,500 | 0.3200 | 0.3360 | 0.3280 |
| 1 | 2,000 | 2,000 | 0.4380 | 0.4540 | 0.4460 |
| 1 | 2,500 | 2,500 | 0.5460 | 0.5620 | 0.5540 |
| 1 | 3,000 | 3,000 | 0.6480 | 0.6640 | 0.6560 |
| 1 | 3,500 | 3,500 | 0.7800 | 0.8000 | 0.7900 |
| 1 | 4,000 | 4,000 | 0.8840 | 0.9040 | 0.8940 |
| 1 | 4,500 | 4,500 | 0.9660 | 0.9840 | 0.9750 |
| 1 | 5,000 | 4,720 | 1.0160 | 1.0360 | 1.0260 |
| 1 | 0 | 0 | 0.0180 | 0.0300 | 0.0240 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.5 | Pile ID: | PT-PV-212 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.0 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 124.34 |
| Location: | 45.26099, -120.74507 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 16.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.71 |
| 4 | 4.84 |
| 5 | 7.36 |
| 6 | 9.45 |
| 7 | 15.8 |
| 8 | 15.98 |
| 9 | 36.26 |
| 10 | 32.94 |
| 11 | |
| 12 | |
| Total Time (s) = | 124.34 |

**Field Notes**

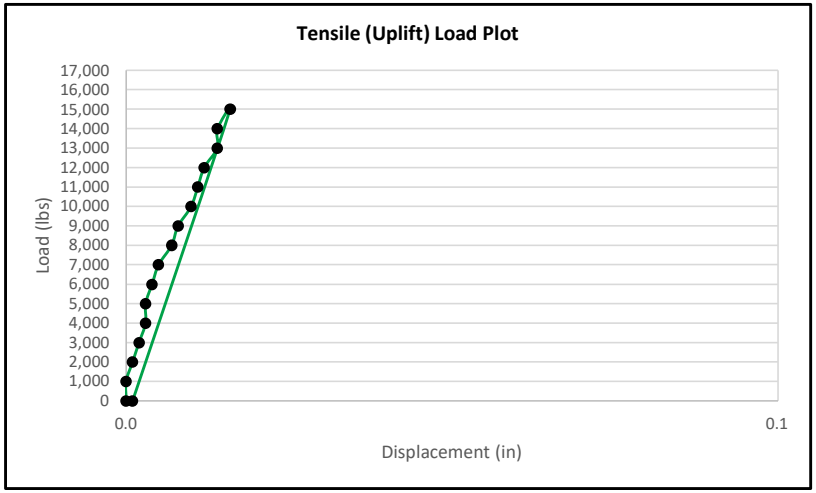
Rock encountered at 3 feet BGS during pre-drilling.
Pile refusal encountered at 9.5 feet BGS during install.

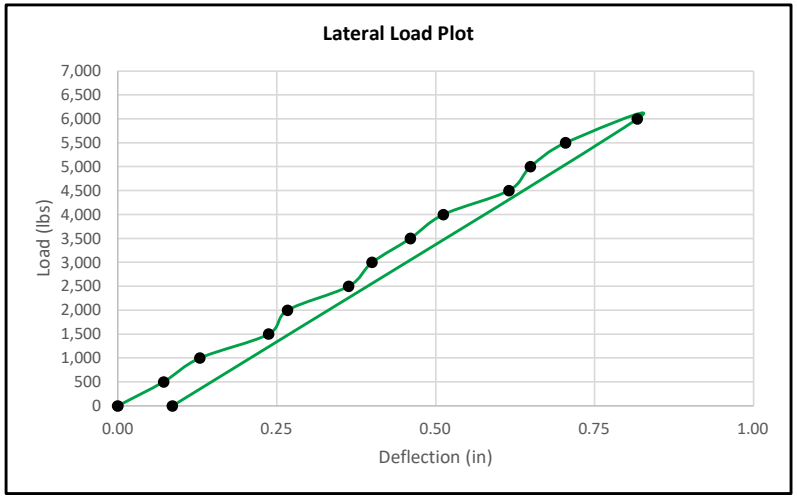
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 12,000 | 12,000 | 0.0100 | 0.0140 | 0.0120 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 14,000 | 14,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 0 | 0 | 0.0000 | 0.0020 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0800 | 0.0640 | 0.0720 |
| 1 | 1,000 | 1,000 | 0.1400 | 0.1180 | 0.1290 |
| 1 | 1,500 | 1,500 | 0.2560 | 0.2180 | 0.2370 |
| 1 | 2,000 | 2,000 | 0.2860 | 0.2480 | 0.2670 |
| 1 | 2,500 | 2,500 | 0.3840 | 0.3420 | 0.3630 |
| 1 | 3,000 | 3,000 | 0.4220 | 0.3780 | 0.4000 |
| 1 | 3,500 | 3,500 | 0.4820 | 0.4380 | 0.4600 |
| 1 | 4,000 | 4,000 | 0.5340 | 0.4900 | 0.5120 |
| 1 | 4,500 | 4,500 | 0.6280 | 0.6020 | 0.6150 |
| 1 | 5,000 | 5,000 | 0.6720 | 0.6260 | 0.6490 |
| 1 | 5,500 | 5,500 | 0.7240 | 0.6840 | 0.7040 |
| 1 | 6,000 | 6,000 | 0.8280 | 0.8060 | 0.8170 |
| 1 | 0 | 0 | 0.0720 | 0.1000 | 0.0860 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-214 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 18.7 |
| Location: | 45.25942, -120.73385 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.86 |
| 5 | 1.57 |
| 6 | 2.64 |
| 7 | 7.29 |
| 8 | 6.32 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 18.68 |

**Field Notes**

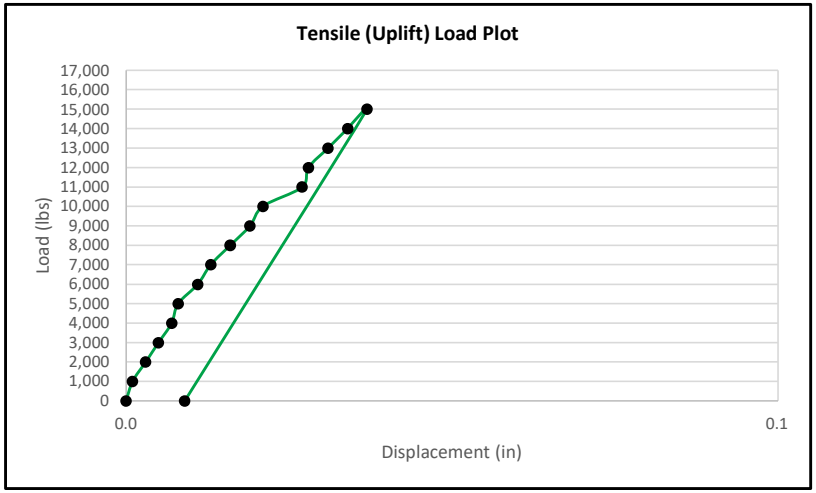
Rock encountered at 4.5 feet BGS during pre-drilling.

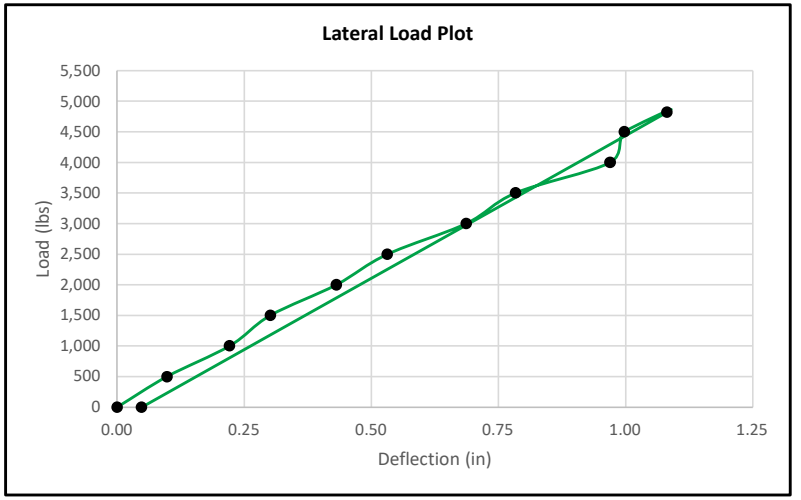
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0320 | 0.0270 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0320 | 0.0280 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0360 | 0.0310 |
| 1 | 14,000 | 14,000 | 0.0280 | 0.0400 | 0.0340 |
| 1 | 15,000 | 15,000 | 0.0300 | 0.0440 | 0.0370 |
| 1 | 0 | 0 | 0.0080 | 0.0100 | 0.0090 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1040 | 0.0920 | 0.0980 |
| 1 | 1,000 | 1,000 | 0.2300 | 0.2120 | 0.2210 |
| 1 | 1,500 | 1,500 | 0.3120 | 0.2900 | 0.3010 |
| 1 | 2,000 | 2,000 | 0.4460 | 0.4160 | 0.4310 |
| 1 | 2,500 | 2,500 | 0.5480 | 0.5140 | 0.5310 |
| 1 | 3,000 | 3,000 | 0.7060 | 0.6660 | 0.6860 |
| 1 | 3,500 | 3,500 | 0.8050 | 0.7620 | 0.7835 |
| 1 | 4,000 | 4,000 | 0.9900 | 0.9480 | 0.9690 |
| 1 | 4,500 | 4,500 | 1.0200 | 0.9740 | 0.9970 |
| 1 | 5,000 | 4,820 | 1.1040 | 1.0580 | 1.0810 |
| 1 | 0 | 0 | 0.0400 | 0.0560 | 0.0480 |



# Pile Load Test Log

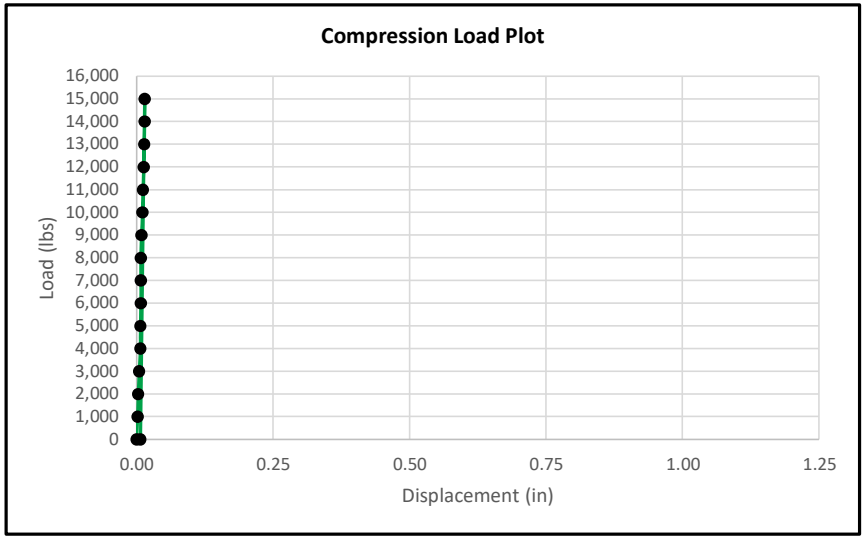
| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-214 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 18.7 |
| Installed Coordinates: | 45.25942, -120.73385 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.86 |
| 5 | 1.57 |
| 6 | 2.64 |
| 7 | 7.29 |
| 8 | 6.32 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 18.68 |

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0040 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0060 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0080 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0100 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0100 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0100 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0120 | 0.0130 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 0 | 0 | 0.0060 | 0.0080 | 0.0070 |




**Field Notes**

Rock encountered at 4.5 feet BGS during pre-drilling.

# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-217 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/3/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 0 |
| Location: | 45.27012, -120.71778 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 0.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | - |
| 7 | - |
| 8 | - |
| 9 | - |
| 10 | - |
| 11 | |
| 12 | |
| Total Time (s) = | 0 |

**Field Notes**

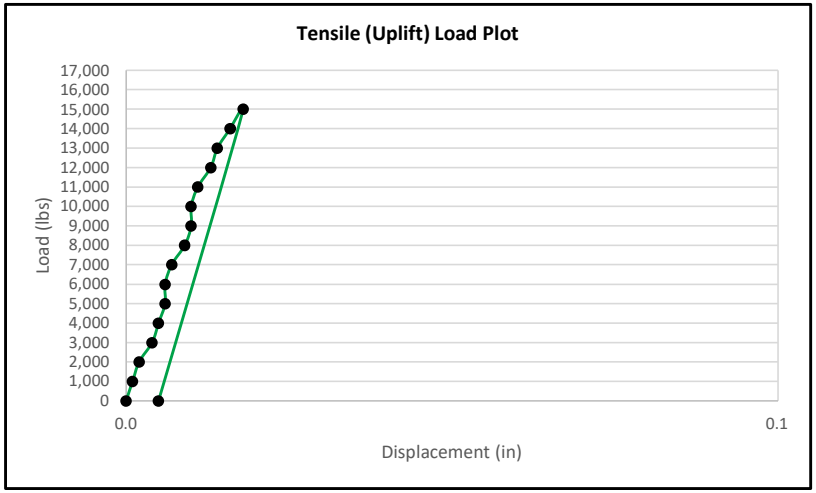
Rock encountered at 2 feet BGS during pre-drilling.
Missing data for drive times

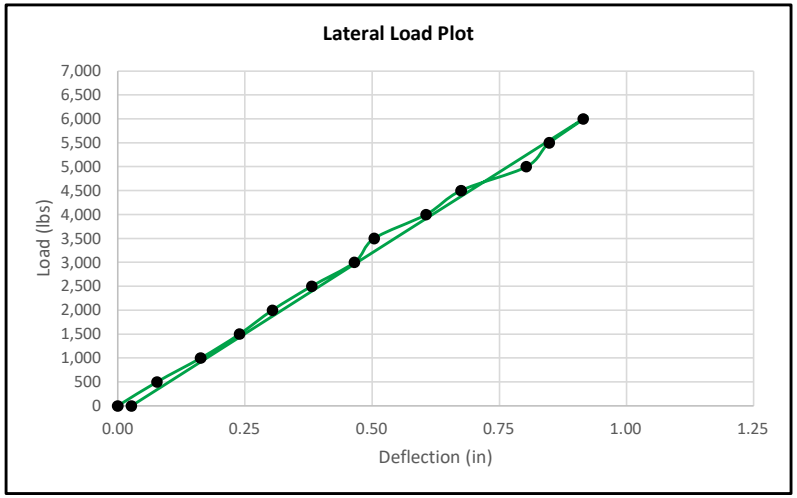
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 8,000 | 8,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0080 | 0.0120 | 0.0100 |
| 1 | 11,000 | 11,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 13,000 | 13,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 14,000 | 14,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 15,000 | 15,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 0 | 0 | 0.0060 | 0.0040 | 0.0050 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0780 | 0.0760 | 0.0770 |
| 1 | 1,000 | 1,000 | 0.1660 | 0.1600 | 0.1630 |
| 1 | 1,500 | 1,500 | 0.2460 | 0.2320 | 0.2390 |
| 1 | 2,000 | 2,000 | 0.3140 | 0.2940 | 0.3040 |
| 1 | 2,500 | 2,500 | 0.3940 | 0.3680 | 0.3810 |
| 1 | 3,000 | 3,000 | 0.4800 | 0.4500 | 0.4650 |
| 1 | 3,500 | 3,500 | 0.4700 | 0.5380 | 0.5040 |
| 1 | 4,000 | 4,000 | 0.6220 | 0.5900 | 0.6060 |
| 1 | 4,500 | 4,500 | 0.6940 | 0.6560 | 0.6750 |
| 1 | 5,000 | 5,000 | 0.8220 | 0.7840 | 0.8030 |
| 1 | 5,500 | 5,500 | 0.8680 | 0.8280 | 0.8480 |
| 1 | 6,000 | 6,000 | 0.9340 | 0.8960 | 0.9150 |
| 1 | 0 | 0 | 0.0280 | 0.0260 | 0.0270 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-PV-221 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 109.4 |
| Location: | 45.26223, -120.71548 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 19.9 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 1.26 |
| 4 | 14.66 |
| 5 | 16.58 |
| 6 | 15.62 |
| 7 | 19.75 |
| 8 | 41.48 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 109.35 |

**Field Notes**

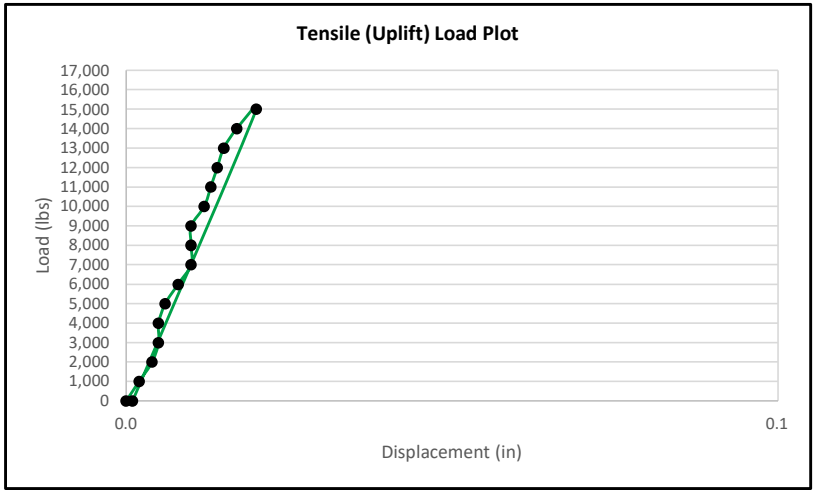
Rock encountered at 3 feet BGS during pre-drilling.

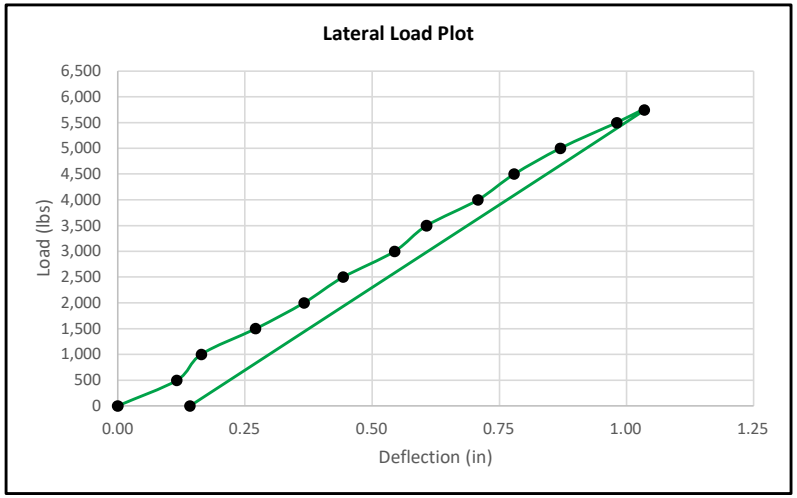
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 12,000 | 12,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 13,000 | 13,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0160 | 0.0200 |
| 1 | 0 | 0 | 0.0020 | 0.0000 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1220 | 0.1100 | 0.1160 |
| 1 | 1,000 | 1,000 | 0.1700 | 0.1580 | 0.1640 |
| 1 | 1,500 | 1,500 | 0.2780 | 0.2640 | 0.2710 |
| 1 | 2,000 | 2,000 | 0.3740 | 0.3580 | 0.3660 |
| 1 | 2,500 | 2,500 | 0.4520 | 0.4340 | 0.4430 |
| 1 | 3,000 | 3,000 | 0.5540 | 0.5340 | 0.5440 |
| 1 | 3,500 | 3,500 | 0.6160 | 0.5980 | 0.6070 |
| 1 | 4,000 | 4,000 | 0.7120 | 0.7040 | 0.7080 |
| 1 | 4,500 | 4,500 | 0.7780 | 0.7800 | 0.7790 |
| 1 | 5,000 | 5,000 | 0.8600 | 0.8800 | 0.8700 |
| 1 | 5,500 | 5,500 | 0.9680 | 0.9940 | 0.9810 |
| 1 | 6,000 | 5,740 | 1.0200 | 1.0500 | 1.0350 |
| 1 | 0 | 0 | 0.0860 | 0.1980 | 0.1420 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-223 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 54.1 |
| Location: | 45.25868, -120.71862 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 9.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.53 |
| 6 | 6.83 |
| 7 | 8.16 |
| 8 | 9.92 |
| 9 | 13.53 |
| 10 | 14.17 |
| 11 | |
| 12 | |
| Total Time (s) = | 54.14 |

**Field Notes**

Rock encountered at 2.75 feet BGS during pre-drilling.

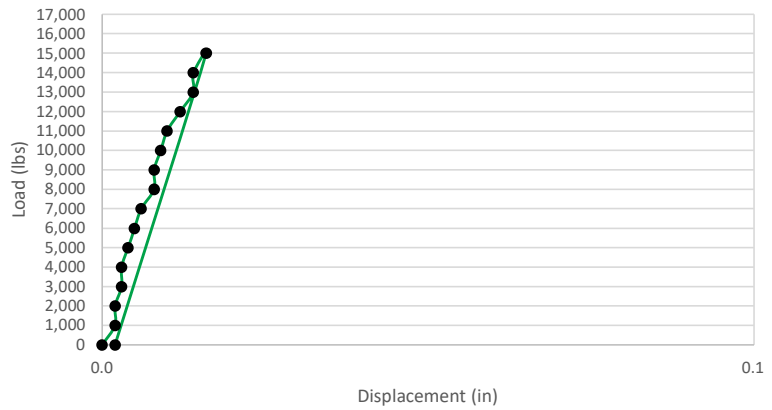
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 10,000 | 10,000 | 0.0120 | 0.0060 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 12,000 | 12,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 13,000 | 13,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 14,000 | 14,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

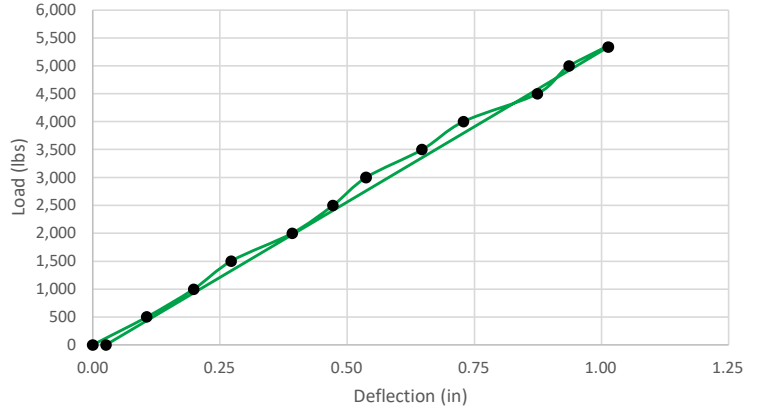
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1080 | 0.1040 | 0.1060 |
| 1 | 1,000 | 1,000 | 0.2000 | 0.1960 | 0.1980 |
| 1 | 1,500 | 1,500 | 0.2780 | 0.2660 | 0.2720 |
| 1 | 2,000 | 2,000 | 0.4000 | 0.3840 | 0.3920 |
| 1 | 2,500 | 2,500 | 0.4800 | 0.4640 | 0.4720 |
| 1 | 3,000 | 3,000 | 0.5460 | 0.5280 | 0.5370 |
| 1 | 3,500 | 3,500 | 0.6560 | 0.6380 | 0.6470 |
| 1 | 4,000 | 4,000 | 0.7380 | 0.7200 | 0.7290 |
| 1 | 4,500 | 4,500 | 0.8820 | 0.8660 | 0.8740 |
| 1 | 5,000 | 5,000 | 0.9440 | 0.9280 | 0.9360 |
| 1 | 5,500 | 5,340 | 1.0220 | 1.0040 | 1.0130 |
| 1 | 0 | 0 | 0.0240 | 0.0280 | 0.0260 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-223 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 54.1 |
| Location: | 45.25868, -120.71862 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 9.0 |

**Embedment Data**

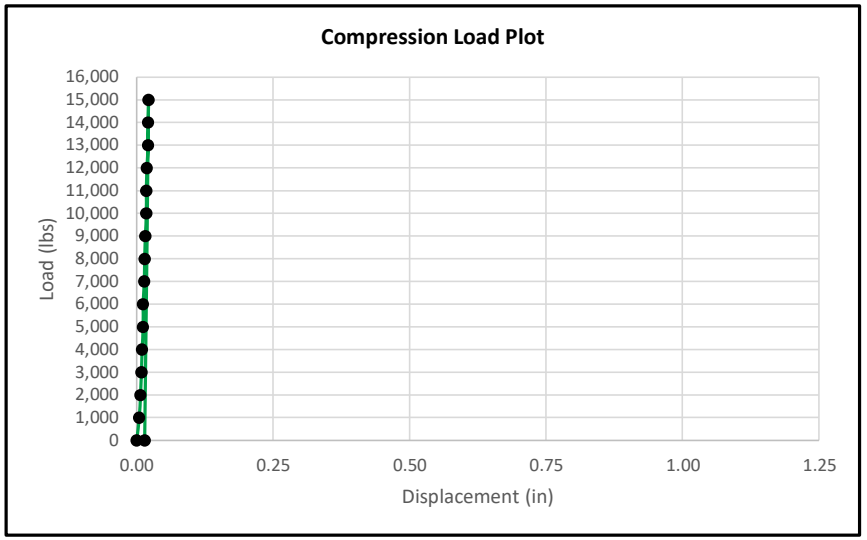
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.53 |
| 6 | 6.83 |
| 7 | 8.16 |
| 8 | 9.92 |
| 9 | 13.53 |
| 10 | 14.17 |
| 11 | |
| 12 | |
| Total Time (s) = | 54.14 |

**Field Notes**

Rock encountered at 2.75 feet BGS during pre-drilling.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0100 | 0.0040 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0060 | 0.0090 |
| 1 | 4,000 | 4,000 | 0.0140 | 0.0060 | 0.0100 |
| 1 | 5,000 | 5,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 6,000 | 6,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0180 | 0.0100 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0180 | 0.0140 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 11,000 | 11,000 | 0.0200 | 0.0160 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0180 | 0.0190 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0200 | 0.0210 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0200 | 0.0210 |
| 1 | 15,000 | 15,000 | 0.0240 | 0.0200 | 0.0220 |
| 1 | 0 | 0 | 0.0160 | 0.0140 | 0.0150 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 12.0 | Pile ID: | PT-PV-226 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 206.95 |
| Location: | 45.26966, -120.69180 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 24.3 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.44 |
| 5 | 6.61 |
| 6 | 8.99 |
| 7 | 9.41 |
| 8 | 21.46 |
| 9 | 31.92 |
| 10 | 36.91 |
| 11 | 47.66 |
| 12 | 43.55 |
| Total Time (s) = | 206.95 |

**Field Notes**

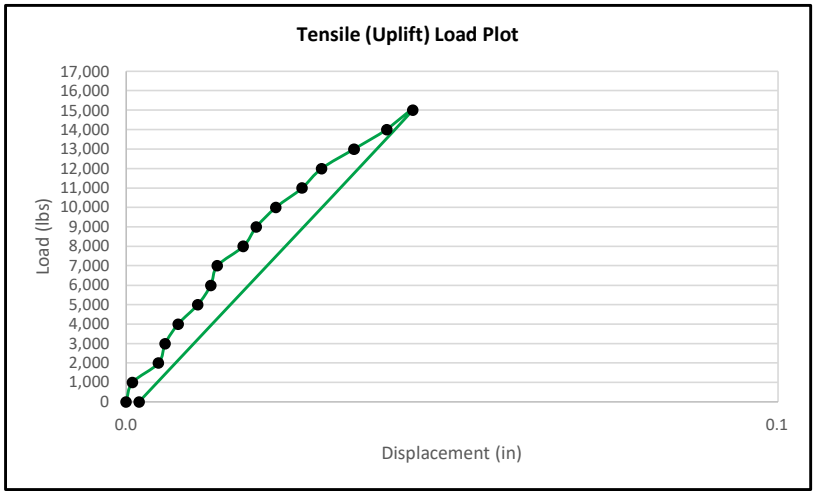
Rock encountered at 2 feet BGS during pre-drilling,

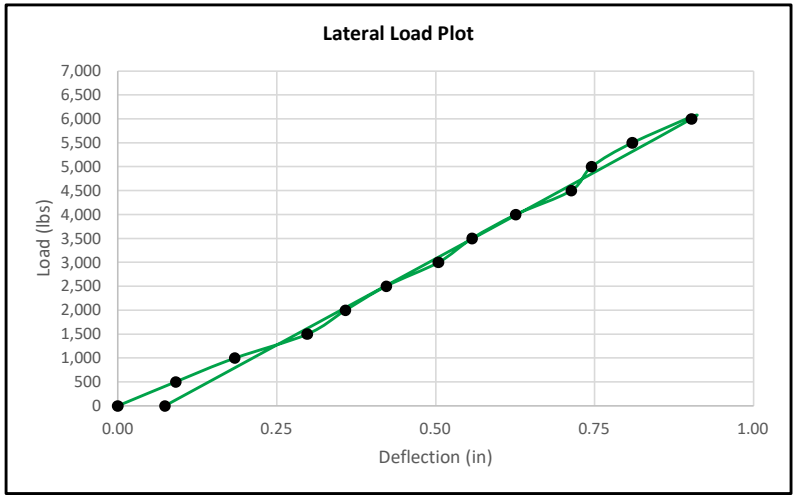
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0100 | 0.0080 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0140 | 0.0110 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0160 | 0.0130 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0180 | 0.0140 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0220 | 0.0180 |
| 1 | 9,000 | 9,000 | 0.0160 | 0.0240 | 0.0200 |
| 1 | 10,000 | 10,000 | 0.0180 | 0.0280 | 0.0230 |
| 1 | 11,000 | 11,000 | 0.0220 | 0.0320 | 0.0270 |
| 1 | 12,000 | 12,000 | 0.0240 | 0.0360 | 0.0300 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0420 | 0.0350 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0500 | 0.0400 |
| 1 | 15,000 | 15,000 | 0.0340 | 0.0540 | 0.0440 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0860 | 0.0960 | 0.0910 |
| 1 | 1,000 | 1,000 | 0.1720 | 0.1960 | 0.1840 |
| 1 | 1,500 | 1,500 | 0.2800 | 0.3160 | 0.2980 |
| 1 | 2,000 | 2,000 | 0.3320 | 0.3840 | 0.3580 |
| 1 | 2,500 | 2,500 | 0.3980 | 0.4460 | 0.4220 |
| 1 | 3,000 | 3,000 | 0.4760 | 0.5320 | 0.5040 |
| 1 | 3,500 | 3,500 | 0.5280 | 0.5860 | 0.5570 |
| 1 | 4,000 | 4,000 | 0.5940 | 0.6580 | 0.6260 |
| 1 | 4,500 | 4,500 | 0.6780 | 0.7480 | 0.7130 |
| 1 | 5,000 | 5,000 | 0.7080 | 0.7820 | 0.7450 |
| 1 | 5,500 | 5,500 | 0.7700 | 0.8480 | 0.8090 |
| 1 | 6,000 | 6,000 | 0.8600 | 0.9440 | 0.9020 |
| 1 | 0 | 0 | 0.0600 | 0.0880 | 0.0740 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-230 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 101.03 |
| Location: | 45.25927, -120.68991 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 13.5 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.55 |
| 5 | 3.16 |
| 6 | 4.83 |
| 7 | 8.76 |
| 8 | 17.27 |
| 9 | 35.27 |
| 10 | 31.19 |
| 11 | |
| 12 | |
| Total Time (s) = | 101.03 |

**Field Notes**

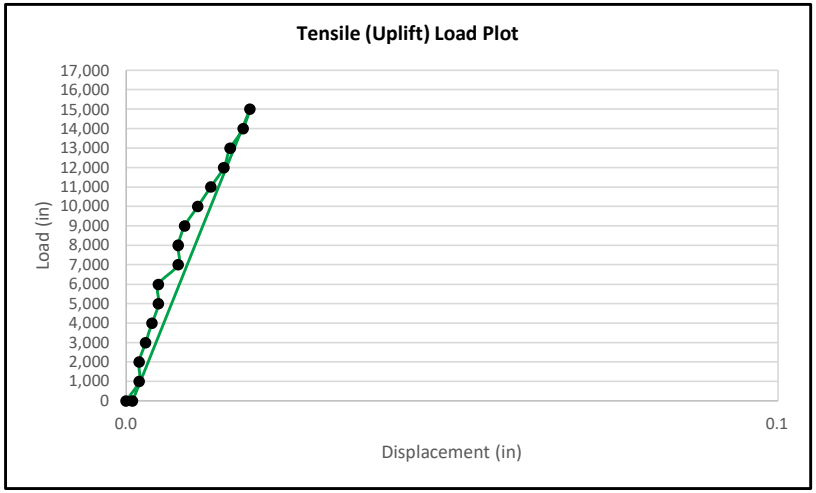
Rock encountered at 2 feet BGS during pre-drilling,

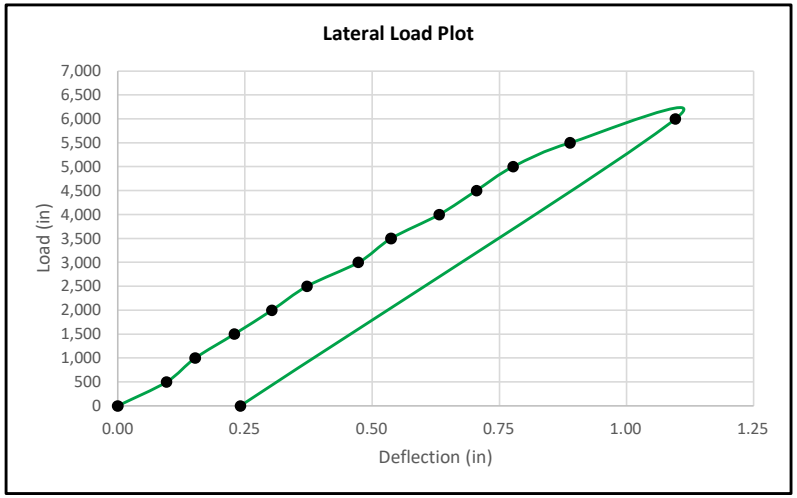
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 6,000 | 6,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0060 | 0.0090 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0100 | 0.0130 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0120 | 0.0150 |
| 1 | 13,000 | 13,000 | 0.0200 | 0.0120 | 0.0160 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0140 | 0.0180 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 0 | 0 | 0.0020 | 0.0000 | 0.0010 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0920 | 0.1000 | 0.0960 |
| 1 | 1,000 | 1,000 | 0.1460 | 0.1580 | 0.1520 |
| 1 | 1,500 | 1,500 | 0.2220 | 0.2360 | 0.2290 |
| 1 | 2,000 | 2,000 | 0.2960 | 0.3100 | 0.3030 |
| 1 | 2,500 | 2,500 | 0.3660 | 0.3780 | 0.3720 |
| 1 | 3,000 | 3,000 | 0.4640 | 0.4820 | 0.4730 |
| 1 | 3,500 | 3,500 | 0.5280 | 0.5460 | 0.5370 |
| 1 | 4,000 | 4,000 | 0.6220 | 0.6420 | 0.6320 |
| 1 | 4,500 | 4,500 | 0.6940 | 0.7160 | 0.7050 |
| 1 | 5,000 | 5,000 | 0.7640 | 0.7900 | 0.7770 |
| 1 | 5,500 | 5,500 | 0.8700 | 0.9080 | 0.8890 |
| 1 | 6,000 | 6,000 | 1.0680 | 1.1240 | 1.0960 |
| 1 | 0 | 0 | 0.2040 | 0.2780 | 0.2410 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-PV-230 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 101.0 |
| Installed Coordinates: | 45.25927, -120.68991 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 13.5 |

**Embedment Data**

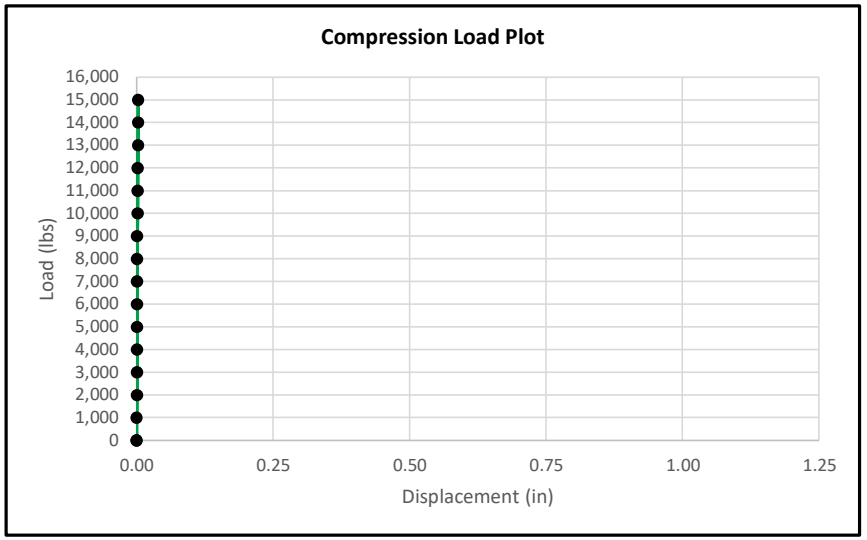
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.55 |
| 5 | 3.16 |
| 6 | 4.83 |
| 7 | 8.76 |
| 8 | 17.27 |
| 9 | 35.27 |
| 10 | 31.19 |
| 11 | |
| 12 | |
| Total Time (s) = | 101.03 |

**Field Notes**

Rock encountered at 2 feet BGS during pre-drilling,

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 4,000 | 4,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 5,000 | 5,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 6,000 | 6,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 7,000 | 7,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 8,000 | 8,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 9,000 | 9,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 10,000 | 10,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 11,000 | 11,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 12,000 | 12,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 13,000 | 13,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 14,000 | 14,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 15,000 | 15,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-SB-01A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 2.1 |
| Location: | 45.36651, -120.70621 | Pre-Drill Depth (ft): | 7.0 | Avg. Installation Rate (sec/ft): | 1.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 0.73 |
| 7 | 1.37 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 2.1 |

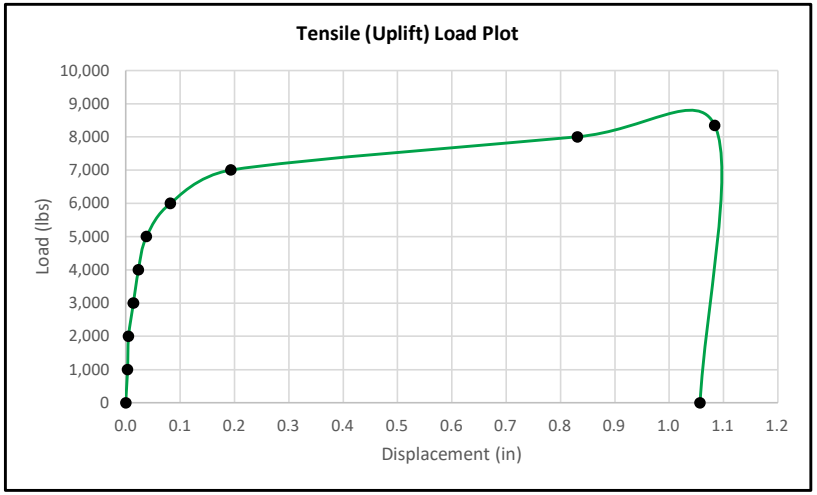
**Field Notes**

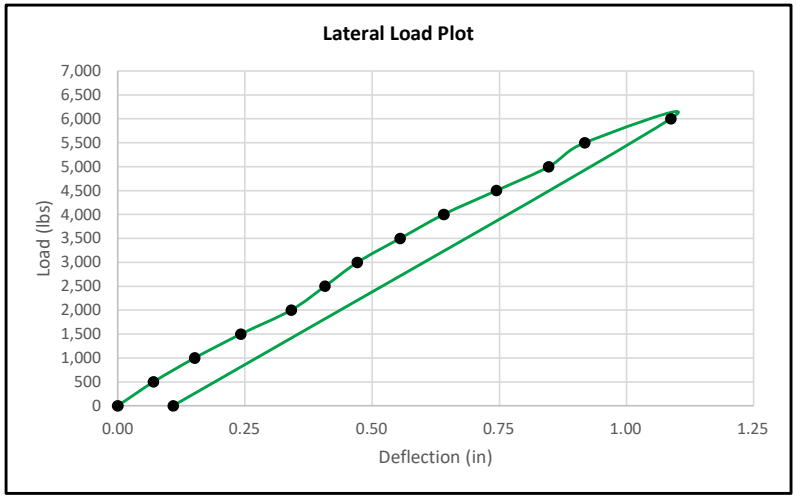
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 3,000 | 3,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 4,000 | 4,000 | 0.0240 | 0.0220 | 0.0230 |
| 1 | 5,000 | 5,000 | 0.0380 | 0.0380 | 0.0380 |
| 1 | 6,000 | 6,000 | 0.0820 | 0.0820 | 0.0820 |
| 1 | 7,000 | 7,000 | 0.1940 | 0.1920 | 0.1930 |
| 1 | 8,000 | 8,000 | 0.8320 | 0.8300 | 0.8310 |
| 1 | 9,000 | 8,340 | 1.0860 | 1.0820 | 1.0840 |
| 1 | 0 | 0 | 1.0580 | 1.0560 | 1.0570 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0760 | 0.0640 | 0.0700 |
| 1 | 1,000 | 1,000 | 0.1600 | 0.1420 | 0.1510 |
| 1 | 1,500 | 1,500 | 0.2520 | 0.2320 | 0.2420 |
| 1 | 2,000 | 2,000 | 0.3520 | 0.3300 | 0.3410 |
| 1 | 2,500 | 2,500 | 0.4180 | 0.3960 | 0.4070 |
| 1 | 3,000 | 3,000 | 0.4820 | 0.4600 | 0.4710 |
| 1 | 3,500 | 3,500 | 0.5660 | 0.5440 | 0.5550 |
| 1 | 4,000 | 4,000 | 0.6520 | 0.6300 | 0.6410 |
| 1 | 4,500 | 4,500 | 0.7480 | 0.7400 | 0.7440 |
| 1 | 5,000 | 5,000 | 0.8580 | 0.8360 | 0.8470 |
| 1 | 5,500 | 5,500 | 0.9280 | 0.9080 | 0.9180 |
| 1 | 6,000 | 6,000 | 1.0940 | 1.0800 | 1.0870 |
| 1 | 0 | 0 | 0.1180 | 0.1000 | 0.1090 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-SB-01B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/4/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 6.7 |
| Location: | 45.36651, -120.70621 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.87 |
| 6 | 2.14 |
| 7 | 2.66 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 6.67 |

**Tensile (Uplift) Testing**

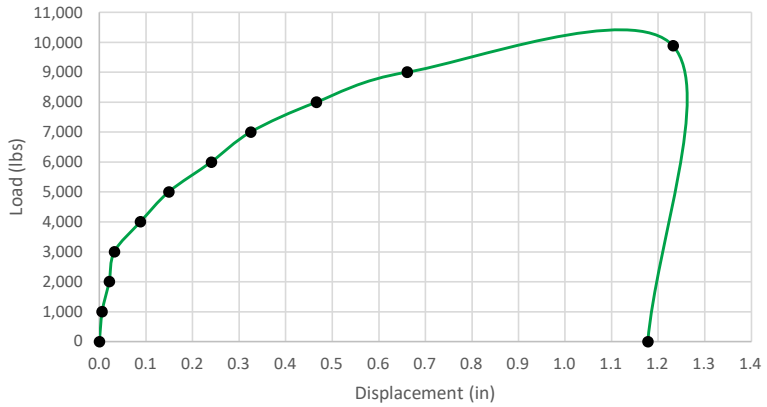
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 2,000 | 2,000 | 0.0220 | 0.0200 | 0.0210 |
| 1 | 3,000 | 3,000 | 0.0320 | 0.0320 | 0.0320 |
| 1 | 4,000 | 4,000 | 0.0820 | 0.0940 | 0.0880 |
| 1 | 5,000 | 5,000 | 0.1440 | 0.1540 | 0.1490 |
| 1 | 6,000 | 6,000 | 0.2340 | 0.2460 | 0.2400 |
| 1 | 7,000 | 7,000 | 0.3200 | 0.3300 | 0.3250 |
| 1 | 8,000 | 8,000 | 0.4600 | 0.4720 | 0.4660 |
| 1 | 9,000 | 9,000 | 0.6560 | 0.6660 | 0.6610 |
| 1 | 10,000 | 9,880 | 1.2300 | 1.2340 | 1.2320 |
| 1 | 0 | 0 | 1.1740 | 1.1820 | 1.1780 |

**Lateral Testing**

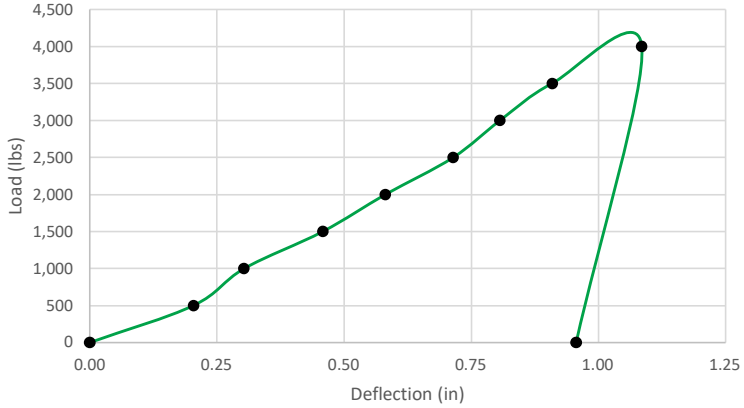
| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.2020 | 0.2060 | 0.2040 |
| 1 | 1,000 | 1,000 | 0.3000 | 0.3060 | 0.3030 |
| 1 | 1,500 | 1,500 | 0.4540 | 0.4620 | 0.4580 |
| 1 | 2,000 | 2,000 | 0.5760 | 0.5860 | 0.5810 |
| 1 | 2,500 | 2,500 | 0.7080 | 0.7200 | 0.7140 |
| 1 | 3,000 | 3,000 | 0.7980 | 0.8140 | 0.8060 |
| 1 | 3,500 | 3,500 | 0.9020 | 0.9160 | 0.9090 |
| 1 | 4,000 | 4,000 | 1.0760 | 1.0940 | 1.0850 |
| 1 | 0 | 0 | 0.1720 | 1.7400 | 0.9560 |

**Field Notes**

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-SB-01B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 6.7 |
| Location: | 45.36651, -120.70621 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 2.2 |

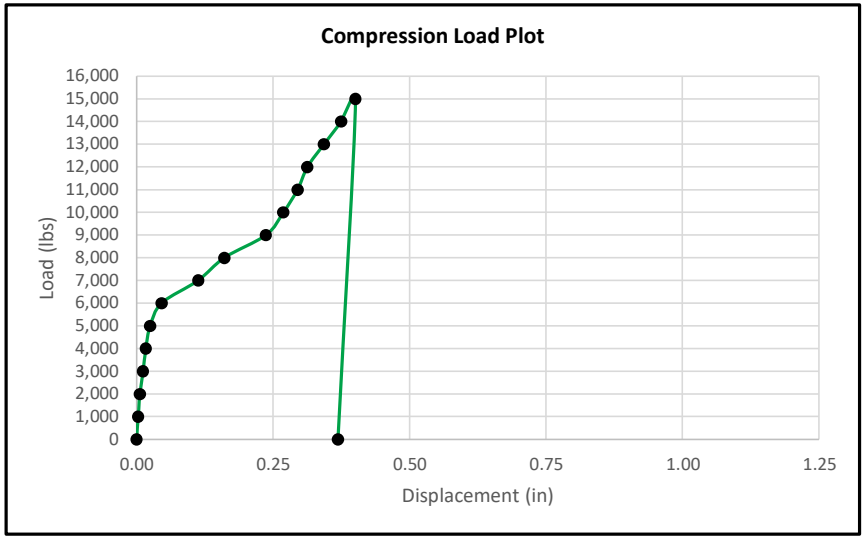
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.87 |
| 6 | 2.14 |
| 7 | 2.66 |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 6.67 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0080 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0160 | 0.0120 |
| 1 | 4,000 | 4,000 | 0.0120 | 0.0220 | 0.0170 |
| 1 | 5,000 | 5,000 | 0.0200 | 0.0300 | 0.0250 |
| 1 | 6,000 | 6,000 | 0.0400 | 0.0520 | 0.0460 |
| 1 | 7,000 | 7,000 | 0.1060 | 0.1200 | 0.1130 |
| 1 | 8,000 | 8,000 | 0.1540 | 0.1680 | 0.1610 |
| 1 | 9,000 | 9,000 | 0.2300 | 0.2440 | 0.2370 |
| 1 | 10,000 | 10,000 | 0.2620 | 0.2760 | 0.2690 |
| 1 | 11,000 | 11,000 | 0.2900 | 0.3000 | 0.2950 |
| 1 | 12,000 | 12,000 | 0.3080 | 0.3180 | 0.3130 |
| 1 | 13,000 | 13,000 | 0.3380 | 0.3490 | 0.3435 |
| 1 | 14,000 | 14,000 | 0.3740 | 0.3760 | 0.3750 |
| 1 | 15,000 | 15,000 | 0.4000 | 0.4020 | 0.4010 |
| 1 | 0 | 0 | 0.3680 | 0.3700 | 0.3690 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.5 | Pile ID: | PT-SB-02 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 116.3 |
| Location: | 45.36491, -120.70764 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 16.6 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.5 |
| 5 | 2.27 |
| 6 | 8.03 |
| 7 | 6.66 |
| 8 | 17.25 |
| 9 | 22.5 |
| 10 | 24.15 |
| 11 | 34.98 |
| 12 | - |
| Total Time (s) = | 116.34 |

**Field Notes**

Pile refusal encountered at 10.5 feet BGS

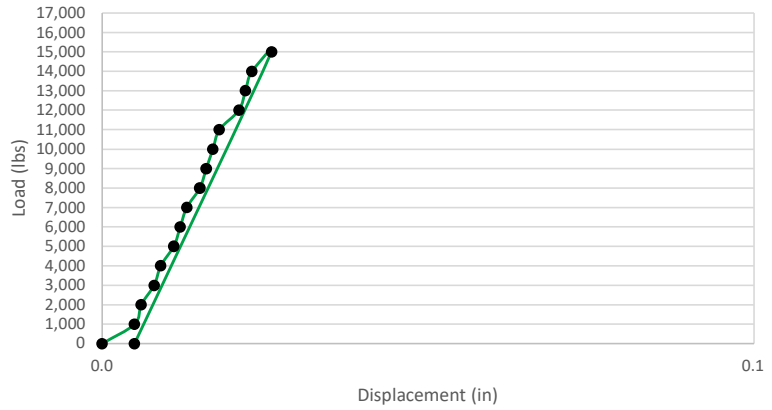
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 6,000 | 6,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0140 | 0.0130 |
| 1 | 8,000 | 8,000 | 0.0140 | 0.0160 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0200 | 0.0180 |
| 1 | 12,000 | 12,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0180 | 0.0260 | 0.0220 |
| 1 | 14,000 | 14,000 | 0.0200 | 0.0260 | 0.0230 |
| 1 | 15,000 | 15,000 | 0.0220 | 0.0300 | 0.0260 |
| 1 | 0 | 0 | 0.0040 | 0.0060 | 0.0050 |

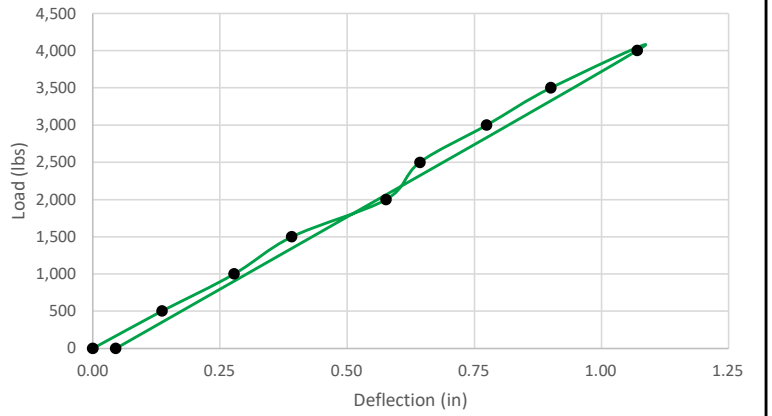
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1420 | 0.1300 | 0.1360 |
| 1 | 1,000 | 1,000 | 0.2820 | 0.2740 | 0.2780 |
| 1 | 1,500 | 1,500 | 0.4000 | 0.3820 | 0.3910 |
| 1 | 2,000 | 2,000 | 0.5860 | 0.5660 | 0.5760 |
| 1 | 2,500 | 2,500 | 0.6520 | 0.6340 | 0.6430 |
| 1 | 3,000 | 3,000 | 0.7840 | 0.7640 | 0.7740 |
| 1 | 3,500 | 3,500 | 0.9100 | 0.8900 | 0.9000 |
| 1 | 4,000 | 4,000 | 1.0800 | 1.0600 | 1.0700 |
| 1 | 0 | 0 | 0.0420 | 0.0480 | 0.0450 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.5 | Pile ID: | PT-SB-02 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 3.5 | Pile Section: | W6x9 |
| Date Installed: | 11/12/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/3/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 116.3 |
| Location: | 45.36491, -120.70764 | Pre-Drill Depth (ft): | 12.0 | Avg. Installation Rate (sec/ft): | 16.6 |

**Embedment Data**

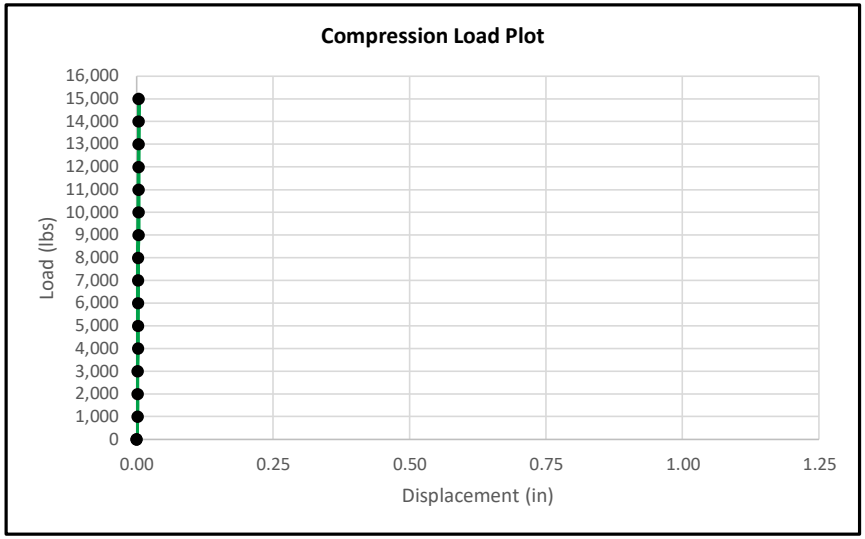
| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | 0.5 |
| 5 | 2.27 |
| 6 | 8.03 |
| 7 | 6.66 |
| 8 | 17.25 |
| 9 | 22.5 |
| 10 | 24.15 |
| 11 | 34.98 |
| 12 | - |
| Total Time (s) = | 116.34 |

**Field Notes**

Pile refusal encountered at 10.5 feet BGS during install.

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 3,000 | 3,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 5,000 | 5,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 7,000 | 7,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 8,000 | 8,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 9,000 | 9,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 10,000 | 10,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 11,000 | 11,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 12,000 | 12,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 13,000 | 13,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 14,000 | 14,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 15,000 | 15,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-WTG-01A |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 25.54 |
| Location: | 45.41832, -120.70108 | Pre-Drill Depth (ft): | 9.0 | Avg. Installation Rate (sec/ft): | 5.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 0.87 |
| 6 | 2.53 |
| 7 | 2.4 |
| 8 | 4.79 |
| 9 | 14.95 |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 25.54 |

**Field Notes**

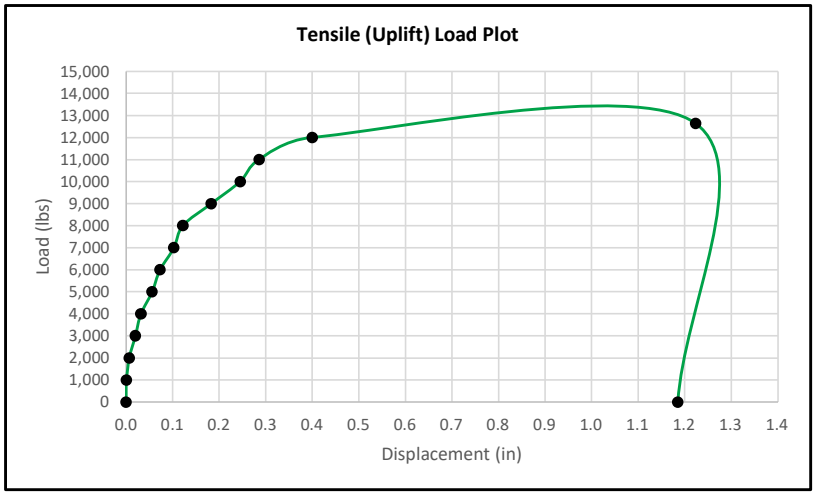
Rock encountered at 8 feet BGS during pre-drilling.

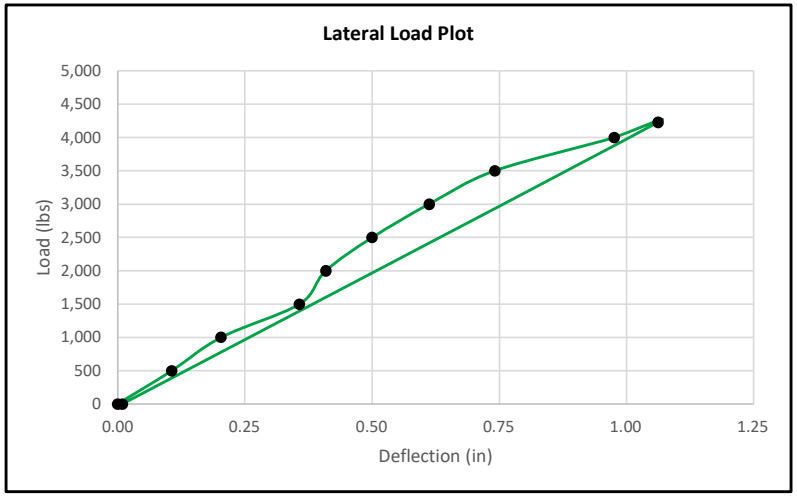
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0000 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0200 | 0.0200 | 0.0200 |
| 1 | 4,000 | 4,000 | 0.0300 | 0.0340 | 0.0320 |
| 1 | 5,000 | 5,000 | 0.0500 | 0.0620 | 0.0560 |
| 1 | 6,000 | 6,000 | 0.0660 | 0.0800 | 0.0730 |
| 1 | 7,000 | 7,000 | 0.0940 | 0.1120 | 0.1030 |
| 1 | 8,000 | 8,000 | 0.1120 | 0.1320 | 0.1220 |
| 1 | 9,000 | 9,000 | 0.1720 | 0.1940 | 0.1830 |
| 1 | 10,000 | 10,000 | 0.2340 | 0.2560 | 0.2450 |
| 1 | 11,000 | 11,000 | 0.2740 | 0.2980 | 0.2860 |
| 1 | 12,000 | 12,000 | 0.3860 | 0.4140 | 0.4000 |
| 1 | 13,000 | 12,640 | 1.2120 | 1.2340 | 1.2230 |
| 1 | 0 | 0 | 1.1820 | 1.1880 | 1.1850 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1020 | 0.1100 | 0.1060 |
| 1 | 1,000 | 1,000 | 0.2000 | 0.2060 | 0.2030 |
| 1 | 1,500 | 1,500 | 0.3580 | 0.3560 | 0.3570 |
| 1 | 2,000 | 2,000 | 0.4080 | 0.4100 | 0.4090 |
| 1 | 2,500 | 2,500 | 0.5000 | 0.5000 | 0.5000 |
| 1 | 3,000 | 3,000 | 0.6120 | 0.6120 | 0.6120 |
| 1 | 3,500 | 3,500 | 0.7400 | 0.7420 | 0.7410 |
| 1 | 4,000 | 4,000 | 0.9760 | 0.9760 | 0.9760 |
| 1 | 4,500 | 4,230 | 1.0600 | 1.0640 | 1.0620 |
| 1 | 0 | 0 | 0.0000 | 0.0180 | 0.0090 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-WTG-01B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.29 |
| Location: | 45.41832, -120.70108 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.68 |
| 6 | 1.58 |
| 7 | 1.35 |
| 8 | 3.11 |
| 9 | 6.57 |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.29 |

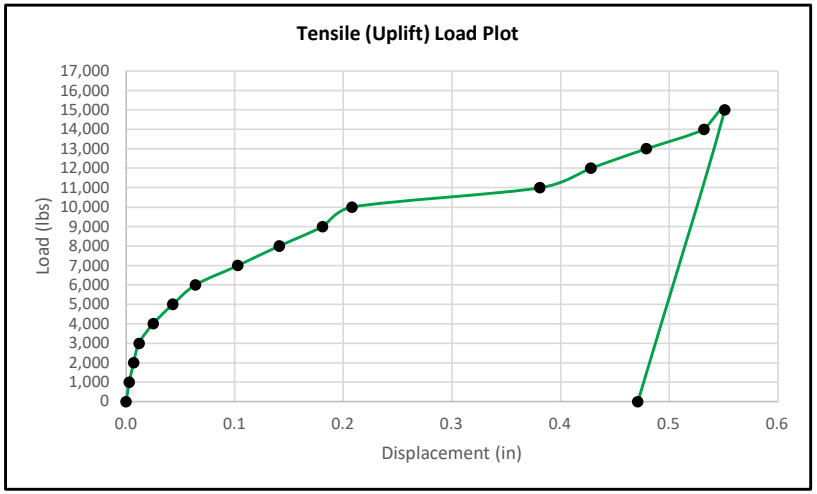
**Field Notes**

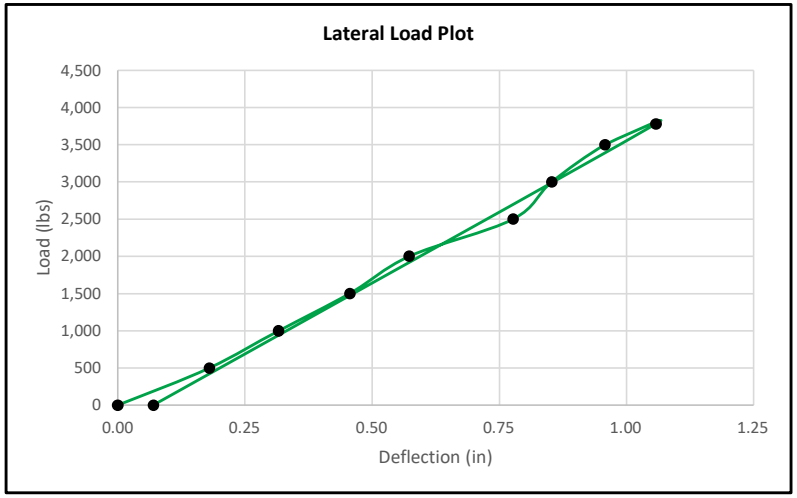
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 3,000 | 3,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 4,000 | 4,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 5,000 | 5,000 | 0.0400 | 0.0460 | 0.0430 |
| 1 | 6,000 | 6,000 | 0.0600 | 0.0680 | 0.0640 |
| 1 | 7,000 | 7,000 | 0.0960 | 0.1100 | 0.1030 |
| 1 | 8,000 | 8,000 | 0.1320 | 0.1500 | 0.1410 |
| 1 | 9,000 | 9,000 | 0.1720 | 0.1900 | 0.1810 |
| 1 | 10,000 | 10,000 | 0.1980 | 0.2180 | 0.2080 |
| 1 | 11,000 | 11,000 | 0.3680 | 0.3940 | 0.3810 |
| 1 | 12,000 | 12,000 | 0.4160 | 0.4400 | 0.4280 |
| 1 | 13,000 | 13,000 | 0.4660 | 0.4920 | 0.4790 |
| 1 | 14,000 | 14,000 | 0.5200 | 0.5440 | 0.5320 |
| 1 | 15,000 | 15,000 | 0.5400 | 0.5620 | 0.5510 |
| 1 | 0 | 0 | 0.4720 | 0.4700 | 0.4710 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1780 | 0.1820 | 0.1800 |
| 1 | 1,000 | 1,000 | 0.3120 | 0.3200 | 0.3160 |
| 1 | 1,500 | 1,500 | 0.4540 | 0.4580 | 0.4560 |
| 1 | 2,000 | 2,000 | 0.5720 | 0.5740 | 0.5730 |
| 1 | 2,500 | 2,500 | 0.7760 | 0.7780 | 0.7770 |
| 1 | 3,000 | 3,000 | 0.8520 | 0.8540 | 0.8530 |
| 1 | 3,500 | 3,500 | 0.9560 | 0.9600 | 0.9580 |
| 1 | 4,000 | 3,780 | 1.0560 | 1.0600 | 1.0580 |
| 1 | 0 | 0 | 0.0740 | 0.0660 | 0.0700 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 9.0 | Pile ID: | PT-WTG-01B |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.5 | Pile Section: | W6x9 |
| Date Installed: | 11/16/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/9/2025 | Pre-Drill Diameter (in): | N/A | Total Drive Time (sec): | 14.3 |
| Location: | 45.41832, -120.70108 | Pre-Drill Depth (ft): | N/A | Avg. Installation Rate (sec/ft): | 3.2 |

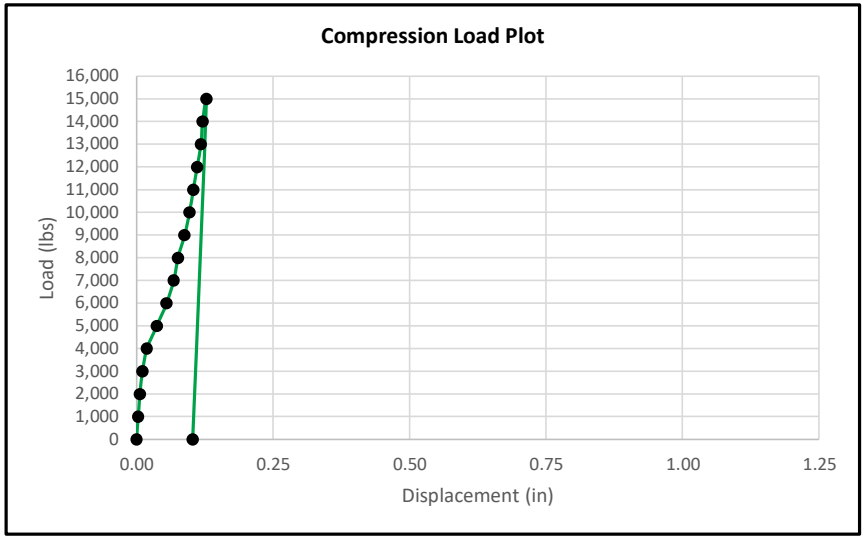
**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 1.68 |
| 6 | 1.58 |
| 7 | 1.35 |
| 8 | 3.11 |
| 9 | 6.57 |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.29 |

**Field Notes**

**Compression Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 4,000 | 4,000 | 0.0220 | 0.0160 | 0.0190 |
| 1 | 5,000 | 5,000 | 0.0400 | 0.0340 | 0.0370 |
| 1 | 6,000 | 6,000 | 0.0600 | 0.0500 | 0.0550 |
| 1 | 7,000 | 7,000 | 0.0720 | 0.0640 | 0.0680 |
| 1 | 8,000 | 8,000 | 0.0820 | 0.0700 | 0.0760 |
| 1 | 9,000 | 9,000 | 0.0940 | 0.0820 | 0.0880 |
| 1 | 10,000 | 10,000 | 0.1020 | 0.0920 | 0.0970 |
| 1 | 11,000 | 11,000 | 0.1100 | 0.0980 | 0.1040 |
| 1 | 12,000 | 12,000 | 0.1180 | 0.1040 | 0.1110 |
| 1 | 13,000 | 13,000 | 0.1240 | 0.1120 | 0.1180 |
| 1 | 14,000 | 14,000 | 0.1280 | 0.1140 | 0.1210 |
| 1 | 15,000 | 15,000 | 0.1340 | 0.1220 | 0.1280 |
| 1 | 0 | 0 | 0.1020 | 0.1040 | 0.1030 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-WTG-02 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/15/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/7/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 25.5 |
| Location: | 45.39250, -120.66497 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 5.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 0.87 |
| 7 | 2.53 |
| 8 | 2.4 |
| 9 | 4.79 |
| 10 | 14.95 |
| 11 | |
| 12 | |
| Total Time (s) = | 25.54 |

**Field Notes**

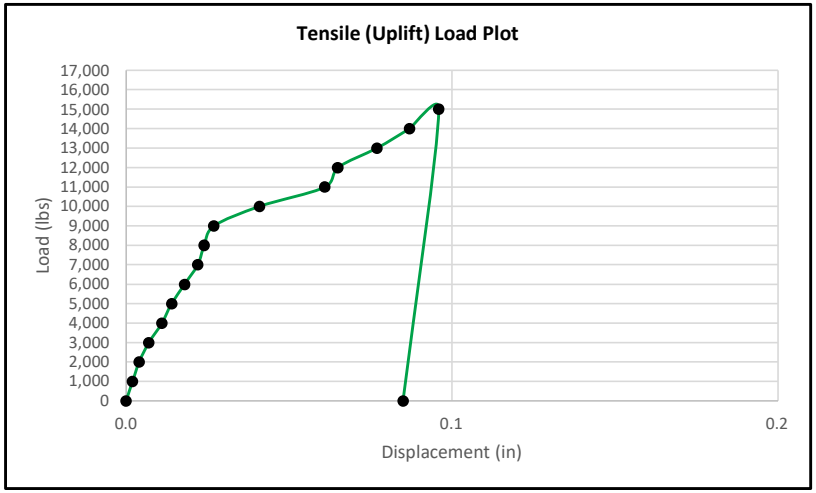
Rock encountered at 5 feet BGS during pre-drilling.

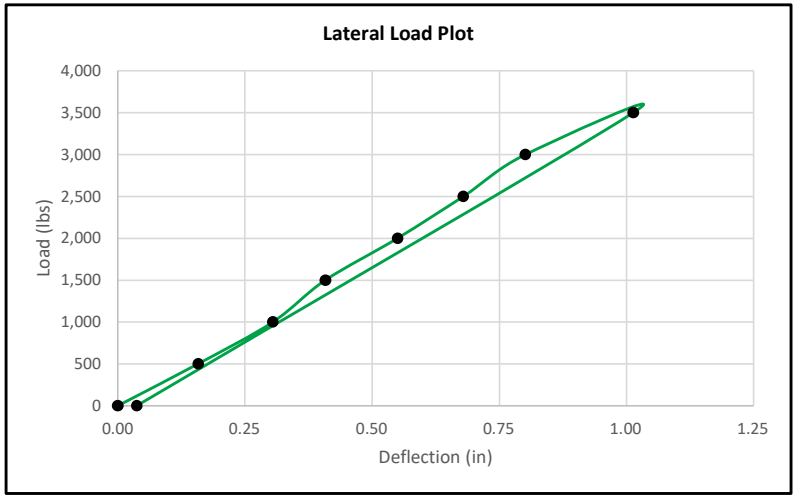
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0080 | 0.0070 |
| 1 | 4,000 | 4,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 5,000 | 5,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 6,000 | 6,000 | 0.0180 | 0.0180 | 0.0180 |
| 1 | 7,000 | 7,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 8,000 | 8,000 | 0.0220 | 0.0260 | 0.0240 |
| 1 | 9,000 | 9,000 | 0.0240 | 0.0300 | 0.0270 |
| 1 | 10,000 | 10,000 | 0.0340 | 0.0480 | 0.0410 |
| 1 | 11,000 | 11,000 | 0.0600 | 0.0620 | 0.0610 |
| 1 | 12,000 | 12,000 | 0.0660 | 0.0640 | 0.0650 |
| 1 | 13,000 | 13,000 | 0.0800 | 0.0740 | 0.0770 |
| 1 | 14,000 | 14,000 | 0.0920 | 0.0820 | 0.0870 |
| 1 | 15,000 | 15,000 | 0.1000 | 0.0920 | 0.0960 |
| 1 | 0 | 0 | 0.0880 | 0.0820 | 0.0850 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1580 | 0.1580 | 0.1580 |
| 1 | 1,000 | 1,000 | 0.3020 | 0.3080 | 0.3050 |
| 1 | 1,500 | 1,500 | 0.4040 | 0.4120 | 0.4080 |
| 1 | 2,000 | 2,000 | 0.5460 | 0.5540 | 0.5500 |
| 1 | 2,500 | 2,500 | 0.6740 | 0.6840 | 0.6790 |
| 1 | 3,000 | 3,000 | 0.7960 | 0.8060 | 0.8010 |
| 1 | 3,500 | 3,500 | 1.0080 | 1.0180 | 1.0130 |
| 1 | 0 | 0 | 0.0300 | 0.0440 | 0.0370 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-WTG-03 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 5.0 | Pile Section: | W6x9 |
| Date Installed: | 11/13/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 12/6/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 14.42 |
| Location: | 45.39251, -120.66497 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 4.8 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | - |
| 6 | 3.03 |
| 7 | 4.84 |
| 8 | 6.55 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 14.42 |

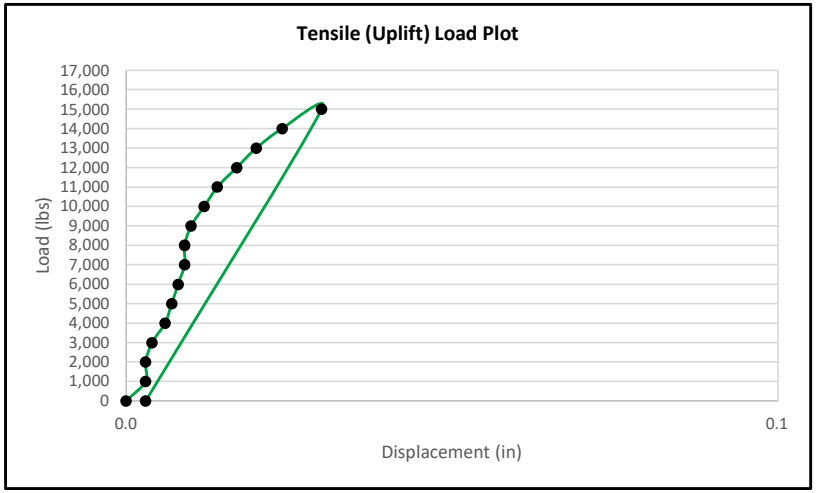
**Field Notes**

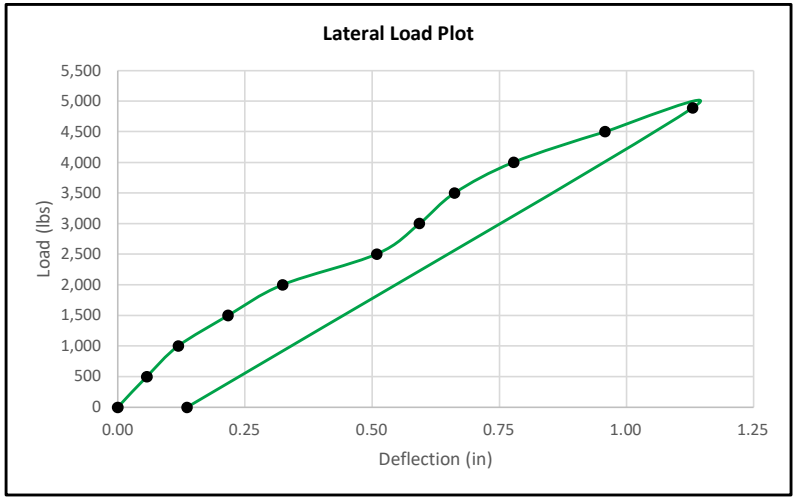
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0060 | 0.0080 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 8,000 | 8,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 9,000 | 9,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 10,000 | 10,000 | 0.0140 | 0.0100 | 0.0120 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0120 | 0.0140 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0140 | 0.0170 |
| 1 | 13,000 | 13,000 | 0.0260 | 0.0140 | 0.0200 |
| 1 | 14,000 | 14,000 | 0.0300 | 0.0180 | 0.0240 |
| 1 | 15,000 | 15,000 | 0.0360 | 0.0240 | 0.0300 |
| 1 | 0 | 0 | 0.0040 | 0.0020 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | | |
|---|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0620 | 0.0520 | 0.0570 |
| 1 | 1,000 | 1,000 | 0.1260 | 0.1120 | 0.1190 |
| 1 | 1,500 | 1,500 | 0.2260 | 0.2080 | 0.2170 |
| 1 | 2,000 | 2,000 | 0.3340 | 0.3140 | 0.3240 |
| 1 | 2,500 | 2,500 | 0.5200 | 0.4980 | 0.5090 |
| 1 | 3,000 | 3,000 | 0.6040 | 0.5820 | 0.5930 |
| 1 | 3,500 | 3,500 | 0.6740 | 0.6500 | 0.6620 |
| 1 | 4,000 | 4,000 | 0.7900 | 0.7660 | 0.7780 |
| 1 | 4,500 | 4,500 | 0.9680 | 0.9480 | 0.9580 |
| 1 | 5,000 | 4,890 | 1.1380 | 1.1220 | 1.1300 |
| 1 | 0 | 0 | 0.1300 | 0.1420 | 0.1360 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-WTG-04 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 4.0 | Pile Section: | W6x9 |
| Date Installed: | 11/7/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/20/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 29.8 |
| Location: | 45.34244, -120.80599 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 5.0 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | - |
| 4 | - |
| 5 | 4.23 |
| 6 | 7.29 |
| 7 | 4.39 |
| 8 | 3.69 |
| 9 | 4.17 |
| 10 | 6.07 |
| 11 | |
| 12 | |
| Total Time (s) = | 29.84 |

**Field Notes**

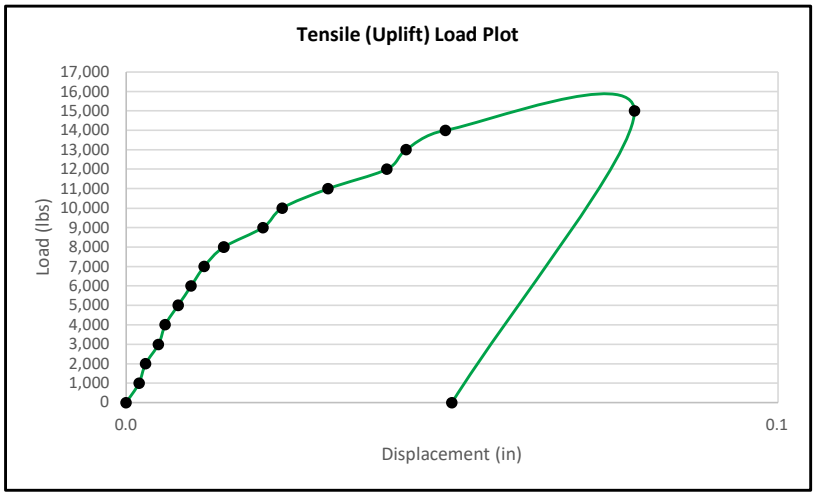
Rock encountered at 4 feet BGS during pre-drilling.

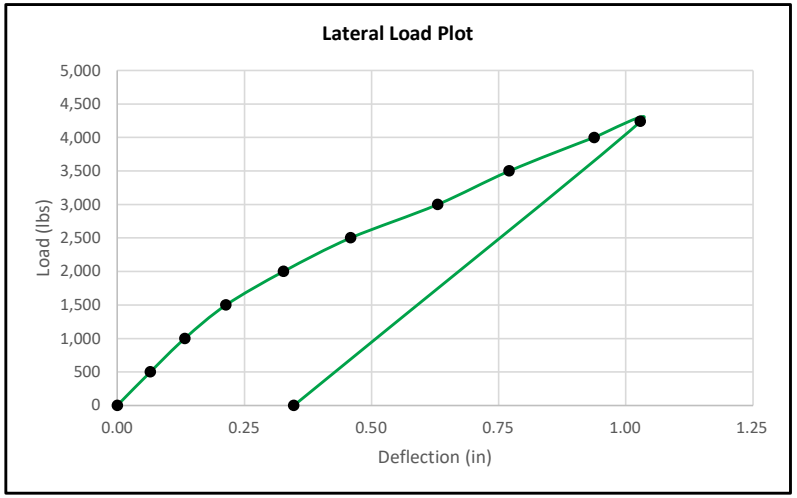
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0020 | 0.0040 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0080 | 0.0080 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0100 | 0.0100 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0160 | 0.0140 | 0.0150 |
| 1 | 9,000 | 9,000 | 0.0240 | 0.0180 | 0.0210 |
| 1 | 10,000 | 10,000 | 0.0280 | 0.0200 | 0.0240 |
| 1 | 11,000 | 11,000 | 0.0360 | 0.0260 | 0.0310 |
| 1 | 12,000 | 12,000 | 0.0440 | 0.0360 | 0.0400 |
| 1 | 13,000 | 13,000 | 0.0500 | 0.0360 | 0.0430 |
| 1 | 14,000 | 14,000 | 0.0560 | 0.0420 | 0.0490 |
| 1 | 15,000 | 15,000 | 0.0860 | 0.0700 | 0.0780 |
| 1 | 0 | 0 | 0.0520 | 0.0480 | 0.0500 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0660 | 0.0650 |
| 1 | 1,000 | 1,000 | 0.1320 | 0.1340 | 0.1330 |
| 1 | 1,500 | 1,500 | 0.2120 | 0.2160 | 0.2140 |
| 1 | 2,000 | 2,000 | 0.3240 | 0.3300 | 0.3270 |
| 1 | 2,500 | 2,500 | 0.4560 | 0.4620 | 0.4590 |
| 1 | 3,000 | 3,000 | 0.6240 | 0.6360 | 0.6300 |
| 1 | 3,500 | 3,500 | 0.7640 | 0.7780 | 0.7710 |
| 1 | 4,000 | 4,000 | 0.9300 | 0.9460 | 0.9380 |
| 1 | 4,500 | 4,240 | 1.0220 | 1.0360 | 1.0290 |
| 1 | 0 | 0 | 0.3260 | 0.3680 | 0.3470 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 7.0 | Pile ID: | PT-WTG-05 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 1.0 | Pile Section: | W6x9 |
| Date Installed: | 10/30/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/9/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 106.0 |
| Location: | 45.29963, -120.84374 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 17.7 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | 1.14 |
| 3 | 4.29 |
| 4 | 12.01 |
| 5 | 17.52 |
| 6 | 37.95 |
| 7 | 33.06 |
| 8 | - |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 105.97 |

**Field Notes**

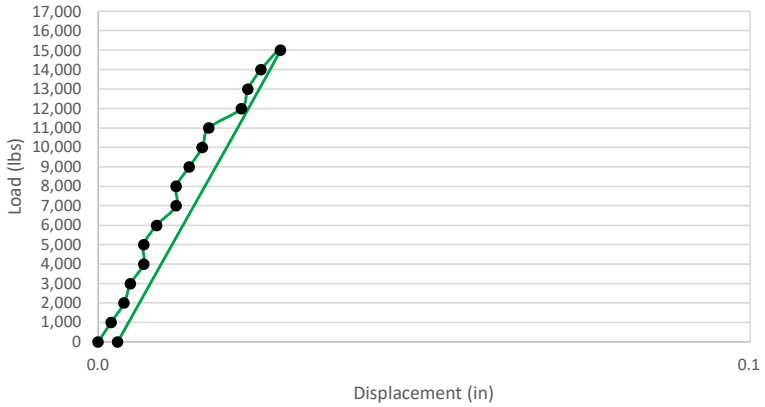
Rock encountered at 2.5 feet BGS during pre-drilling.
Pile refusal encountered at 7 feet BGS during install.

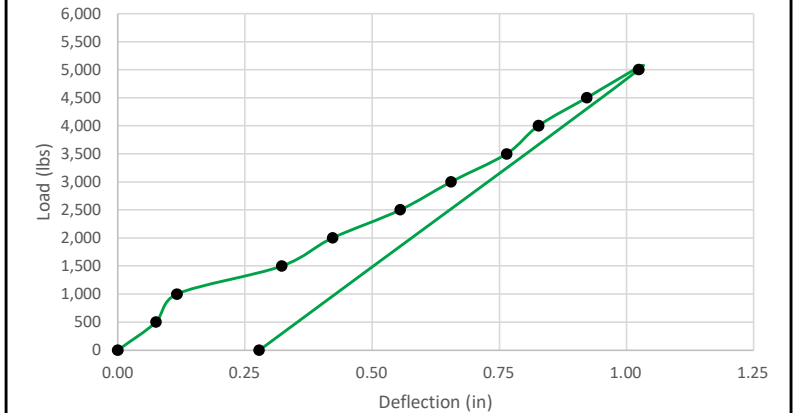
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0040 | 0.0040 |
| 1 | 3,000 | 3,000 | 0.0060 | 0.0040 | 0.0050 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 5,000 | 5,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0120 | 0.0120 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0140 | 0.0140 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0160 | 0.0160 |
| 1 | 11,000 | 11,000 | 0.0160 | 0.0180 | 0.0170 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0240 | 0.0220 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0240 | 0.0230 |
| 1 | 14,000 | 14,000 | 0.0240 | 0.0260 | 0.0250 |
| 1 | 15,000 | 15,000 | 0.0260 | 0.0300 | 0.0280 |
| 1 | 0 | 0 | 0.0020 | 0.0040 | 0.0030 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0720 | 0.0780 | 0.0750 |
| 1 | 1,000 | 1,000 | 0.0186 | 0.2140 | 0.1163 |
| 1 | 1,500 | 1,500 | 0.3040 | 0.3400 | 0.3220 |
| 1 | 2,000 | 2,000 | 0.4040 | 0.4400 | 0.4220 |
| 1 | 2,500 | 2,500 | 0.5360 | 0.5740 | 0.5550 |
| 1 | 3,000 | 3,000 | 0.6340 | 0.6760 | 0.6550 |
| 1 | 3,500 | 3,500 | 0.7420 | 0.7860 | 0.7640 |
| 1 | 4,000 | 4,000 | 0.8060 | 0.8480 | 0.8270 |
| 1 | 4,500 | 4,500 | 0.9000 | 0.9440 | 0.9220 |
| 1 | 5,000 | 5,000 | 1.0020 | 1.0460 | 1.0240 |
| 1 | 0 | 0 | 0.2800 | 0.2760 | 0.2780 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-WTG-06 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 10/31/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/11/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 98.99 |
| Location: | 45.26431, -120.81443 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 13.2 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.21 |
| 4 | 3.09 |
| 5 | 6.94 |
| 6 | 8.41 |
| 7 | 11.12 |
| 8 | 17.41 |
| 9 | 21.35 |
| 10 | 30.46 |
| 11 | |
| 12 | |
| Total Time (s) = | 98.99 |

**Field Notes**

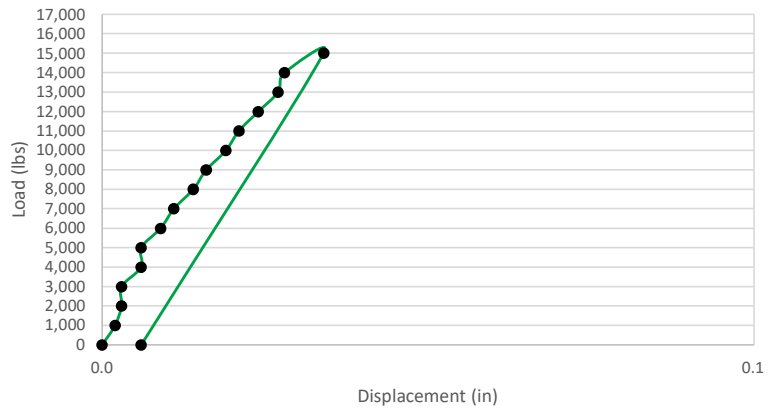
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 3,000 | 3,000 | 0.0040 | 0.0020 | 0.0030 |
| 1 | 4,000 | 4,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 6,000 | 6,000 | 0.0080 | 0.0100 | 0.0090 |
| 1 | 7,000 | 7,000 | 0.0100 | 0.0120 | 0.0110 |
| 1 | 8,000 | 8,000 | 0.0120 | 0.0160 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0140 | 0.0180 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0160 | 0.0220 | 0.0190 |
| 1 | 11,000 | 11,000 | 0.0180 | 0.0240 | 0.0210 |
| 1 | 12,000 | 12,000 | 0.0200 | 0.0280 | 0.0240 |
| 1 | 13,000 | 13,000 | 0.0220 | 0.0320 | 0.0270 |
| 1 | 14,000 | 14,000 | 0.0220 | 0.0340 | 0.0280 |
| 1 | 15,000 | 15,000 | 0.0280 | 0.0400 | 0.0340 |
| 1 | 0 | 0 | 0.0060 | 0.0060 | 0.0060 |

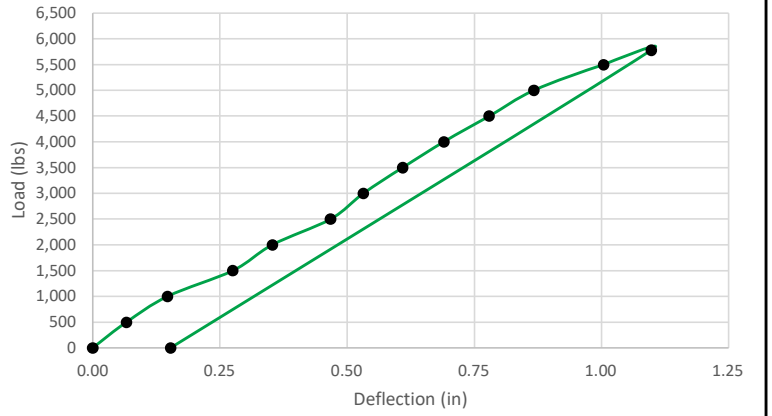
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0640 | 0.0680 | 0.0660 |
| 1 | 1,000 | 1,000 | 0.1160 | 0.1780 | 0.1470 |
| 1 | 1,500 | 1,500 | 0.2660 | 0.2840 | 0.2750 |
| 1 | 2,000 | 2,000 | 0.3420 | 0.3640 | 0.3530 |
| 1 | 2,500 | 2,500 | 0.4520 | 0.4820 | 0.4670 |
| 1 | 3,000 | 3,000 | 0.5140 | 0.5500 | 0.5320 |
| 1 | 3,500 | 3,500 | 0.5880 | 0.6300 | 0.6090 |
| 1 | 4,000 | 4,000 | 0.6660 | 0.7140 | 0.6900 |
| 1 | 4,500 | 4,500 | 0.7500 | 0.8080 | 0.7790 |
| 1 | 5,000 | 5,000 | 0.8300 | 0.9040 | 0.8670 |
| 1 | 5,500 | 5,500 | 0.9480 | 1.0600 | 1.0040 |
| 1 | 6,000 | 5,780 | 1.0380 | 1.1580 | 1.0980 |
| 1 | 0 | 0 | 0.1140 | 0.1920 | 0.1530 |

**Tensile (Uplift) Load Plot**




**Lateral Load Plot**



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 8.0 | Pile ID: | PT-WTG-07 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/6/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/12/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 259.1 |
| Location: | 45.29820, -120.76060 | Pre-Drill Depth (ft): | 8.0 | Avg. Installation Rate (sec/ft): | 47.1 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.47 |
| 4 | 5.92 |
| 5 | 20.85 |
| 6 | 44.07 |
| 7 | 73.77 |
| 8 | 113.97 |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| Total Time (s) = | 259.05 |

**Field Notes**

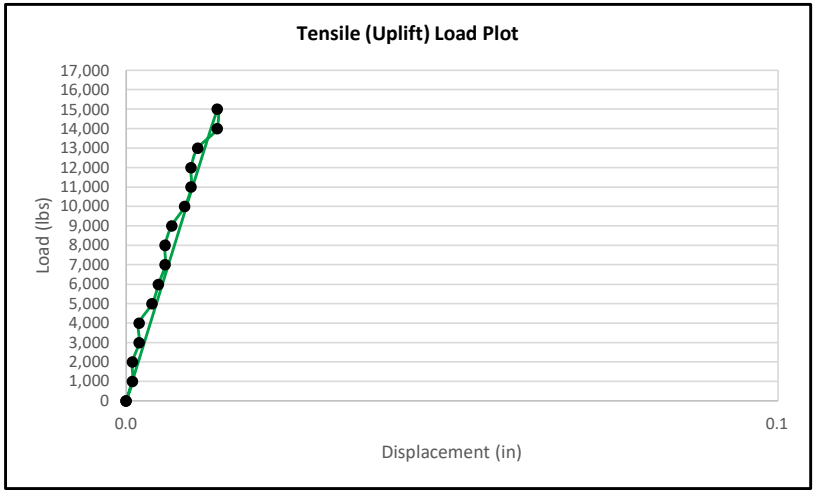
Rock encountered at 2.5 feet BGS during pre-drilling.

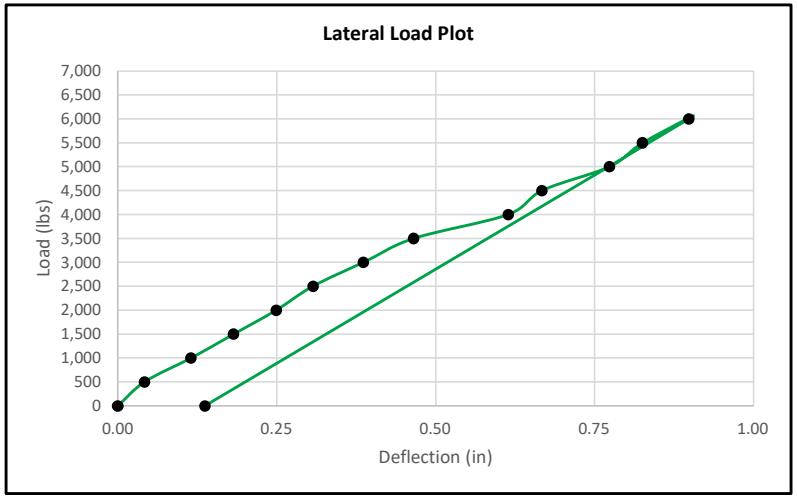
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 2,000 | 2,000 | 0.0000 | 0.0020 | 0.0010 |
| 1 | 3,000 | 3,000 | 0.0000 | 0.0040 | 0.0020 |
| 1 | 4,000 | 4,000 | 0.0000 | 0.0040 | 0.0020 |
| 1 | 5,000 | 5,000 | 0.0020 | 0.0060 | 0.0040 |
| 1 | 6,000 | 6,000 | 0.0040 | 0.0060 | 0.0050 |
| 1 | 7,000 | 7,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 8,000 | 8,000 | 0.0060 | 0.0060 | 0.0060 |
| 1 | 9,000 | 9,000 | 0.0080 | 0.0060 | 0.0070 |
| 1 | 10,000 | 10,000 | 0.0100 | 0.0080 | 0.0090 |
| 1 | 11,000 | 11,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 12,000 | 12,000 | 0.0120 | 0.0080 | 0.0100 |
| 1 | 13,000 | 13,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 14,000 | 14,000 | 0.0180 | 0.0100 | 0.0140 |
| 1 | 15,000 | 15,000 | 0.0180 | 0.0100 | 0.0140 |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |

**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.0440 | 0.0400 | 0.0420 |
| 1 | 1,000 | 1,000 | 0.1200 | 0.1100 | 0.1150 |
| 1 | 1,500 | 1,500 | 0.1880 | 0.1760 | 0.1820 |
| 1 | 2,000 | 2,000 | 0.2560 | 0.2420 | 0.2490 |
| 1 | 2,500 | 2,500 | 0.3140 | 0.3000 | 0.3070 |
| 1 | 3,000 | 3,000 | 0.3940 | 0.3780 | 0.3860 |
| 1 | 3,500 | 3,500 | 0.4740 | 0.4560 | 0.4650 |
| 1 | 4,000 | 4,000 | 0.6240 | 0.6040 | 0.6140 |
| 1 | 4,500 | 4,500 | 0.6780 | 0.6560 | 0.6670 |
| 1 | 5,000 | 5,000 | 0.7840 | 0.7620 | 0.7730 |
| 1 | 5,500 | 5,500 | 0.8360 | 0.8140 | 0.8250 |
| 1 | 6,000 | 6,000 | 0.9080 | 0.8880 | 0.8980 |
| 1 | 0 | 0 | 0.1400 | 0.1340 | 0.1370 |



# Pile Load Test Log

| | | | | | |
|---|---|---|---|---|---|
| Project Name: | Speedway | Embedment Depth (ft): | 10.0 | Pile ID: | PT-WTG-08 |
| Site Location: | Sherman County, Oregon | Pushed to Depth (ft): | 2.5 | Pile Section: | W6x9 |
| Date Installed: | 11/4/2025 | Pre-Excavation Depth (ft): | N/A | Pile Length (ft): | 15.0 |
| Date Tested: | 11/17/2025 | Pre-Drill Diameter (in): | 5.875 | Total Drive Time (sec): | 77.8 |
| Location: | 45.26559, -120.70563 | Pre-Drill Depth (ft): | 10.0 | Avg. Installation Rate (sec/ft): | 10.4 |

**Embedment Data**

| Depth (ft) | Time (s) |
|---|---|
| 1 | - |
| 2 | - |
| 3 | 0.4 |
| 4 | 2.8 |
| 5 | 6.57 |
| 6 | 19.11 |
| 7 | 14.2 |
| 8 | 11 |
| 9 | 12.27 |
| 10 | 11.45 |
| 11 | |
| 12 | |
| Total Time (s) = | 77.8 |

**Field Notes**

Rock encountered at 2 feet BGS during pre-drilling.

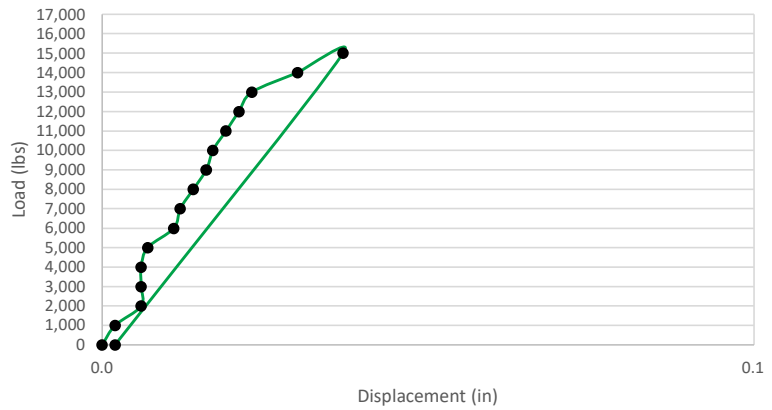
**Tensile (Uplift) Testing**

| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Displacement 1 (in.) | Displacement 2 (in.) | Average Disp. (in.) |
|---|---|---|---|---|---|
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 1,000 | 1,000 | 0.0020 | 0.0020 | 0.0020 |
| 1 | 2,000 | 2,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 3,000 | 3,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 4,000 | 4,000 | 0.0080 | 0.0040 | 0.0060 |
| 1 | 5,000 | 5,000 | 0.0100 | 0.0040 | 0.0070 |
| 1 | 6,000 | 6,000 | 0.0140 | 0.0080 | 0.0110 |
| 1 | 7,000 | 7,000 | 0.0160 | 0.0080 | 0.0120 |
| 1 | 8,000 | 8,000 | 0.0180 | 0.0100 | 0.0140 |
| 1 | 9,000 | 9,000 | 0.0200 | 0.0120 | 0.0160 |
| 1 | 10,000 | 10,000 | 0.0220 | 0.0120 | 0.0170 |
| 1 | 11,000 | 11,000 | 0.0240 | 0.0140 | 0.0190 |
| 1 | 12,000 | 12,000 | 0.0260 | 0.0160 | 0.0210 |
| 1 | 13,000 | 13,000 | 0.0280 | 0.0180 | 0.0230 |
| 1 | 14,000 | 14,000 | 0.0360 | 0.0240 | 0.0300 |
| 1 | 15,000 | 15,000 | 0.0460 | 0.0280 | 0.0370 |
| 1 | 0 | 0 | 0.0020 | 0.0020 | 0.0020 |

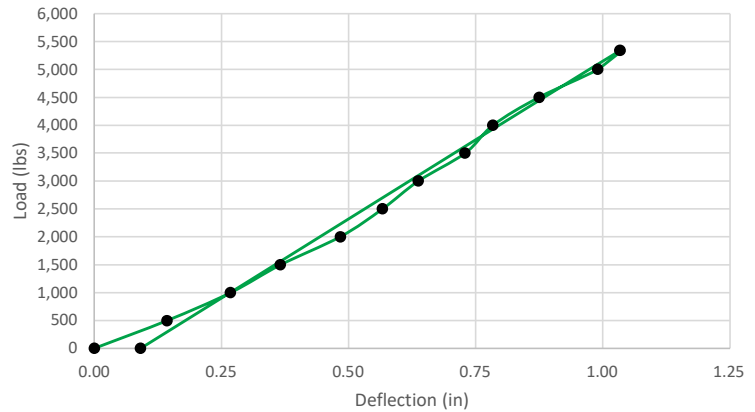
**Lateral Testing**

| Lateral Load Height Above Grade (ft): | 3.0 | Deflection Gauge Height (in): | 6 | |
|---|---|---|---|---|
| Hold Time (min) | Target Load (lbs) | Applied Load (lbs) | Deflection 1 (in.) | Deflection 2 (in.) | Average Deflection (in.) |
| 1 | 0 | 0 | 0.0000 | 0.0000 | 0.0000 |
| 1 | 500 | 500 | 0.1360 | 0.1500 | 0.1430 |
| 1 | 1,000 | 1,000 | 0.2620 | 0.2740 | 0.2680 |
| 1 | 1,500 | 1,500 | 0.3600 | 0.3720 | 0.3660 |
| 1 | 2,000 | 2,000 | 0.4780 | 0.4900 | 0.4840 |
| 1 | 2,500 | 2,500 | 0.5620 | 0.5720 | 0.5670 |
| 1 | 3,000 | 3,000 | 0.6320 | 0.6420 | 0.6370 |
| 1 | 3,500 | 3,500 | 0.7260 | 0.7320 | 0.7290 |
| 1 | 4,000 | 4,000 | 0.7780 | 0.7900 | 0.7840 |
| 1 | 4,500 | 4,500 | 0.8740 | 0.8760 | 0.8750 |
| 1 | 5,000 | 5,000 | 0.9960 | 0.9840 | 0.9900 |
| 1 | 5,500 | 5,340 | 1.0400 | 1.0280 | 1.0340 |
| 1 | 0 | 0 | 0.1040 | 0.0780 | 0.0910 |

**Tensile (Uplift) Load Plot**



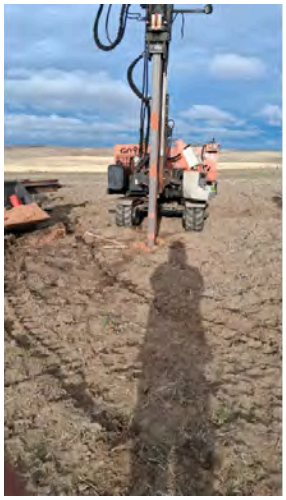

**Lateral Load Plot**



ANS

## ATTACHMENT C

# PLT Photo Log



Media 1: PT-PV-001A Install

Weather: Overcast

Lat/Lng: 45.4310,-120.713
Bearing: N
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 2: PT-PV-001A Uplift Test

Weather: Cloudy

Lat/Lng: 45.4310,-120.713
Bearing: S
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 3: PT-PV-001A Lateral Test

Weather: Mist

Lat/Lng: 45.4310,-120.713
Bearing: SW
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 4: PT-PV-001B Install

Weather: Overcast

Lat/Lng: 45.4309,-120.713
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 5: PT-PV-001B Uplift Test

Weather: Cloudy

Lat/Lng: 45.4310,-120.713
Bearing: S
Date Taken: 12/09/2025

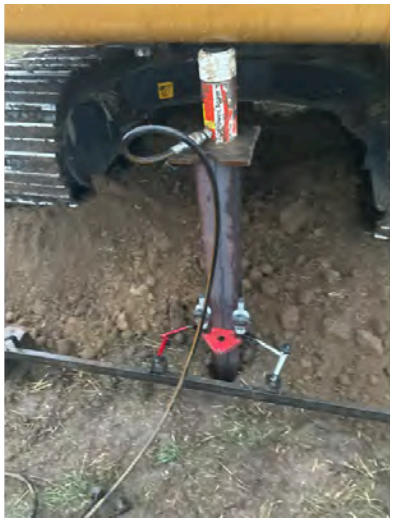
Taken By: Toby Leyba
Tags: uplift

Media 6: PT-PV-001B Lateral Test

Weather: Mist

Lat/Lng: 45.4310,-120.713
Bearing: S
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral



Media 7: PT-PV-001B Compression Test

Weather: Mist

Lat/Lng: 45.4310,-120.713
Bearing: S
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Compression

Media 8: PT-PV-002 Install

Weather: Overcast

Lat/Lng: 45.4287,-120.709
Bearing: NW
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 9: PT-PV-002 Uplift Test

Weather: Cloudy

Lat/Lng: 45.4287,-120.709
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 10: PT-PV-002 Lateral Test

Weather: Cloudy

Lat/Lng: 45.4287,-120.709
Bearing: SE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 11: PT-PV-004 Install

Weather: Overcast

Lat/Lng: 45.4287,-120.709
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 12: PT-PV-004 Uplift Test

Weather: Mist

Lat/Lng: 45.4208,-120.709
Bearing: N
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 13: PT-PV-004 Lateral Test

Weather: Mist

Lat/Lng: 45.4207,-120.709
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 14: PT-PV-005A Install

Weather: Overcast

Lat/Lng: 45.4222,-120.701
Bearing: N
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 15: PT-PV-005A Uplift Test

Weather: Mist

Lat/Lng: 45.4221,-120.701
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 16: PT-PV-005A Lateral Test

Weather: Mist

Lat/Lng: 45.4221,-120.701
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 17: PT-PV-005A Compression Test

Weather: Mist

Lat/Lng: 45.4221,-120.701
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Compression

Media 18: PT-PV-005B Install

Weather: Overcast

Lat/Lng: 45.4221,-120.701
Bearing: N
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 19: PT-PV-005B Uplift Test

Weather: Mist

Lat/Lng: 45.4223,-120.701
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 20: PT-PV-005B Compression Test

Weather: Mist

Lat/Lng: 45.4221,-120.701
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 21: PT-PV-007A Install

Weather: Overcast

Lat/Lng: 45.4160,-120.679
Bearing: SE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 22: PT-PV-007A Uplift Test

Weather: Mist

Lat/Lng: 45.4157,-120.689
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 23: PT-PV-007A Lateral Test

Weather: Mist

Lat/Lng: 45.4158,-120.689
Bearing: N
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 24: PT-PV-007B Install

Weather: Overcast

Lat/Lng: 45.4158,-120.689
Bearing: E
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 25: PT-PV-007B Uplift Test

Weather: Mist

Lat/Lng: 45.4157,-120.689
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 26: PT-PV-007B Lateral Test

Weather: Mist

Lat/Lng: 45.4157,-120.689
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 27: PT-PV-007B Compression Test

Weather: Mist

Lat/Lng: 45.4158,-120.690
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Compression

Media 28: PT-PV-009 Install

Weather: Cloudy

Lat/Lng: 45.4232,-120.674
Bearing: N
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 29: PT-PV-009 Uplift Test

Weather: Overcast

Lat/Lng: 45.4232,-120.674
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 30: PT-PV-009 Lateral Test

Weather: Overcast

Lat/Lng: 45.4232,-120.674
Bearing: SE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 31: PT-PV-009 Compression Test

Weather: Overcast

Lat/Lng: 45.4232,-120.674
Bearing: S
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Compression

Media 32: PT-PV-010 Install

Weather: Partly cloudy

Lat/Lng: 45.4080,-120.665
Bearing: N
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 33: PT-PV-010 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.4200,-120.669
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 34: PT-PV-010 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.4200,-120.669
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 35: PT-PV-010 Compression Test

Weather: Partly cloudy

Lat/Lng: 45.4200,-120.669
Bearing: W
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Compression

Media 36: PT-PV-011A Install

Weather: Overcast

Lat/Lng: 45.4160,-120.679
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 37: PT-PV-011A Uplift Test

Weather: Overcast

Lat/Lng: 45.4160,-120.679
Bearing: N
Date Taken: 12/09/2025

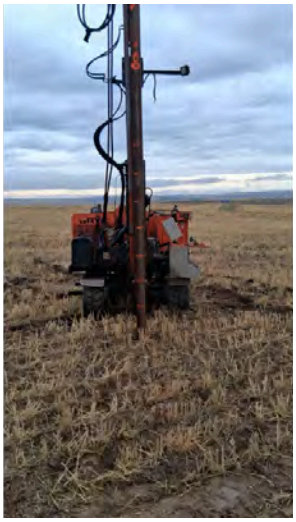
Taken By: Toby Leyba
Tags: uplift

Media 38: PT-PV-011A Lateral Test

Weather: Overcast

Lat/Lng: 45.4160,-120.679
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral



Media 39: PT-PV-011B Install

Weather: Overcast

Lat/Lng: 45.4161,-120.679
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 40: PT-PV-011B Uplift Test

Weather: Overcast

Lat/Lng: 45.4160,-120.679
Bearing: N
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

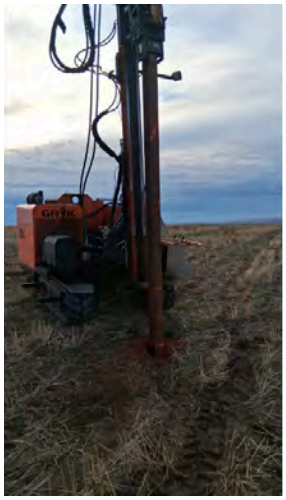
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 41: PT-PV-015A Install

Weather: Clear

Lat/Lng: 45.4079,-120.692
Bearing: SW
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 42: PT-PV-015A Uplift Test

Weather: Overcast

Lat/Lng: 45.4080,-120.692
Bearing: NE
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 43: PT-PV-015A Lateral Test

Weather: Overcast

Lat/Lng: 45.4080,-120.692
Bearing: NE
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 44: PT-PV-015B Install

Weather: Clear

Lat/Lng: 45.4081,-120.692
Bearing: SW
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

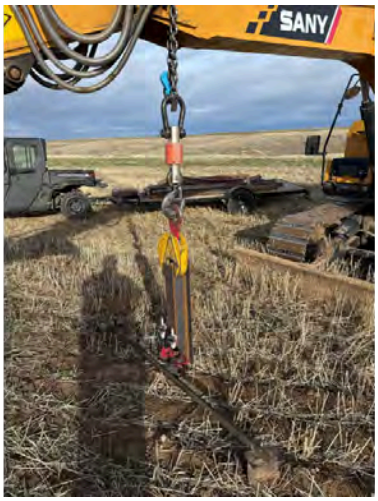
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio




Media 45: PT-PV-015B Uplift Test

Weather: Overcast

Lat/Lng: 45.4080,-120.692
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 46: PT-PV-015B Lateral Test

Weather: Overcast

Lat/Lng: 45.4080,-120.692
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 47: PT-PV-017A Install

Weather: Overcast

Lat/Lng: 45.4010,-120.673
Bearing: NE
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 48: PT-PV-017A Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.4077,-120.675
Bearing: SW
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 49: PT-PV-017A Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.4075,-120.675
Bearing: NW
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 50: PT-PV-017A Compression Test

Weather: Partly cloudy

Lat/Lng: 45.4116,-120.680
Bearing: W
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Compression

Media 51: PT-PV-017B Install

Weather: Overcast

Lat/Lng: 45.4077,-120.675
Bearing: NE
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 52: PT-PV-017B Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.4079,-120.675
Bearing: SW
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 53: PT-PV-017B Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.4075,-120.675
Bearing: W
Date Taken: 12/08/2025

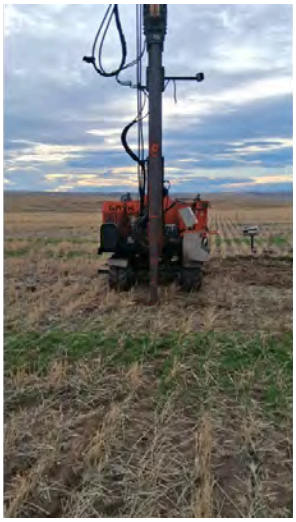
Taken By: Toby Leyba
Tags: Lateral

Media 54: PT-PV-017B Compression Test

Weather: Partly cloudy

Lat/Lng: 45.4076,-120.675
Bearing: W
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Compression



Media 55: PT-PV-019 Install

Weather: Overcast

Lat/Lng: 45.4044,-120.682
Bearing: W
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 56: PT-PV-019 Uplift Test

Weather: Overcast

Lat/Lng: 45.4044,-120.682
Bearing: S
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



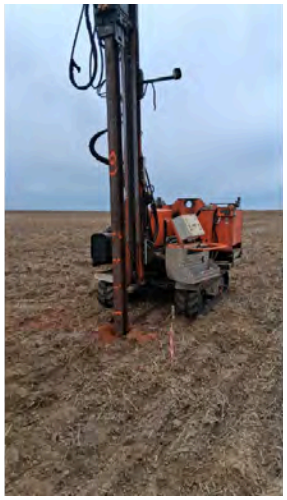
Powered By Filio

Media 57: PT-PV-019 Lateral Test

Weather: Overcast

Lat/Lng: 45.4044,-120.682
Bearing: SW
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral



Media 58: PT-PV-021 Install

Weather: Partly cloudy

Lat/Lng: 45.4080,-120.665
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 59: PT-PV-021 Uplift Test

Weather: Overcast

Lat/Lng: 45.4080,-120.665
Bearing: E
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 60: PT-PV-021 Lateral Test

Weather: Overcast

Lat/Lng: 45.4078,-120.666
Bearing: SE
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

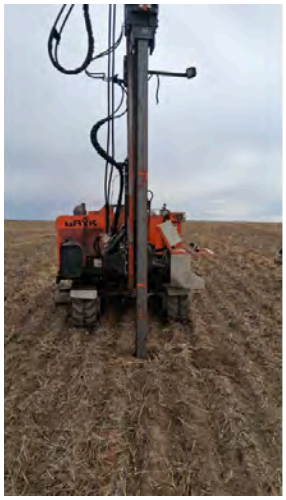
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 61: PT-PV-022 Install

Weather: Partly cloudy

Lat/Lng: 45.3970,-120.659
Bearing: W
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 62: PT-PV-022 Uplift Test

Weather: Overcast

Lat/Lng: 45.4073,-120.658
Bearing: E
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 63: PT-PV-022 Lateral Test

Weather: Overcast

Lat/Lng: 45.4072,-120.658
Bearing: E
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 64: PT-PV-022 Compression Test

Weather: Overcast

Lat/Lng: 45.4072,-120.658
Bearing: E
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 65: PT-PV-025 Install

Weather: Overcast

Lat/Lng: 45.4010,-120.673
Bearing: NE
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 66: PT-PV-025 Uplift Test

Weather: Overcast

Lat/Lng: 45.4011,-120.673
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 67: PT-PV-025 Lateral Test

Weather: Overcast

Lat/Lng: 45.4010,-120.673
Bearing: NE
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 68: PT-PV-025 Compression Test

Weather: Overcast

Lat/Lng: 45.4010,-120.673
Bearing: NW
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

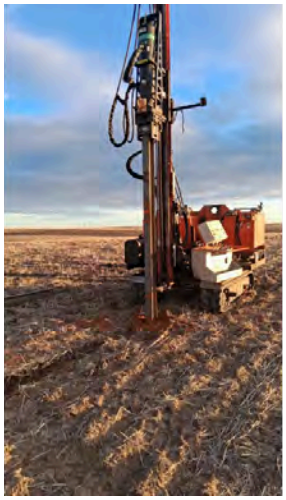
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 69: PT-PV-028A Install

Weather: Cloudy

Lat/Lng: 45.3971,-120.659
Bearing: SE
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 70: PT-PV-028A Uplift Test

Weather: Cloudy

Lat/Lng: 45.3970,-120.659
Bearing: NE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 71: PT-PV-028A Lateral Test

Weather: Cloudy

Lat/Lng: 45.3969,-120.659
Bearing: E
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 72: PT-PV-028B Install

Weather: Cloudy

Lat/Lng: 45.3970,-120.659
Bearing: S
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 73: PT-PV-028B Uplift Test

Weather: Cloudy

Lat/Lng: 45.3969,-120.659
Bearing: SE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 74: PT-PV-028B Lateral Test

Weather: Cloudy

Lat/Lng: 45.3969,-120.659
Bearing: E
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 75: PT-PV-29 Install

Weather: Overcast

Lat/Lng: 45.3938,-120.681
Bearing: S
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 76: PT-PV-029 Uplift Test

Weather: Overcast

Lat/Lng: 45.3938,-120.681
Bearing: W
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 77: PT-PV-029 Lateral Test

Weather: Overcast

Lat/Lng: 45.3938,-120.681
Bearing: SE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 78: PT-PV-029 Compression Test

Weather: Overcast

Lat/Lng: 45.3940,-120.681
Bearing: S
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Compression

Media 79: PT-PV-030A Install

Weather: Overcast

Lat/Lng: 45.3918,-120.671
Bearing: SW
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 80: PT-PV-030A Uplift Test

Weather: Cloudy

Lat/Lng: 45.3918,-120.671
Bearing: NW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 81: PT-PV-030A Lateral Test

Weather: Cloudy

Lat/Lng: 45.3918,-120.671
Bearing: N
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 82: PT-PV-030B Install

Weather: Overcast

Lat/Lng: 45.3919,-120.671
Bearing: S
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 83: PT-PV-030B Uplift Test

Weather: Cloudy

Lat/Lng: 45.3918,-120.671
Bearing: N
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 84: PT-PV-030B Lateral Test

Weather: Cloudy

Lat/Lng: 45.3919,-120.671
Bearing: N
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 85: PT-PV-031A Install

Weather: Overcast

Lat/Lng: 45.3896,-120.679
Bearing: SE
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

Media 86: PT-PV-031A Uplift Test

Weather: Overcast

Lat/Lng: 45.3895,-120.679
Bearing: W
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 87: PT-PV-031A Lateral Test

Weather: Overcast

Lat/Lng: 45.3896,-120.679
Bearing: S
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 88: PT-PV-031B Install

Weather: Overcast

Lat/Lng: 45.3896,-120.679
Bearing: S
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 89: PT-PV-031B Uplift Test

Weather: Overcast

Lat/Lng: 45.3896,-120.679
Bearing: W
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 90: PT-PV-031B Lateral Test

Weather: Overcast

Lat/Lng: 45.3894,-120.679
Bearing: SE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 91: PT-PV-031B Compression Test

Weather: Overcast

Lat/Lng: 45.3896,-120.679
Bearing: S
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Compression

Media 92: PT-PV-034 Install

Weather: Overcast

Lat/Lng: 45.3760,-120.675
Bearing: NW
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 93: PT-PV-034 Uplift Test

Weather: Overcast

Lat/Lng: 45.3865,-120.684
Bearing: E
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 94: PT-PV-034 Lateral Test

Weather: Overcast

Lat/Lng: 45.3865,-120.684
Bearing: E
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 95: PT-PV-035 Install

Weather: Overcast

Lat/Lng: 45.3824,-120.679
Bearing: S
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

Media 96: PT-PV-035 Uplift Test

Weather: Overcast

Lat/Lng: 45.3823,-120.679
Bearing: NW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 97: PT-PV-035 Lateral Test

Weather: Overcast

Lat/Lng: 45.3823,-120.679
Bearing: N
Date Taken: 12/07/2025

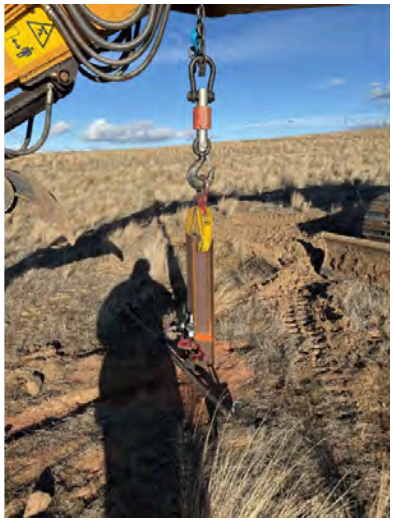
Taken By: Toby Leyba
Tags: Lateral

Media 98: PT-PV-036 Install

Weather: Fog

Lat/Lng: 45.3896,-120.679
Bearing: E
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install



Media 99: PT-PV-036 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3863,-120.675
Bearing: N
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

Media 100: PT-PV-036 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3869,-120.685
Bearing: NE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

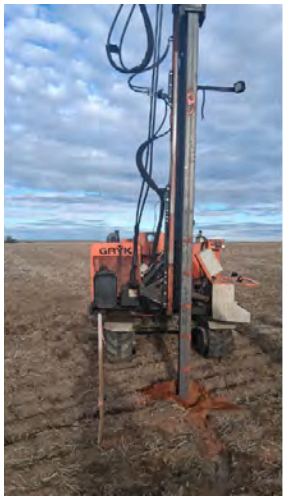
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 101: PT-PV-040 Install

Weather: Mist

Lat/Lng: 45.3832,-120.664
Bearing: NE
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 102: PT-PV-040 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3833,-120.664
Bearing: SE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

Media 103: PT-PV-040 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3835,-120.665
Bearing: SE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

Media 104: PT-PV-043 Install

Weather: Overcast

Lat/Lng: 45.3753,-120.692
Bearing: S
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 105: PT-PV-043 Uplift Test

Weather: Overcast

Lat/Lng: 45.3717,-120.710
Bearing: E
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 106: PT-PV-043 Lateral Test

Weather: Overcast

Lat/Lng: 45.3753,-120.692
Bearing: SE
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 107: PT-PV-045A Install

Weather: Overcast

Lat/Lng: 45.3761,-120.675
Bearing: W
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

Media 108: PT-PV-045A Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3760,-120.675
Bearing: SW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 109: PT-PV-045A Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3771,-120.676
Bearing: SW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 110: PT-PV-045A Compression Test

Weather: Partly cloudy

Lat/Lng: 45.3760,-120.675
Bearing: SW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Compression

Media 111: PT-PV-045B Install

Weather: Overcast

Lat/Lng: 45.3753,-120.692
Bearing: W
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

Media 112: PT-PV-045B Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3760,-120.675
Bearing: SW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 113: PT-PV-045B Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3760,-120.675
Bearing: NW
Date Taken: 12/07/2025

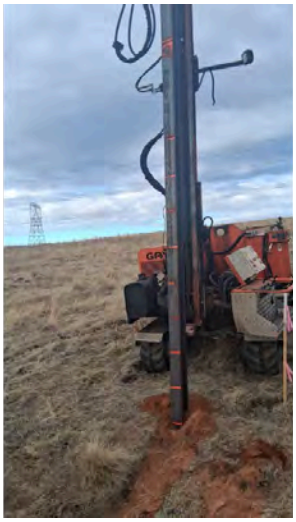
Taken By: Toby Leyba
Tags: Lateral

Media 114: PT-PV-045B Compression Test

Weather: Partly cloudy

Lat/Lng: 45.3761,-120.675
Bearing: W
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Compression



Media 115: PT-PV-047 Install

Weather: Mist

Lat/Lng: 45.3690,-120.658
Bearing: NW
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 116: PT-PV-047 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3761,-120.662
Bearing: E
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 117: PT-PV-047 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3826,-120.691
Bearing: SE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

Media 118: PT-PV-048 Install

Weather: Overcast

Lat/Lng: 45.3384,-120.657
Bearing: E
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 119: PT-PV-048 Uplift Test

Weather: Mist

Lat/Lng: 45.3707,-120.675
Bearing: N
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 120: PT-PV-048 Lateral Test

Weather: Mist

Lat/Lng: 45.3707,-120.674
Bearing: NE
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 121: PT-PV-051 Install

Weather: Mist

Lat/Lng: 45.3691,-120.658
Bearing: N
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 122: PT-PV-051 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3690,-120.658
Bearing: N
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

Media 123: PT-PV-051 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3691,-120.658
Bearing: N
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

Media 124: PT-PV-052 Install

Weather: Fog

Lat/Lng: 45.3643,-120.673
Bearing: NE
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 125: PT-PV-052 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3642,-120.672
Bearing: W
Date Taken: 12/06/2025

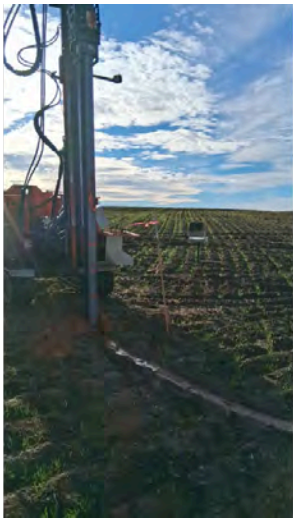
Taken By: Toby Leyba
Tags: uplift

Media 126: PT-PV-052 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3642,-120.672
Bearing: S
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral



Media 127: PT-PV-056 Install

Weather: Overcast

Lat/Lng: 45.3496,-120.664
Bearing: SW
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 128: PT-PV-056 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3496,-120.664
Bearing: NE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 129: PT-PV-056 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3495,-120.664
Bearing: E
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

Media 130: PT-PV-058 Install

Weather: Overcast

Lat/Lng: 45.3422,-120.660
Bearing: S
Date Taken: 11/14/2025

Taken By: Robert Moore
Tags: install

Media 131: PT-PV-058 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3584,-120.668
Bearing: NE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

Media 132: PT-PV-058 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3422,-120.660
Bearing: NE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



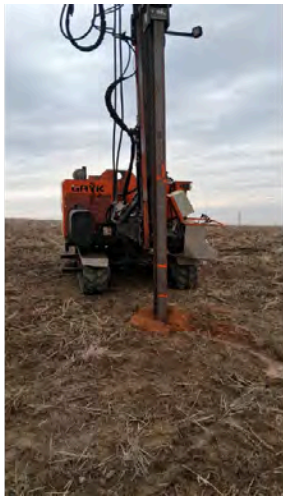
Powered By Filio

Media 133: PT-PV-058 Compression Test

Weather: Partly cloudy

Lat/Lng: 45.3595,-120.669
Bearing: NW
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Compression



Media 134: PT-PV-060A Install

Weather: Fog

Lat/Lng: 45.3679,-120.683
Bearing: W
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

Media 135: PT-PV-060A Uplift Test

Weather: Cloudy

Lat/Lng: 45.3604,-120.685
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 136: PT-PV-060A Lateral Test

Weather: Cloudy

Lat/Lng: 45.3678,-120.683
Bearing: W
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

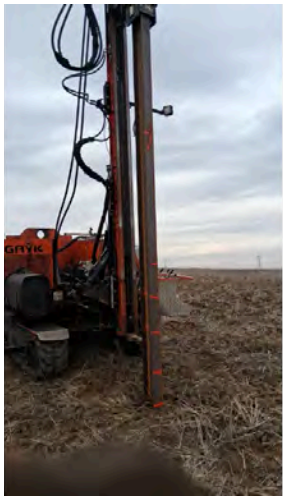
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 137: PT-PV-060B Install

Weather: Fog

Lat/Lng: 45.3679,-120.683
Bearing: W
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install

Media 138: PT-PV-060B Uplift Test

Weather: Cloudy

Lat/Lng: 45.3679,-120.683
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 139: PT-PV-060B Lateral Test

Weather: Cloudy

Lat/Lng: 45.3679,-120.683
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 140: PT-PV-060B Compression Test

Weather: Cloudy

Lat/Lng: 45.3678,-120.683
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 141: PT-PV-062 Install

Weather: Overcast

Lat/Lng: 45.3606,-120.685
Bearing: NE
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 142: PT-PV-062 Uplift Test

Weather: Cloudy

Lat/Lng: 45.3605,-120.685
Bearing: NW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 143: PT-PV-062 Lateral Test

Weather: Cloudy

Lat/Lng: 45.3605,-120.685
Bearing: NW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 144: PT-PV-064 Install

Weather: Overcast

Lat/Lng: 45.3658,-120.689
Bearing: N
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 145: PT-PV-064 Uplift Test

Weather: Cloudy

Lat/Lng: 45.3659,-120.689
Bearing: N
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 146: PT-PV-064 Lateral Test

Weather: Cloudy

Lat/Lng: 45.3664,-120.689
Bearing: N
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 147: PT-PV-065 Install

Weather: Overcast

Lat/Lng: 45.3705,-120.694
Bearing: N
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 148: PT-PV-065 Uplift Test

Weather: Cloudy

Lat/Lng: 45.3704,-120.694
Bearing: N
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 149: PT-PV-065 Lateral Test

Weather: Cloudy

Lat/Lng: 45.3704,-120.694
Bearing: N
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 150: PT-PV-068 Install

Weather: Overcast

Lat/Lng: 45.3718,-120.710
Bearing: E
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 151: PT-PV-068 Uplift Test

Weather: Overcast

Lat/Lng: 45.3717,-120.710
Bearing: E
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 152: PT-PV-068 Lateral Test

Weather: Overcast

Lat/Lng: 45.3719,-120.710
Bearing: E
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 153: PT-PV-068 Compression Test

Weather: Overcast

Lat/Lng: 45.3718,-120.710
Bearing: E
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Compression

Media 154: PT-PV-071 Install

Weather: Overcast

Lat/Lng: 45.3668,-120.725
Bearing: SW
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install

Media 155: PT-PV-071 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3668,-120.725
Bearing: SW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

Media 156: PT-PV-071 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3669,-120.725
Bearing: W
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

| | |
|---|---|
| Project Name: Speedway | |
| Project Location: Sherman County, OR | |
| Client: Tetra Tech | Project Code: |
| Preparer: Sarah Ambrozak | Reviewer: Alex Lesky |
| Report Date: 2025-12-15 | Page Number: 39 of 127 |

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Media 157: PT-PV-072 Install

Weather: Cloudy

Lat/Lng: 45.3610,-120.717
Bearing: NW
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 158: PT-PV-072 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3610,-120.717
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

Media 159: PT-PV-072 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3609,-120.717
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

Media 160: PT-PV-074 Install

Weather: Cloudy

Lat/Lng: 45.3571,-120.722
Bearing: W
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 161: PT-PV-074 Uplift Test

Weather: Overcast

Lat/Lng: 45.3571,-120.722
Bearing: SW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

Media 162: PT-PV-074 Lateral Test

Weather: Overcast

Lat/Lng: 45.3571,-120.722
Bearing: SW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

Media 163: PT-PV-077A Install

Weather: Cloudy

Lat/Lng: 45.3518,-120.726
Bearing: N
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 164: PT-PV-077A Uplift Test

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



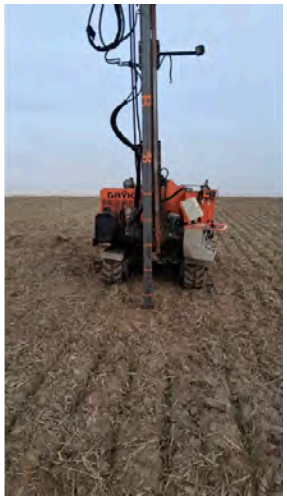
Powered By Filio

Media 165: PT-PV-077A Lateral Test

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

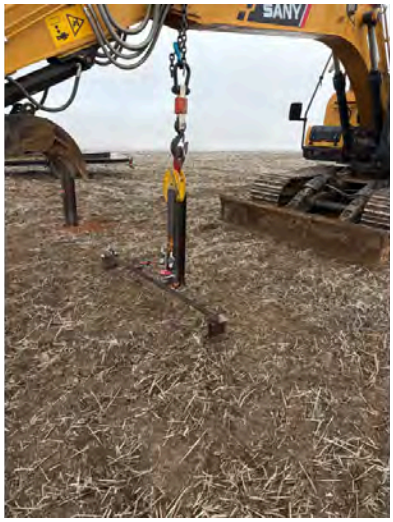


Media 166: PT-PV-077B Install

Weather: Cloudy

Lat/Lng: 45.3518,-120.726
Bearing: N
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:



Media 167: PT-PV-077B Uplift Test

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

Media 168: PT-PV-077B Lateral Test

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

| | |
|---|---|
| Project Name: Speedway | |
| Project Location: Sherman County, OR | |
| Client: Tetra Tech | Project Code: |
| Preparer: Sarah Ambrozak | Reviewer: Alex Lesky |
| Report Date: 2025-12-15 | Page Number: 42 of 127 |

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Media 169: PT-PV-077B Compression Test

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: N
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: compression

Media 170: PT-PV-079 Install

Weather: Cloudy

Lat/Lng: 45.3492,-120.721
Bearing: NW
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 171: PT-PV-079 Uplift Test

Weather: Overcast

Lat/Lng: 45.3492,-120.721
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

Media 172: PT-PV-079 Lateral Test

Weather: Overcast

Lat/Lng: 45.3626,-120.738
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 173: PT-PV-081 Install

Weather: Cloudy

Lat/Lng: 45.3465,-120.729
Bearing: SE
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 174: PT-PV-081 Uplift Test

Weather: Overcast

Lat/Lng: 45.3465,-120.729
Bearing: E
Date Taken: 12/03/2025

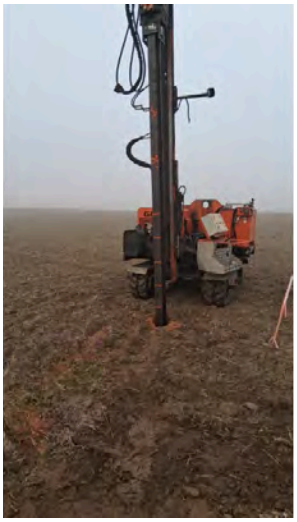
Taken By: Toby Leyba
Tags: uplift

Media 175: PT-PV-081 Lateral Test

Weather: Overcast

Lat/Lng: 45.3465,-120.729
Bearing: E
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral



Media 176: PT-PV-084A Install

Weather: Cloudy

Lat/Lng: 45.3533,-120.736
Bearing: W
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 177: PT-PV-084A Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3533,-120.736
Bearing: W
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: uplift

Media 178: PT-PV-084A Lateral Test

Weather: Mist

Lat/Lng: 45.3533,-120.736
Bearing: NW
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Lateral

Media 179: PT-PV-084B Install

Weather: Cloudy

Lat/Lng: 45.3532,-120.736
Bearing: W
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 180: PT-PV-084B Uplift Test

Weather: Mist

Lat/Lng: 45.3533,-120.736
Bearing: W
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 181: PT-PV-084B Lateral Test

Weather: Mist

Lat/Lng: 45.3532,-120.737
Bearing: NW
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Lateral

Media 182: PT-PV-084B Compression Test

Weather: Mist

Lat/Lng: 45.3533,-120.736
Bearing: NW
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Compression

Media 183: PT-PV-086 Install

Weather: Partly cloudy

Lat/Lng: 45.3465,-120.745
Bearing: SE
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

Media 184: PT-PV-086 Uplift Test

Weather: Fog

Lat/Lng: 45.3464,-120.745
Bearing: W
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 185: PT-PV-086 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3464,-120.745
Bearing: NW
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Lateral

Media 186: PT-PV-089 Install

Weather: Overcast

Lat/Lng: 45.3541,-120.758
Bearing: SE
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

Media 187: PT-PV-089 Uplift Test

Weather: Overcast

Lat/Lng: 45.3540,-120.758
Bearing: SW
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: uplift

Media 188: PT-PV-089 Lateral Test

Weather: Overcast

Lat/Lng: 45.3540,-120.758
Bearing: SW
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 189: PT-PV-090 Install

Weather: Overcast

Lat/Lng: 45.3498,-120.757
Bearing: SE
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

Media 190: PT-PV-090 Uplift Test

Weather: Overcast

Lat/Lng: 45.3498,-120.757
Bearing: SE
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: uplift

Media 191: PT-PV-090 Lateral Test

Weather: Overcast

Lat/Lng: 45.3498,-120.757
Bearing: SE
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Lateral

Media 192: PT-PV-093A Install

Weather: Overcast

Lat/Lng: 45.3436,-120.759
Bearing: E
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 193: PT-PV-093A Uplift Test

Weather: Overcast

Lat/Lng: 45.3436,-120.759
Bearing: NE
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: uplift

Media 194: PT-PV-093A Lateral Test

Weather: Overcast

Lat/Lng: 45.3436,-120.759
Bearing: E
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Lateral

Media 195: PT-PV-093B Install

Weather: Overcast

Lat/Lng: 45.3436,-120.759
Bearing: E
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

Media 196: PT-PV-093B Uplift Test

Weather: Overcast

Lat/Lng: 45.3436,-120.759
Bearing: NE
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

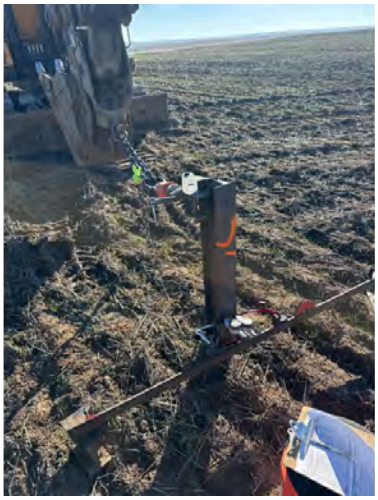
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 197: PT-PV-093B Lateral Test

Weather: Overcast

Lat/Lng: 45.3438,-120.765
Bearing: SE
Date Taken: 11/22/2025

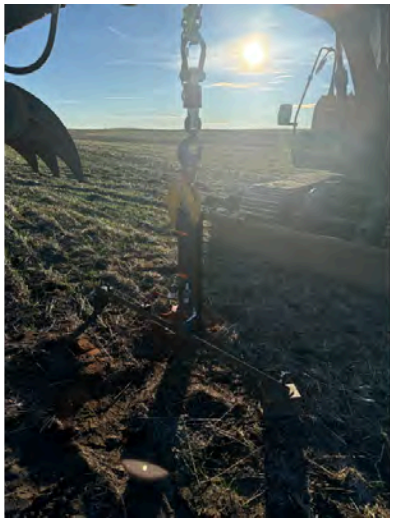
Taken By: Toby Leyba
Tags: Lateral

Media 198: PT-PV-095 Install

Weather: Overcast

Lat/Lng: 45.3387,-120.765
Bearing: SE
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:



Media 199: PT-PV-095 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3387,-120.765
Bearing: SE
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: uplift

Media 200: PT-PV-095 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3387,-120.765
Bearing: SE
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 201: PT-PV-097A Install

Weather: Overcast

Lat/Lng: 45.3415,-120.779
Bearing: NW
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

Media 202: PT-PV-097A Uplift Test

Weather: Clear

Lat/Lng: 45.3415,-120.779
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

Media 203: PT-PV-097A Lateral Test

Weather: Clear

Lat/Lng: 45.3415,-120.779
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

Media 204: PT-PV-097B Install

Weather: Overcast

Lat/Lng: 45.3439,-120.781
Bearing: NW
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 205: PT-PV-097B Uplift Test

Weather: Clear

Lat/Lng: 45.3412,-120.779
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

Media 206: PT-PV-097B Lateral Test

Weather: Clear

Lat/Lng: 45.3415,-120.779
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

Media 207: PT-PV-097B Compression Test

Weather: Clear

Lat/Lng: 45.3413,-120.779
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Compression

Media 208: PT-PV-098 Install

Weather: Overcast

Lat/Lng: 45.3377,-120.783
Bearing: NE
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 209: PT-PV-098 Uplift Test

Weather: Clear

Lat/Lng: 45.3377,-120.783
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

Media 210: PT-PV-098 Lateral Test

Weather: Clear

Lat/Lng: 45.3377,-120.783
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

Media 211: PT-PV-100 Install

Weather: Overcast

Lat/Lng: 45.3316,-120.786
Bearing: NE
Date Taken: 11/08/2025

Taken By: Robert Moore
Tags:

Media 212: PT-PV-100 Uplift Test

Weather: Clear

Lat/Lng: 45.3329,-120.772
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 213: PT-PV-100 Lateral Test

Weather: Clear

Lat/Lng: 45.3329,-120.772
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

Media 214: PT-PV-100 Compression Test

Weather: Clear

Lat/Lng: 45.3329,-120.772
Bearing: NW
Date Taken: 11/20/2025

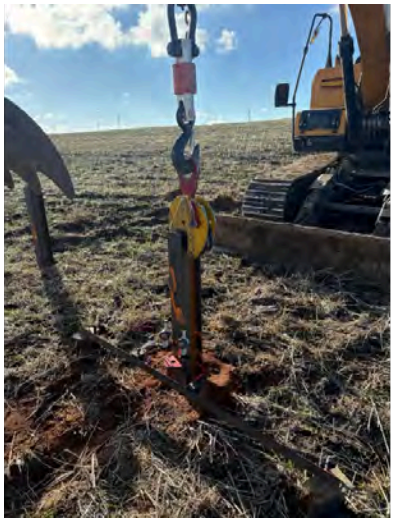
Taken By: Toby Leyba
Tags: Compression

Media 215: PT-PV-101A Install

Weather: Cloudy

Lat/Lng: 45.3430,-120.796
Bearing: N
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:



Media 216: PT-PV-101A Uplift Test

Weather: Clear

Lat/Lng: 45.3317,-120.786
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



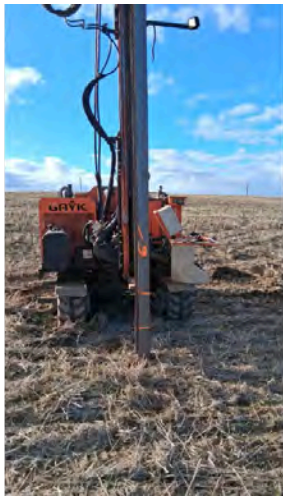
Powered By Filio

Media 217: PT-PV-101A Lateral Test

Weather: Clear

Lat/Lng: 45.3317,-120.786
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral



Media 218: PT-PV-101B Install

Weather: Cloudy

Lat/Lng: 45.3316,-120.786
Bearing: N
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

Media 219: PT-PV-101B Uplift Test

Weather: Clear

Lat/Lng: 45.3316,-120.786
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

Media 220: PT-PV-101B Lateral Test

Weather: Clear

Lat/Lng: 45.3316,-120.786
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

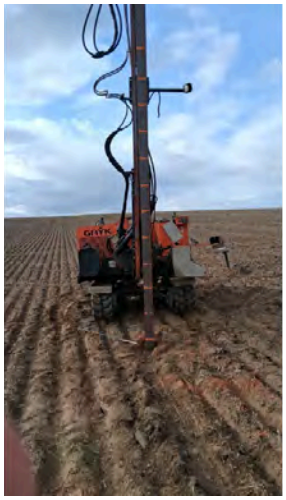
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 221: PT-PV-102 Install

Weather: Cloudy

Lat/Lng: 45.3430,-120.796
Bearing: W
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

Media 222: PT-PV-102 Uplift Test

Weather: Clear

Lat/Lng: 45.3430,-120.796
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

Media 223: PT-PV-102 Lateral Test

Weather: Clear

Lat/Lng: 45.3430,-120.796
Bearing: W
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

Media 224: PT-PV-106A Install

Weather: Overcast

Lat/Lng: 45.3282,-120.798
Bearing: NW
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 225: PT-PV-106A Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3281,-120.798
Bearing: NW
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

Media 226: PT-PV-106A Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3281,-120.798
Bearing: N
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 227: PT-PV-106B Install

Weather: Overcast

Lat/Lng: 45.3281,-120.798
Bearing: W
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 228: PT-PV-106B Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3281,-120.798
Bearing: N
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



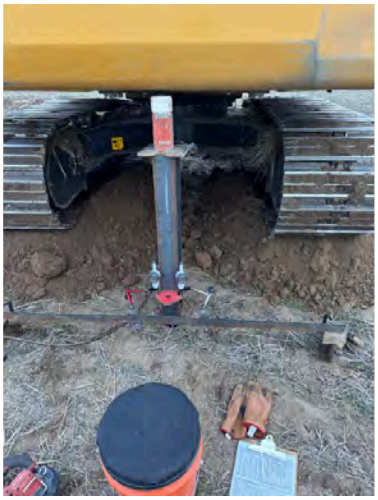
Powered By Filio

Media 229: PT-PV-106B Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3281,-120.798
Bearing: NE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral



Media 230: PT-PV-106B Compression Test

Weather: Partly cloudy

Lat/Lng: 45.3281,-120.798
Bearing: NE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Compression

Media 231: PT-PV-107 Install

Weather: Clear

Lat/Lng: 45.3229,-120.797
Bearing: N
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

Media 232: PT-PV-107 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3229,-120.797
Bearing: NE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 233: PT-PV-107 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3228,-120.797
Bearing: NE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 234: PT-PV-109 Install

Weather: Light sleet

Lat/Lng: 45.2765,-121.042
Bearing: N
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 235: PT-PV-109 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3186,-120.791
Bearing: SE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

Media 236: PT-PV-109 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3186,-120.790
Bearing: SE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 237: PT-PV-111A Install

Weather: Clear

Lat/Lng: 45.3222,-120.778
Bearing: S
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

Media 238: PT-PV-111A Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3221,-120.778
Bearing: SE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

Media 239: PT-PV-111A Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3221,-120.778
Bearing: SE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 240: PT-PV-111B Install

Weather: Clear

Lat/Lng: 45.3222,-120.778
Bearing: SW
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 241: PT-PV-111B Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3221,-120.778
Bearing: SE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

Media 242: PT-PV-111B Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3221,-120.778
Bearing: SE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 243: PT-PV-111B Compression Test

Weather: Partly cloudy

Lat/Lng: 45.3299,-120.784
Bearing: S
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Compression

Media 244: PT-PV-112 Install

Weather: Clear

Lat/Lng: 45.3193,-120.772
Bearing: SW
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 245: PT-PV-112 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3193,-120.772
Bearing: S
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

Media 246: PT-PV-112 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3193,-120.772
Bearing: S
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 247: PT-PV-114 Install

Weather: Overcast

Lat/Lng: 45.3136,-120.779
Bearing: NE
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 248: PT-PV-114 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3136,-120.779
Bearing: NE
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 249: PT-PV-114 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3135,-120.779
Bearing: E
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 250: PT-PV-114 Compression Test

Weather: Partly cloudy

Lat/Lng: 45.3136,-120.779
Bearing: E
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Compression

Media 251: PT-PV-117 Install

Weather: Overcast

Lat/Lng: 45.3068,-120.786
Bearing: N
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 252: PT-PV-117 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3104,-120.773
Bearing: SW
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 253: PT-PV-117 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3072,-120.774
Bearing: SW
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Lateral

Media 254: PT-PV-118 Install

Weather: Overcast

Lat/Lng: 45.3069,-120.786
Bearing: NW
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 255: PT-PV-118 Uplift Test

Weather: Clear

Lat/Lng: 45.3068,-120.786
Bearing: E
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: uplift

Media 256: PT-PV-118 Lateral Test

Weather: Clear

Lat/Lng: 45.3064,-120.786
Bearing: SE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 257: PT-PV-121 Install

Weather: Overcast

Lat/Lng: 45.3033,-120.771
Bearing: S
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 258: PT-PV-121 Uplift Test

Weather: Clear

Lat/Lng: 45.3033,-120.771
Bearing: NE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: uplift

Media 259: PT-PV-121 Lateral Test

Weather: Clear

Lat/Lng: 45.3035,-120.771
Bearing: NE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Lateral

Media 260: PT-PV-122A 5.875" Pre-Drill Install

Weather: Clear

Lat/Lng: 45.3143,-120.816
Bearing: N
Date Taken: 10/27/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 261: PT-PV-122A 5.875" Uplift Test

Weather: Clear

Lat/Lng: 45.3143,-120.816
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 262: PT-PV-122A 5.875" Lateral Test

Weather: Clear

Lat/Lng: 45.3143,-120.816
Bearing: N
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 263: PT-PV-122A 6.5" Pre-Drill Install

Weather: Clear

Lat/Lng: 45.3143,-120.816
Bearing: N
Date Taken: 10/27/2025

Taken By: Robert Moore
Tags:

Media 264: PT-PV-122A 6.5" Uplift Test

Weather: Clear

Lat/Lng: 45.3143,-120.816
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 265: PT-PV-122A 6.5" Lateral Test

Weather: Clear

Lat/Lng: 45.3143,-120.816
Bearing: N
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 266: PT-PV-123A 5.875" Pre-Drill Install

Weather: Clear

Lat/Lng: 45.3121,-120.824
Bearing: NW
Date Taken: 10/27/2025

Taken By: Robert Moore
Tags:

Media 267: PT-PV-123A 5.875" Uplift Test

Weather: Clear

Lat/Lng: 45.3208,-120.781
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 268: PT-PV-123A 5.875" Lateral Test

Weather: Clear

Lat/Lng: 45.3154,-120.813
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 269: PT-PV-123A 5.875" Compression Test

Weather: Clear

Lat/Lng: 45.3122,-120.824
Bearing: N
Date Taken: 11/07/2025

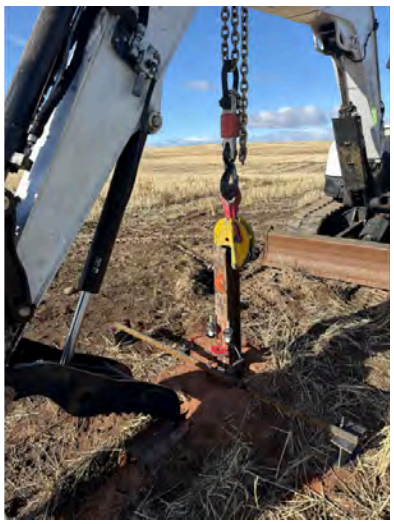
Taken By: Toby Leyba
Tags: Compression

Media 270: PT-PV-123A 6.5" Pre-Drill Install

Weather: Clear

Lat/Lng: 45.3121,-120.824
Bearing: NW
Date Taken: 10/27/2025

Taken By: Robert Moore
Tags:



Media 271: PT-PV-123A 6.5" Uplift Test

Weather: Clear

Lat/Lng: 45.3122,-120.824
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 272: PT-PV-123A 6.5" Lateral Test

Weather: Clear

Lat/Lng: 45.3122,-120.824
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 273: PT-PV-123A 6.5" Compression Test

Weather: Overcast

Lat/Lng: 45.3121,-120.824
Bearing: NW
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Compression

Media 274: PT-PV-126A 5.875" Pre-Drill Install

Weather: Partly cloudy

Lat/Lng: 45.3024,-120.823
Bearing: SE
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

Media 275: PT-PV-126A 5.875" Uplift Test

Weather: Clear

Lat/Lng: 45.3024,-120.823
Bearing: W
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 276: PT-PV-126A 5.875" Lateral Test

Weather: Clear

Lat/Lng: 45.3024,-120.823
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 277: PT-PV-126A 6.5" Pre-Drill Install

Weather: Partly cloudy

Lat/Lng: 45.3024,-120.823
Bearing: N
Date Taken: 10/27/2025

Taken By: Robert Moore
Tags:

Media 278: PT-PV-126A 6.5" Uplift Test

Weather: Clear

Lat/Lng: 45.3023,-120.823
Bearing: W
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: uplift

Media 279: PT-PV-126A 6.5" Lateral Test

Weather: Clear

Lat/Lng: 45.2879,-120.801
Bearing: NW
Date Taken: 11/07/2025

Taken By: Toby Leyba
Tags: Lateral

Media 280: PT-PV-127A 5.875" Pre-Drill Install

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: SW
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

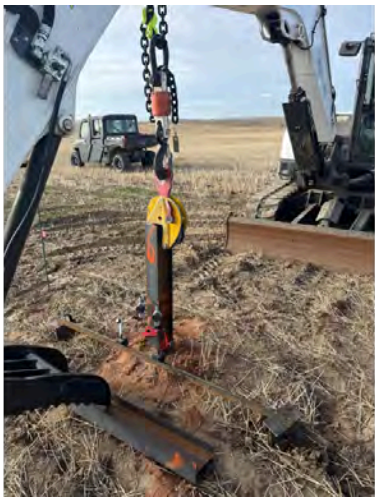
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 281: PT-PV-127A 5.875" Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: NW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 282: PT-PV-127A 5.875" Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: NW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 283: PT-PV-127A 5.875" Compression Test

Weather: Overcast

Lat/Lng: 45.2905,-120.825
Bearing: NW
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Compression

Media 284: PT-PV-127C 6.5" Pre-Drill Install

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: SW
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 285: PT-PV-127C 6.5" Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: W
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 286: PT-PV-127C 6.5" Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: N
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 287: PT-PV-127C 6.5" Compression Test

Weather: Overcast

Lat/Lng: 45.2996,-120.827
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Compression

Media 288: PT-PV-127B Install

Weather: Overcast

Lat/Lng: 45.2996,-120.827
Bearing: SW
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 289: PT-PV-127B Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: NW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 290: PT-PV-127B Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2996,-120.827
Bearing: NW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 291: PT-PV-127B Compression Test

Weather: Overcast

Lat/Lng: 45.2995,-120.827
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Compression

Media 292: PT-PV-128A 5.875" Pre-Drill Install

Weather: Overcast

Lat/Lng: 45.3004,-120.834
Bearing: SW
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

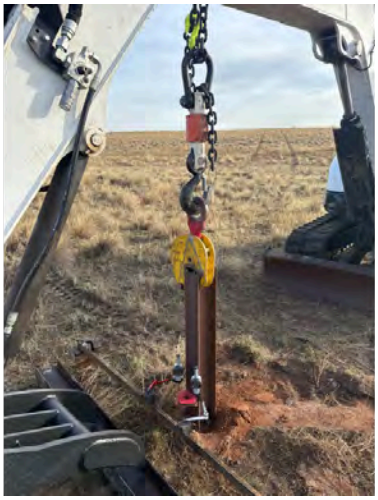
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 293: PT-PV-128A 5.875" Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3000,-120.835
Bearing: NE
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 294: PT-PV-128A 5.875" Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3004,-120.835
Bearing: E
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 295: PT-PV-128A 6.5" Pre-Drill Install

Weather: Overcast

Lat/Lng: 45.3004,-120.835
Bearing: SW
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

Media 296: PT-PV-128A 6.5" Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3004,-120.835
Bearing: NE
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 297: PT-PV-128A 6.5" Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3004,-120.835
Bearing: NE
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 298: PT-PV-130A 5.875" Pre-Drill Install

Weather: Overcast

Lat/Lng: 45.2966,-120.833
Bearing: E
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:

Media 299: PT-PV-130A 5.875" Uplift Test

Weather: Mist

Lat/Lng: 45.2966,-120.833
Bearing: SW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 300: PT-PV-130A 5.875" Lateral Test

Weather: Mist

Lat/Lng: 45.2967,-120.833
Bearing: SW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



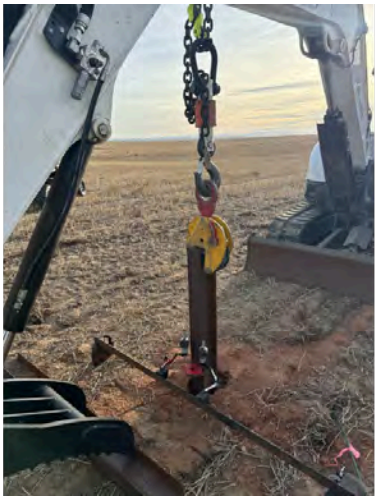
Powered By Filio

Media 301: PT-PV-130A 6.5" Pre-Drill Install

Weather: Overcast

Lat/Lng: 45.2966,-120.833
Bearing: E
Date Taken: 10/28/2025

Taken By: Robert Moore
Tags:



Media 302: PT-PV-130A 6.5" Uplift Test

Weather: Mist

Lat/Lng: 45.2966,-120.833
Bearing: SW
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: uplift

Media 303: PT-PV-130A 6.5" Lateral Test

Weather: Mist

Lat/Lng: 45.2966,-120.833
Bearing: S
Date Taken: 11/08/2025

Taken By: Toby Leyba
Tags: Lateral

Media 304: PT-PV-132 Install

Weather: Overcast

Lat/Lng: 45.2927,-120.827
Bearing: SW
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 305: PT-PV-132 Uplift Test

Weather: Mist

Lat/Lng: 45.2927,-120.827
Bearing: SW
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

Media 306: PT-PV-132 Lateral Test

Weather: Mist

Lat/Lng: 45.2927,-120.827
Bearing: SW
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 307: PT-PV-132 Compression Test

Weather: Overcast

Lat/Lng: 45.2927,-120.827
Bearing: NE
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Compression

Media 308: PT-PV-134 Install

Weather: Partly cloudy

Lat/Lng: 45.2924,-120.843
Bearing: NW
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

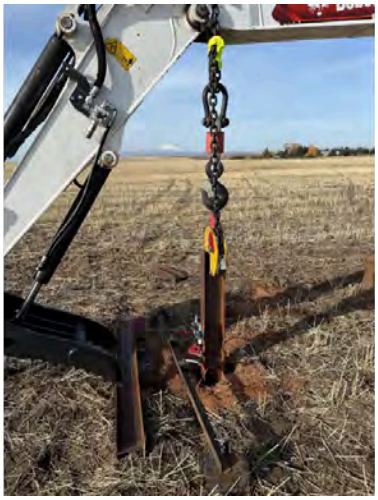
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 309: PT-PV-134 Uplift Test

Weather: Overcast

Lat/Lng: 45.2924,-120.843
Bearing: NW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 310: PT-PV-134 Lateral Test

Weather: Overcast

Lat/Lng: 45.2924,-120.842
Bearing: N
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 311: PT-PV-136 Install

Weather: Overcast

Lat/Lng: 45.2882,-120.834
Bearing: SE
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 312: PT-PV-136 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2882,-120.834
Bearing: E
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



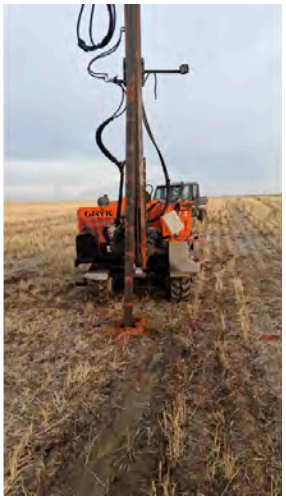
Powered By Filio

Media 313: PT-PV-136 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2882,-120.834
Bearing: E
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

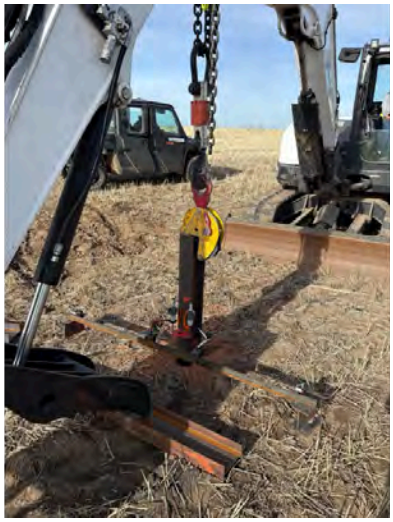


Media 314: PT-PV-137 Install

Weather: Overcast

Lat/Lng: 45.3014,-120.810
Bearing: N
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:



Media 315: PT-PV-137 Uplift Test

Weather: Overcast

Lat/Lng: 45.2890,-120.840
Bearing: NW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 316: PT-PV-137 Lateral Test

Weather: Overcast

Lat/Lng: 45.2891,-120.840
Bearing: NW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 317: PT-PV-141 Install

Weather: Overcast

Lat/Lng: 45.2839,-120.848
Bearing: NW
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 318: PT-PV-141 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2838,-120.848
Bearing: NW
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

Media 319: PT-PV-141 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2838,-120.848
Bearing: N
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 320: PT-PV-142 Install

Weather: Overcast

Lat/Lng: 45.2799,-120.827
Bearing: SW
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 321: PT-PV-142 Uplift Test

Weather: Mist

Lat/Lng: 45.2799,-120.827
Bearing: W
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

Media 322: PT-PV-142 Lateral Test

Weather: Mist

Lat/Lng: 45.2799,-120.827
Bearing: W
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 323: PT-PV-144 Install

Weather: Overcast

Lat/Lng: 45.2781,-120.844
Bearing: NE
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 324: PT-PV-144 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2781,-120.844
Bearing: SE
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 325: PT-PV-144 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2782,-120.844
Bearing: S
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 326: PT-PV-144 Compression Test

Weather: Overcast

Lat/Lng: 45.2781,-120.844
Bearing: NE
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Compression

Media 327: PT-PV-145 Install

Weather: Overcast

Lat/Lng: 45.2795,-120.857
Bearing: S
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 328: PT-PV-145 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2794,-120.857
Bearing: SE
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 329: PT-PV-145 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2794,-120.857
Bearing: S
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 330: PT-PV-147 Install

Weather: Overcast

Lat/Lng: 45.2749,-120.831
Bearing: NW
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 331: PT-PV-147 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2750,-120.831
Bearing: S
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

Media 332: PT-PV-147 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2750,-120.831
Bearing: SE
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 333: PT-PV-151 Install

Weather: Overcast

Lat/Lng: 45.2660,-120.831
Bearing: NE
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 334: PT-PV-151 Uplift Test

Weather: Mist

Lat/Lng: 45.2661,-120.831
Bearing: W
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

Media 335: PT-PV-151 Lateral Test

Weather: Mist

Lat/Lng: 45.2661,-120.831
Bearing: NW
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 336: PT-PV-151 Compression Test

Weather: Overcast

Lat/Lng: 45.2661,-120.831
Bearing: NW
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 337: PT-PV-154 Install

Weather: Overcast

Lat/Lng: 45.2559,-120.837
Bearing: W
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 338: PT-PV-154 Uplift Test

Weather: Sunny

Lat/Lng: 45.2592,-120.826
Bearing: NW
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

Media 339: PT-PV-154 Lateral Test

Weather: Sunny

Lat/Lng: 45.2592,-120.826
Bearing: NW
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

Media 340: PT-PV-156 Install

Weather: Overcast

Lat/Lng: 45.2558,-120.837
Bearing: NE
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 341: PT-PV-156 Uplift Test

Weather: Mist

Lat/Lng: 45.2559,-120.837
Bearing: N
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: uplift

Media 342: PT-PV-156 Lateral Test

Weather: Mist

Lat/Lng: 45.2559,-120.837
Bearing: N
Date Taken: 11/10/2025

Taken By: Toby Leyba
Tags: Lateral

Media 343: PT-PV-157A Install

Weather: Overcast

Lat/Lng: 45.2925,-120.859
Bearing: SW
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

Media 344: PT-PV-157A Uplift Test

Weather: Overcast

Lat/Lng: 45.2924,-120.859
Bearing: W
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 345: PT-PV-157A Lateral Test

Weather: Overcast

Lat/Lng: 45.2919,-120.858
Bearing: W
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 346: PT-PV-157B Install

Weather: Overcast

Lat/Lng: 45.2925,-120.859
Bearing: SW
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

Media 347: PT-PV-157B Uplift Test

Weather: Overcast

Lat/Lng: 45.2925,-120.859
Bearing: W
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 348: PT-PV-157B Lateral Test

Weather: Overcast

Lat/Lng: 45.2925,-120.859
Bearing: NW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



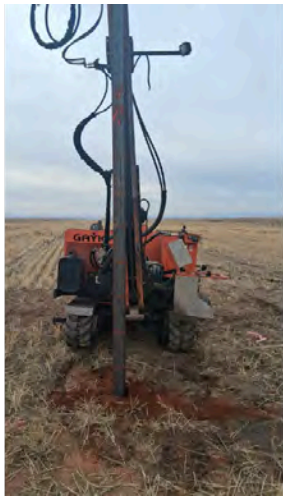
Powered By Filio

Media 349: PT-PV-157B Compression Test

Weather: Partly cloudy

Lat/Lng: 45.2925,-120.859
Bearing: E
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Compression



Media 350: PT-PV-160 Install

Weather: Clear

Lat/Lng: 45.2856,-120.858
Bearing: E
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

Media 351: PT-PV-160 Uplift Test

Weather: Mist

Lat/Lng: 45.2856,-120.858
Bearing: SW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 352: PT-PV-160 Lateral Test

Weather: Mist

Lat/Lng: 45.2855,-120.858
Bearing: SW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 353: PT-PV-162 Install

Weather: Clear

Lat/Lng: 45.1881,-120.892
Bearing: N
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

Media 354: PT-PV-162 Uplift Test

Weather: Mist

Lat/Lng: 45.2818,-120.864
Bearing: W
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 355: PT-PV-162 Lateral Test

Weather: Mist

Lat/Lng: 45.2818,-120.864
Bearing: NW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 356: PT-PV-163 Install

Weather: Overcast

Lat/Lng: 45.2848,-120.870
Bearing: W
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 357: PT-PV-163 Uplift Test

Weather: Mist

Lat/Lng: 45.2848,-120.870
Bearing: NW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 358: PT-PV-163 Lateral Test

Weather: Mist

Lat/Lng: 45.2848,-120.870
Bearing: N
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 359: PT-PV-164A Install

Weather: Overcast

Lat/Lng: 45.2848,-120.870
Bearing: SW
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

Media 360: PT-PV-164A Uplift Test

Weather: Mist

Lat/Lng: 45.2830,-120.874
Bearing: S
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 361: PT-PV-164A Lateral Test

Weather: Mist

Lat/Lng: 45.2830,-120.874
Bearing: SW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 362: PT-PV-164B Install

Weather: Overcast

Lat/Lng: 45.2830,-120.874
Bearing: SW
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

Media 363: PT-PV-164B Uplift Test

Weather: Mist

Lat/Lng: 45.2830,-120.874
Bearing: SW
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 364: PT-PV-164B Lateral Test

Weather: Mist

Lat/Lng: 45.2830,-120.874
Bearing: S
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 365: PT-PV-164B Compression Test

Weather: Overcast

Lat/Lng: 45.2830,-120.874
Bearing: NE
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Compression

Media 366: PT-PV-167 Install

Weather: Clear

Lat/Lng: 45.2963,-120.811
Bearing: NE
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 367: PT-PV-167 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2964,-120.811
Bearing: NE
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

Media 368: PT-PV-167 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2963,-120.811
Bearing: NE
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

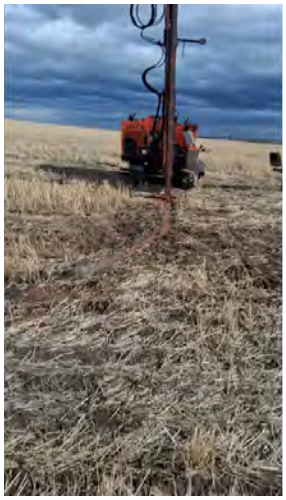
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 369: PT-PV-169 Install

Weather: Patchy rain nearby

Lat/Lng: 45.2872,-120.811
Bearing: NE
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 370: PT-PV-169 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2872,-120.811
Bearing: NE
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

Media 371: PT-PV-169 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2872,-120.811
Bearing: NE
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

Media 372: PT-PV-169 Compression Test

Weather: Cloudy

Lat/Lng: 45.2872,-120.811
Bearing: E
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 373: PT-PV-172 Install (Shallow Refusal)

Weather: Patchy rain nearby

Lat/Lng: 45.2755,-120.815
Bearing: SW
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 374: PT-PV-172 Install

Weather: Partly cloudy

Lat/Lng: 45.2755,-120.815
Bearing: NW
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 375: PT-PV-172 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2755,-120.815
Bearing: N
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

Media 376: PT-PV-172 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2755,-120.815
Bearing: NE
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 377: PT-PV-173 Install

Weather: Partly Cloudy

Lat/Lng: 45.2737,-120.811
Bearing: W
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 378: PT-PV-173 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2737,-120.811
Bearing: SW
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

Media 379: PT-PV-173 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2737,-120.811
Bearing: E
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

Media 380: PT-PV-177 Install

Weather: Clear

Lat/Lng: 45.2967,-120.802
Bearing: SE
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 381: PT-PV-177 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2967,-120.802
Bearing: E
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

Media 382: PT-PV-177 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2967,-120.802
Bearing: E
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

Media 383: PT-PV-178 Install

Weather: Clear

Lat/Lng: 45.2905,-120.806
Bearing: W
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 384: PT-PV-178 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2906,-120.806
Bearing: W
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 385: PT-PV-178 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2905,-120.806
Bearing: W
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

Media 386: PT-PV-178 Compression Test

Weather: Overcast

Lat/Lng: 45.2905,-120.806
Bearing: NW
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Compression

Media 387: PT-PV-179 Install

Weather: Clear

Lat/Lng: 45.2990,-120.795
Bearing: W
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 388: PT-PV-179 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2990,-120.795
Bearing: SW
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 389: PT-PV-179 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2990,-120.795
Bearing: W
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

Media 390: PT-PV-181 Install

Weather: Patchy rain nearby

Lat/Lng: 45.2890,-120.790
Bearing: N
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 391: PT-PV-181 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2890,-120.790
Bearing: SW
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

Media 392: PT-PV-181 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2890,-120.790
Bearing: W
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 393: PT-PV-183 Install

Weather: Overcast

Lat/Lng: 45.2987,-120.780
Bearing: SW
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 394: PT-PV-183 Uplift Test

Weather: Clear

Lat/Lng: 45.2987,-120.780
Bearing: N
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: uplift

Media 395: PT-PV-183 Lateral Test

Weather: Clear

Lat/Lng: 45.2987,-120.780
Bearing: NE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Lateral

Media 396: PT-PV-183 Compression Test

Weather: Clear

Lat/Lng: 45.2987,-120.780
Bearing: NE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 397: PT-PV-184 Install

Weather: Thundery outbreaks possible

Lat/Lng: 45.2210,-120.702
Bearing: SW
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 398: PT-PV-184 Uplift Test

Weather: Clear

Lat/Lng: 45.2990,-120.772
Bearing: SW
Date Taken: 11/18/2025

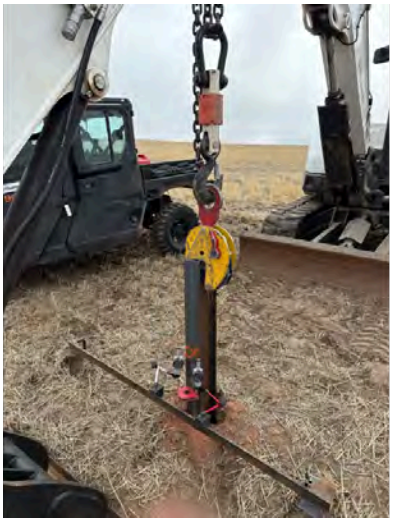
Taken By: Toby Leyba
Tags: uplift

Media 399: PT-PV-188 Install

Weather: Sunny

Lat/Lng: 45.2920,-120.772
Bearing: SE
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:



Media 400: PT-PV-188 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2920,-120.772
Bearing: SE
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 401: PT-PV-188 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2920,-120.772
Bearing: SE
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

Media 402: PT-PV-189 Install

Weather: Patchy rain nearby

Lat/Lng: 45.2890,-120.790
Bearing: N
Date Taken: 11/01/2025

Taken By: Robert Moore
Tags:

Media 403: PT-PV-189 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2877,-120.784
Bearing: SE
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

Media 404: PT-PV-189 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2877,-120.784
Bearing: S
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 405: PT-PV-191 Install

Weather: Thundery outbreaks possible

Lat/Lng: 45.2982,-120.760
Bearing: NW
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 406: PT-PV-191 Uplift Test

Weather: Clear

Lat/Lng: 45.2957,-120.765
Bearing: SE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: uplift

Media 407: PT-PV-191 Lateral Test

Weather: Clear

Lat/Lng: 45.2957,-120.765
Bearing: SE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: lateral

Media 408: PT-PV-193 Install

Weather: Cloudy

Lat/Lng: 45.2884,-120.762
Bearing: N
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

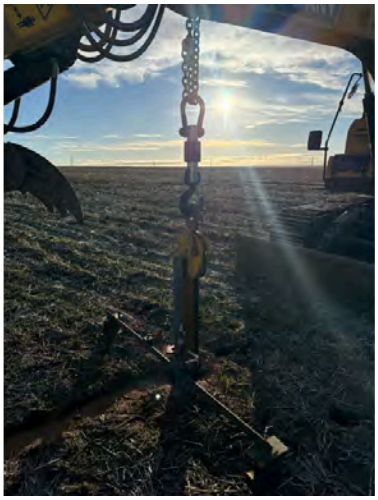
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 409: PT-PV-193 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2884,-120.762
Bearing: SE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: uplift

Media 410: PT-PV-193 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2923,-120.764
Bearing: SE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: lateral

Media 411: PT-PV-195 Install

Weather: Partly cloudy

Lat/Lng: 45.2820,-120.781
Bearing: NE
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

Media 412: PT-PV-195 Uplift Test

Weather: Overcast

Lat/Lng: 45.2819,-120.781
Bearing: E
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 413: PT-PV-195 Lateral Test

Weather: Overcast

Lat/Lng: 45.2820,-120.781
Bearing: SE
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

Media 414: PT-PV-197 Install (Shallow Refusal)

Weather: Sunny

Lat/Lng: 45.2920,-120.772
Bearing: N
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

Media 415: PT-PV-197 Install

Weather: Thundery outbreaks possible

Lat/Lng: 45.2781,-120.787
Bearing: N
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 416: PT-PV-197 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2782,-120.787
Bearing: N
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 417: PT-PV-197 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2781,-120.787
Bearing: N
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

Media 418: PT-PV-198 Install

Weather: Partly cloudy

Lat/Lng: 45.2820,-120.781
Bearing: N
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

Media 419: PT-PV-198 Uplift Test

Weather: Overcast

Lat/Lng: 45.2809,-120.775
Bearing: W
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift

Media 420: PT-PV-198 Lateral Test

Weather: Overcast

Lat/Lng: 45.2809,-120.775
Bearing: S
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 421: PT-PV-198 Compression Test

Weather: Mist

Lat/Lng: 45.2809,-120.775
Bearing: S
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Compression

Media 422: PT-PV-203 Install

Weather: Overcast

Lat/Lng: 45.2852,-120.748
Bearing: N
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

Media 423: PT-PV-203 Uplift Test

Weather: Cloudy

Lat/Lng: 45.2851,-120.748
Bearing: SW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: uplift

Media 424: PT-PV-203 Lateral Test

Weather: Cloudy

Lat/Lng: 45.2852,-120.748
Bearing: W
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 425: PT-PV-203 Compression Test

Weather: Cloudy

Lat/Lng: 45.2852,-120.748
Bearing: W
Date Taken: 11/16/2025

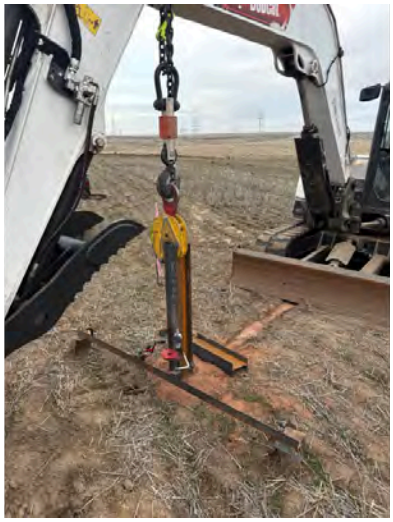
Taken By: Toby Leyba
Tags: Compression

Media 426: PT-PV-204 Install

Weather: Cloudy

Lat/Lng: 45.2833,-120.759
Bearing: N
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

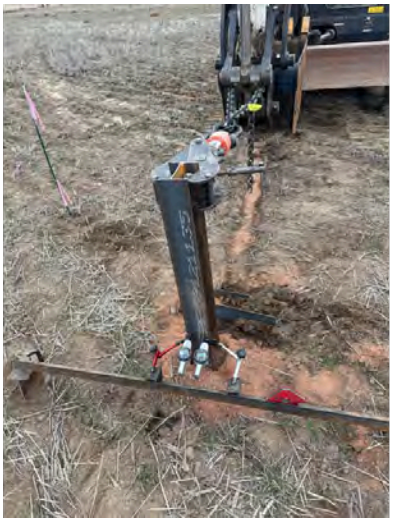


Media 427: PT-PV-204 Uplift Test

Weather: Overcast

Lat/Lng: 45.2833,-120.759
Bearing: E
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift



Media 428: PT-PV-204 Lateral Test

Weather: Overcast

Lat/Lng: 45.2834,-120.759
Bearing: E
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



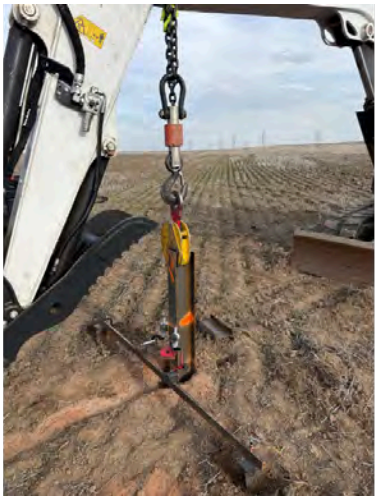
Powered By Filio

Media 429: PT-PV-205 Install

Weather: Cloudy

Lat/Lng: 45.2791,-120.765
Bearing: NE
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

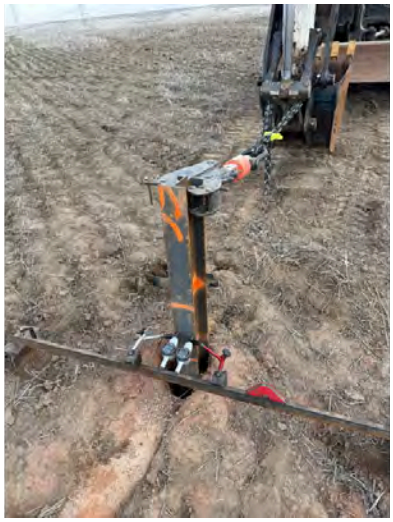


Media 430: PT-PV-205 Uplift Test

Weather: Overcast

Lat/Lng: 45.2791,-120.765
Bearing: E
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: uplift



Media 431: PT-PV-205 Lateral Test

Weather: Overcast

Lat/Lng: 45.2791,-120.765
Bearing: E
Date Taken: 11/12/2025

Taken By: Toby Leyba
Tags: Lateral

Media 432: PT-PV-206 Install

Weather: Overcast

Lat/Lng: 45.2781,-120.749
Bearing: NE
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 433: PT-PV-206 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2758,-120.752
Bearing: NW
Date Taken: 11/16/2025

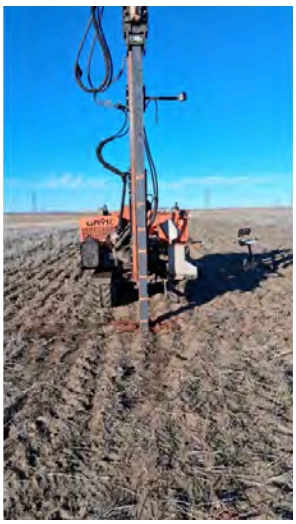
Taken By: Toby Leyba
Tags: uplift

Media 434: PT-PV-206 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2781,-120.749
Bearing: NW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Lateral



Media 435: PT-PV-207 Install

Weather: Overcast

Lat/Lng: 45.2745,-120.752
Bearing: NW
Date Taken: 11/02/2025

Taken By: Robert Moore
Tags:

Media 436: PT-PV-207 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2746,-120.752
Bearing: NW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 437: PT-PV-207 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2743,-120.752
Bearing: N
Date Taken: 11/16/2025

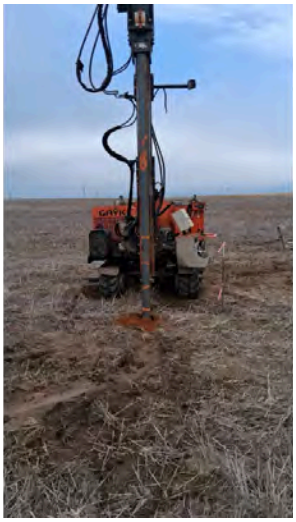
Taken By: Toby Leyba
Tags: Lateral

Media 438: PT-PV-207 Compression Test

Weather: Partly cloudy

Lat/Lng: 45.2746,-120.752
Bearing: N
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Compression



Media 439: PT-PV-210 Install

Weather: Overcast

Lat/Lng: 45.2703,-120.732
Bearing: N
Date Taken: 11/03/2025

Taken By: Robert Moore
Tags:

Media 440: PT-PV-210 Uplift Test

Weather: Overcast

Lat/Lng: 45.2704,-120.732
Bearing: SE
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 441: PT-PV-210 Lateral Test

Weather: Overcast

Lat/Lng: 45.2704,-120.732
Bearing: SE
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Lateral

Media 442: PT-PV-211 Install

Weather: Overcast

Lat/Lng: 45.2667,-120.737
Bearing: N
Date Taken: 11/03/2025

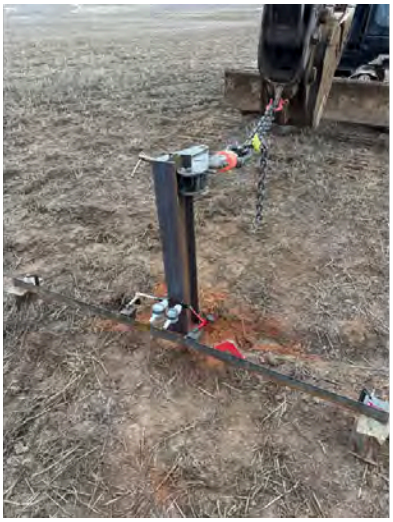
Taken By: Robert Moore
Tags:

Media 443: PT-PV-211 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.2666,-120.736
Bearing: SW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: uplift



Media 444: PT-PV-211 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.2666,-120.736
Bearing: SW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 445: PT-PV-212 Install

Weather: Overcast

Lat/Lng: 45.2594,-120.733
Bearing: SE
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:

Media 446: PT-PV-212 Uplift Test

Weather: Clear

Lat/Lng: 45.2610,-120.745
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags:

Media 447: PT-PV-212 Lateral Test

Weather: Clear

Lat/Lng: 45.2612,-120.745
Bearing: E
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Lateral

Media 448: PT-PV-214 Install

Weather: Overcast

Lat/Lng: 45.2594,-120.733
Bearing: N
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 449: PT-PV-214 Uplift Test

Weather: Clear

Lat/Lng: 45.2594,-120.733
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: uplift

Media 450: PT-PV-214 Lateral Test

Weather: Clear

Lat/Lng: 45.2594,-120.733
Bearing: E
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Lateral

Media 451: PT-PV-214 Compression Test

Weather: Clear

Lat/Lng: 45.2594,-120.733
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Compression

Media 452: PT-PV-217 Install

Weather: Overcast

Lat/Lng: 45.2702,-120.717
Bearing: NW
Date Taken: 11/03/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 453: PT-PV-217 Uplift Test

Weather: Overcast

Lat/Lng: 45.2701,-120.717
Bearing: NW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: uplift

Media 454: PT-PV-217 Lateral Test

Weather: Overcast

Lat/Lng: 45.2701,-120.717
Bearing: NW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Lateral

Media 455: PT-PV-221 Install

Weather: Overcast

Lat/Lng: 45.2655,-120.705
Bearing: N
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:

Media 456: PT-PV-221 Uplift Test

Weather: Clear

Lat/Lng: 45.2622,-120.715
Bearing: SW
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 457: PT-PV-221 Lateral Test

Weather: Clear

Lat/Lng: 45.2622,-120.715
Bearing: E
Date Taken: 11/17/2025

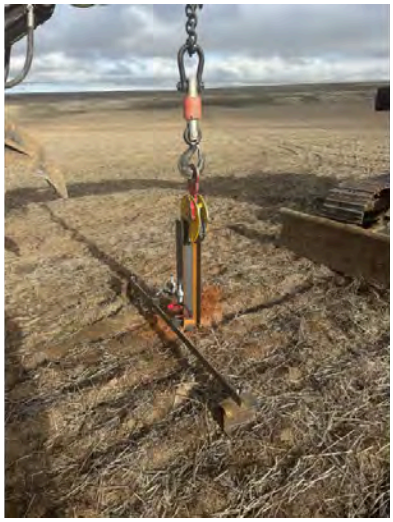
Taken By: Toby Leyba
Tags: Lateral

Media 458: PT-PV-223 Install

Weather: Overcast

Lat/Lng: 45.2587,-120.718
Bearing: N
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:



Media 459: PT-PV-223 Uplift Test

Weather: Clear

Lat/Lng: 45.2587,-120.718
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: uplift

Media 460: PT-PV-223 Lateral Test

Weather: Clear

Lat/Lng: 45.2587,-120.718
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 461: PT-PV-223 Compression Test

Weather: Clear

Lat/Lng: 45.2587,-120.718
Bearing: E
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Compression

Media 462: PT-PV-226 Install

Weather: Light rain

Lat/Lng: 45.2697,-120.692
Bearing: SE
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:

Media 463: PT-PV-226 Uplift Test

Weather: Sunny

Lat/Lng: 45.2697,-120.691
Bearing: W
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: uplift

Media 464: PT-PV-226 Lateral Test

Weather: Sunny

Lat/Lng: 45.2697,-120.691
Bearing: NW
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 465: PT-PV-230 Install

Weather: Light rain

Lat/Lng: 45.2593,-120.690
Bearing: NE
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:

Media 466: PT-PV-230 Uplift Test

Weather: Sunny

Lat/Lng: 45.2593,-120.689
Bearing: N
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: uplift

Media 467: PT-PV-230 Lateral Test

Weather: Clear

Lat/Lng: 45.2599,-120.693
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Lateral

Media 468: PT-PV-230 Compression test

Weather: Clear

Lat/Lng: 45.2592,-120.690
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Compression

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

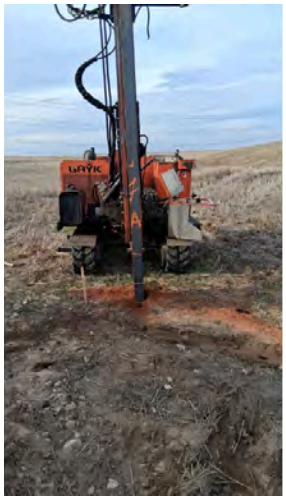
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 469: PT-SB-01A Install

Weather: Overcast

Lat/Lng: 45.3665,-120.706
Bearing: NW
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

Media 470: PT-SB-01A Uplift Test

Weather: Overcast

Lat/Lng: 45.3666,-120.706
Bearing: W
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 471: PT-SB-01A Lateral Test

Weather: Overcast

Lat/Lng: 45.3647,-120.710
Bearing: W
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 472: PT-SB-01B Install

Weather: Overcast

Lat/Lng: 45.3665,-120.706
Bearing: W
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 473: PT-SB-01B Uplift Test

Weather: Overcast

Lat/Lng: 45.3667,-120.706
Bearing: W
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: uplift

Media 474: PT-SB-01B Lateral Test

Weather: Overcast

Lat/Lng: 45.3665,-120.706
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Lateral

Media 475: PT-SB-01B Compression Test

Weather: Overcast

Lat/Lng: 45.3666,-120.706
Bearing: W
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: Compression

Media 476: PT-SB-02A Install

Weather: Overcast

Lat/Lng: 45.3649,-120.707
Bearing: N
Date Taken: 11/12/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

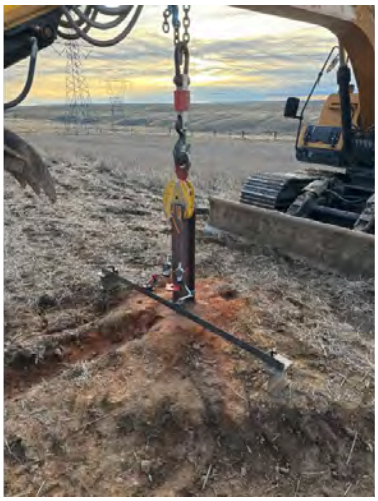
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 477: PT-SB-02A Uplift Test

Weather: Mist

Lat/Lng: 45.3649,-120.707
Bearing: SW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: uplift

Media 478: PT-SB-02A Lateral Test

Weather: Mist

Lat/Lng: 45.3649,-120.707
Bearing: SW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Lateral

Media 479: PT-SB-02A Compression Test

Weather: Mist

Lat/Lng: 45.3649,-120.707
Bearing: SW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Compression

Media 480: PT-WTG-01A Install

Weather: Overcast

Lat/Lng: 45.4183,-120.701
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 481: PT-WTG-01A Uplift Test

Weather: Mist

Lat/Lng: 45.4184,-120.701
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 482: PT-WTG-01A Lateral Test

Weather: Mist

Lat/Lng: 45.4183,-120.701
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 483: PT-WTG-01B Install

Weather: Overcast

Lat/Lng: 45.4184,-120.701
Bearing: NE
Date Taken: 11/16/2025

Taken By: Robert Moore
Tags: install

Media 484: PT-WTG-01B Uplift Test

Weather: Mist

Lat/Lng: 45.4183,-120.701
Bearing: NE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 485: PT-WTG-01B Lateral Test

Weather: Mist

Lat/Lng: 45.4183,-120.701
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 486: PT-WTG-01B Compression Test

Weather: Mist

Lat/Lng: 45.4184,-120.700
Bearing: SE
Date Taken: 12/09/2025

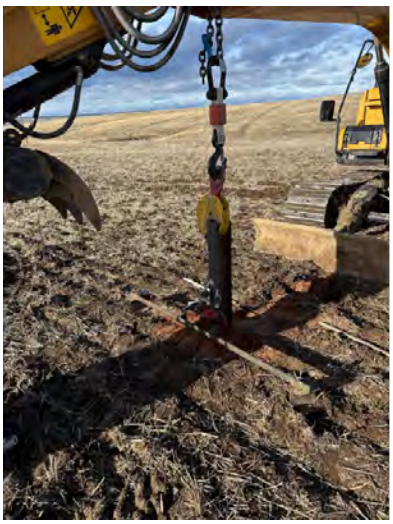
Taken By: Toby Leyba
Tags: Compression

Media 487: PT-WTG-02 Install

Weather: Overcast

Lat/Lng: 45.3832,-120.664
Bearing: SE
Date Taken: 11/15/2025

Taken By: Robert Moore
Tags: install



Media 488: PT-WTG-02 Uplift Test

Weather: Cloudy

Lat/Lng: 45.3924,-120.665
Bearing: N
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 489: PT-WTG-02 Lateral Test

Weather: Cloudy

Lat/Lng: 45.3925,-120.665
Bearing: N
Date Taken: 12/07/2025

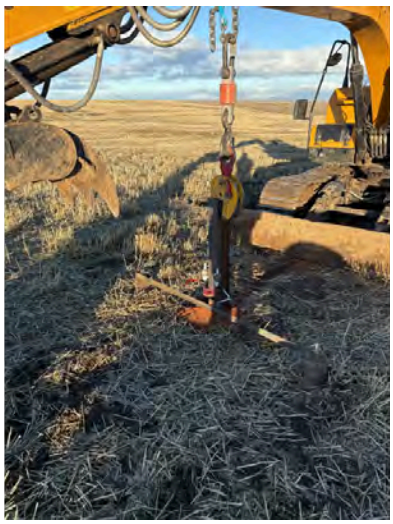
Taken By: Toby Leyba
Tags: Lateral

Media 490: PT-WTG-03 Install

Weather: Fog

Lat/Lng: 45.3546,-120.672
Bearing: S
Date Taken: 11/13/2025

Taken By: Robert Moore
Tags: install



Media 491: PT-WTG-03 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3546,-120.672
Bearing: NW
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: uplift

Media 492: PT-WTG-03 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3546,-120.672
Bearing: N
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

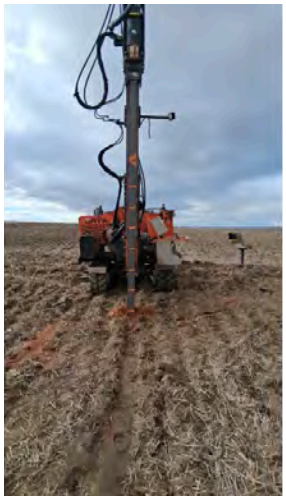
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 493: PT-WTG-04 Install

Weather: Cloudy

Lat/Lng: 45.3617,-120.784
Bearing: W
Date Taken: 11/07/2025

Taken By: Robert Moore
Tags:

Media 494: PT-WTG-04 Uplift Test

Weather: Partly cloudy

Lat/Lng: 45.3424,-120.806
Bearing: S
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: uplift

Media 495: PT-WTG-04 Lateral Test

Weather: Partly cloudy

Lat/Lng: 45.3424,-120.806
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Lateral

Media 496: PT-WTG-05 Install

Weather: Overcast

Lat/Lng: 45.2996,-120.843
Bearing: SW
Date Taken: 10/30/2025

Taken By: Robert Moore
Tags:

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 497: PT-WTG-05 Uplift Test

Weather: Overcast

Lat/Lng: 45.2996,-120.843
Bearing: E
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: uplift

Media 498: PT-WTG-05 Lateral Test

Weather: Overcast

Lat/Lng: 45.2995,-120.843
Bearing: E
Date Taken: 11/09/2025

Taken By: Toby Leyba
Tags: Lateral

Media 499: PT-WTG-06 Install

Weather: Overcast

Lat/Lng: 45.2643,-120.814
Bearing: E
Date Taken: 10/31/2025

Taken By: Robert Moore
Tags:

Media 500: PT-WTG-06 Uplift Test

Weather: Clear

Lat/Lng: 45.2643,-120.814
Bearing: S
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: uplift

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 501: PT-WTG-06 Lateral Test

Weather: Clear

Lat/Lng: 45.2643,-120.814
Bearing: E
Date Taken: 11/11/2025

Taken By: Toby Leyba
Tags: Lateral

Media 502: PT-WTG-07 Install

Weather: Thundery outbreaks possible

Lat/Lng: 45.2888,-120.789
Bearing: S
Date Taken: 11/06/2025

Taken By: Robert Moore
Tags:

Media 503: PT-WTG-07 Uplift Test

Weather: Clear

Lat/Lng: 45.2981,-120.760
Bearing: N
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: uplift

Media 504: PT-WTG-07 Lateral Test

Weather: Clear

Lat/Lng: 45.2982,-120.760
Bearing: N
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 505: PT-WTG-08 Install

Weather: Light rain

Lat/Lng: 45.2593,-120.690
Bearing: NW
Date Taken: 11/04/2025

Taken By: Robert Moore
Tags:

Media 506: PT-WTG-08 Uplift Test

Weather: Clear

Lat/Lng: 45.2656,-120.705
Bearing: SE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: uplift

Media 507: PT-WTG-08 Lateral Test

Weather: Clear

Lat/Lng: 45.2656,-120.705
Bearing: SE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Lateral

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

ANS

ATTACHMENT D

# Pile Extraction Photo Log

Media 1: PT-PV-001 A & B Full Extraction

Weather: Overcast

Lat/Lng: 45.4310,-120.713
Bearing: N
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

Media 2: PT-PV-002 Full Extraction

Weather: Overcast

Lat/Lng: 45.4287,-120.709
Bearing: W
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

Media 3: PT-PV-004 Full Extraction

Weather: Overcast

Lat/Lng: 45.4207,-120.709
Bearing: SE
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

Media 4: PT-PV-005A Full Extraction

Weather: Overcast

Lat/Lng: 45.4220,-120.701
Bearing: NW
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 5: PT-PV-005B Full Extraction

Weather: Overcast

Lat/Lng: 45.4221,-120.701
Bearing: E
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

Media 6: PT-PV-007 A & B full extraction

Weather: Partly cloudy

Lat/Lng: 45.4157,-120.689
Bearing: NE
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

Media 7: PT-PV-009 Full Extraction

Weather: Overcast

Lat/Lng: 45.4233,-120.674
Bearing: SE
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: extraction

Media 8: PT-PV-010 Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.4200,-120.669
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 9: PT-PV-011A Full Extraction

Weather: Mist

Lat/Lng: 45.4161,-120.679
Bearing: W
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: extraction

Media 10: PT-PV-011B Full Extraction

Weather: Mist

Lat/Lng: 45.4160,-120.679
Bearing: E
Date Taken: 12/09/2025

Taken By: Toby Leyba
Tags: extraction

Media 11: PT-PV-015A Full Extraction

Weather: Overcast

Lat/Lng: 45.4094,-120.693
Bearing: NE
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

Media 12: PT-PV-015B Full Extraction

Weather: Overcast

Lat/Lng: 45.4085,-120.692
Bearing: E
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 13: PT-PV-017A Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.4077,-120.675
Bearing: W
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

Media 14: PT-PV-017B 6.5’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.4077,-120.675
Bearing: S
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

Media 15: PT-PV-019 Full Extraction

Weather: Overcast

Lat/Lng: 45.4071,-120.685
Bearing: SW
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

Media 16: PT-PV-021 Full Extraction

Weather: Overcast

Lat/Lng: 45.4080,-120.665
Bearing: S
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 17: PT-PV-022 Full Extraction

Weather: Overcast

Lat/Lng: 45.4072,-120.658
Bearing: S
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

Media 18: PT-PV-025 Full Extraction

Weather: Overcast

Lat/Lng: 45.4010,-120.673
Bearing: N
Date Taken: 12/08/2025

Taken By: Toby Leyba
Tags: Extraction

Media 19: PT-PV-028 A & B Full Extraction

Weather: Cloudy

Lat/Lng: 45.3969,-120.659
Bearing: W
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 20: PT-PV-029 Full Extraction

Weather: Overcast

Lat/Lng: 45.3937,-120.681
Bearing: N
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 21: PT-PV-030A Full Extraction

Weather: Cloudy

Lat/Lng: 45.3918,-120.671
Bearing: NE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 22: PT-PV-030B Full Extraction

Weather: Cloudy

Lat/Lng: 45.3918,-120.671
Bearing: NE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 23: PT-PV-031A Full Extraction

Weather: Overcast

Lat/Lng: 45.3906,-120.680
Bearing: SE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 24: PT-PV-031B Full Extraction

Weather: Overcast

Lat/Lng: 45.3903,-120.680
Bearing: SW
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 25: PT-PV-034 Full Extraction

Weather: Overcast

Lat/Lng: 45.3866,-120.684
Bearing: S
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 26: PT-PV-035 2’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3832,-120.673
Bearing: E
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: log

Media 27: PT-PV-036 3’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3881,-120.707
Bearing: SE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction

Media 28: PT-PV-040 4’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3832,-120.664
Bearing: SW
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 29: PT-PV-043 5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3753,-120.692
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 30: PT-PV-045A Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.3760,-120.675
Bearing: N
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 31: PT-PV-045B Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.3760,-120.675
Bearing: W
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

Media 32: PT-PV-047 4’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3761,-120.662
Bearing: W
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 33: PT-PV-048 Full Extraction

Weather: Mist

Lat/Lng: 45.3707,-120.675
Bearing: NE
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 34: PT-PV-051 2’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3691,-120.658
Bearing: NW
Date Taken: 12/06/2025

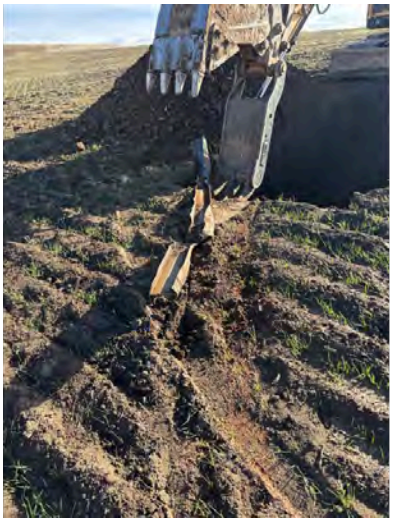
Taken By: Toby Leyba
Tags: Extraction

Media 35: PT-PV-052 3’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3642,-120.672
Bearing: W
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction



Media 36: PT-PV-056 Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.3496,-120.664
Bearing: E
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 37: PT-PV-058 4.5’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3422,-120.660
Bearing: NE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction

Media 38: PT-PV-060A Full Extraction

Weather: Mist

Lat/Lng: 45.3680,-120.683
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 39: PT-PV-060B Full Extraction

Weather: Mist

Lat/Lng: 45.3680,-120.683
Bearing: S
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 40: PT-PV-062 4’ Extraction Cut off

Weather: Cloudy

Lat/Lng: 45.3606,-120.685
Bearing: NE
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 41: PT-PV-064 5’ Extraction Cut off

Weather: Cloudy

Lat/Lng: 45.3659,-120.689
Bearing: SE
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 42: PT-PV-065 Full Extraction

Weather: Cloudy

Lat/Lng: 45.3704,-120.694
Bearing: N
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 43: PT-PV-068 2.5' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3718,-120.710
Bearing: S
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 44: PT-PV-071 2.5’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3669,-120.725
Bearing: SE
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 45: PT-PV-072 5’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3610,-120.717
Bearing: E
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Extraction

Media 46: PT-PV-074 4' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3571,-120.722
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Extraction

Media 47: PT-PV-077A Full Extraction

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Extraction

Media 48: PT-PV-077B Full Extraction

Weather: Overcast

Lat/Lng: 45.3519,-120.726
Bearing: NE
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 49: PT-PV-079 3.5' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3492,-120.721
Bearing: NE
Date Taken: 12/03/2025

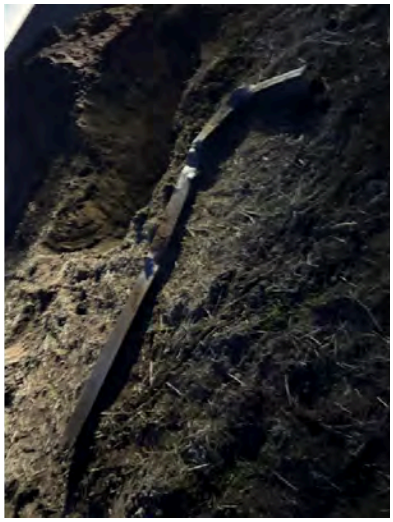
Taken By: Toby Leyba
Tags: Extraction

Media 50: PT-PV-081 Full Extraction

Weather: Overcast

Lat/Lng: 45.3465,-120.729
Bearing: N
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: Extraction



Media 51: PT-PV-084 Full Extraction

Weather: Mist

Lat/Lng: 45.3533,-120.736
Bearing: NW
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Extraction

Media 52: PT-PV-084 Full Extraction

Weather: Mist

Lat/Lng: 45.3533,-120.736
Bearing: SW
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

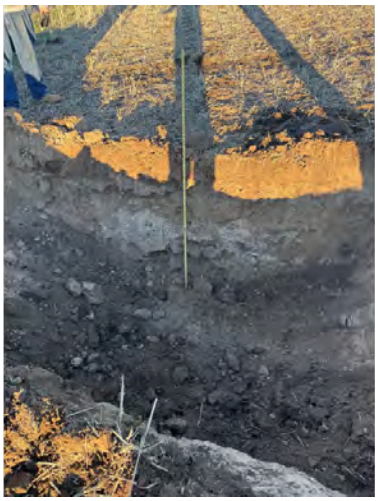
Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio



Media 53: PT-PV-086 4’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3464,-120.745
Bearing: NE
Date Taken: 12/02/2025

Taken By: Toby Leyba
Tags: Extraction

Media 54: PT-PV-089 Full Extraction

Weather: Overcast

Lat/Lng: 45.3531,-120.760
Bearing: W
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Extraction

Media 55: PT-PV-090 4’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3497,-120.757
Bearing: W
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Extraction

Media 56: PT-PV-093A Full Extraction

Weather: Overcast

Lat/Lng: 45.3437,-120.759
Bearing: SW
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



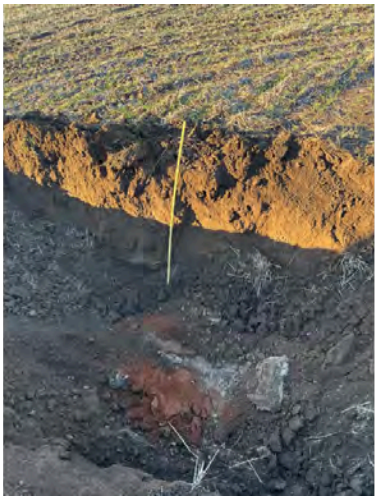
Powered By Filio

Media 57: PT-PV-093B Full Extraction

Weather: Overcast

Lat/Lng: 45.3437,-120.759
Bearing: SW
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Extraction



Media 58: PT-PV-095 3.5’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3387,-120.765
Bearing: SW
Date Taken: 11/22/2025

Taken By: Toby Leyba
Tags: Extraction

Media 59: PT-PV-097 A & B Full Extraction

Weather: Clear

Lat/Lng: 45.3415,-120.779
Bearing: S
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Extraction

Media 60: PT-PV-098 Full Extraction

Weather: Clear

Lat/Lng: 45.3377,-120.783
Bearing: SW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 61: PT-PV-100 4.5’ Extraction Cut off

Weather: Clear

Lat/Lng: 45.3328,-120.772
Bearing: NE
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Extraction

Media 62: PT-PV-102 3’ Extraction Cut off

Weather: Clear

Lat/Lng: 45.3430,-120.796
Bearing: N
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Extraction

Media 63: PT-PV-107 3’ Extraction Cut off

Weather: Mist

Lat/Lng: 45.3229,-120.797
Bearing: S
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Extraction

Media 64: PT-PV-109 Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.3186,-120.791
Bearing: S
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 65: PT-PV-111 A & B Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.3222,-120.778
Bearing: SW
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Extraction

Media 66: PT-PV-112 Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.3193,-120.772
Bearing: SW
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Extraction

Media 67: PT-PV-114 4.5' Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.3136,-120.779
Bearing: S
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Extraction

Media 68: PT-PV-117 4.5’ Extraction Cut Off

Weather: Partly cloudy

Lat/Lng: 45.3103,-120.773
Bearing: NW
Date Taken: 11/19/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 69: PT-PV-118 3’ Extraction Cut off

Weather: Clear

Lat/Lng: 45.3068,-120.786
Bearing: SW
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

Media 70: PT-PV-121 Full Extraction

Weather: Clear

Lat/Lng: 45.3033,-120.771
Bearing: NE
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

Media 71: PT-PV-122A 5.875" Pre-Drill 3’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3143,-120.816
Bearing: E
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 72: PT-PV-122B 6.5" Pre-Drill 3.6' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3143,-120.816
Bearing: W
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 73: PT-PV-123A 5.875" Pre-Drill 5' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3122,-120.824
Bearing: NE
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 74: PT-PV-123B 6.5" Pre-Drill 5' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3122,-120.824
Bearing: NE
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 75: PT-PV-126A 5.875" Pre-Drill 4' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.3024,-120.823
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 76: PT-PV-126B 6.5" Pre-Drill 4' Extraction Cut Off

Weather: Overcast

Lat/Lng: 45.3023,-120.823
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 77: PT-PV-127A 5.875", C6.5", B Full Extraction

Weather: Overcast

Lat/Lng: 45.2996,-120.827
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 78: PT-PV-128A 5.875" 3' Extraction Cut off

Weather: Fog

Lat/Lng: 45.3004,-120.835
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 79: PT-PV-128B 6.5" 3’ Extraction Cut off

Weather: Fog

Lat/Lng: 45.3004,-120.835
Bearing: N
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 80: PT-PV-130A 5.875" 4.5’ Extraction Cut off

Weather: Fog

Lat/Lng: 45.2966,-120.833
Bearing: SE
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 81: PT-PV-130B 6.5" 4’ extraction Cut off

Weather: Fog

Lat/Lng: 45.2967,-120.833
Bearing: SE
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 82: PT-PV-132 4’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2927,-120.827
Bearing: SE
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 83: PT-PV-134 4’ Extraction Cut off

Weather: Fog

Lat/Lng: 45.2924,-120.843
Bearing: W
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 84: PT-PV-136 5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2882,-120.834
Bearing: NE
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 85: PT-PV-137 3’ Extraction Cut off

Weather: Fog

Lat/Lng: 45.2891,-120.840
Bearing: NE
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 86: PT-PV-141 Full Extraction

Weather: Overcast

Lat/Lng: 45.2838,-120.848
Bearing: N
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 87: PT-PV-142 3’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2800,-120.827
Bearing: N
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 88: PT-PV-144 4.5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2782,-120.844
Bearing: E
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 89: PT-PV-145 Full Extraction

Weather: Overcast

Lat/Lng: 45.2794,-120.857
Bearing: E
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 90: PT-PV-147 4.5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2750,-120.831
Bearing: E
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 91: PT-PV-151 2.5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2661,-120.831
Bearing: E
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 92: PT-PV-154 3’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2593,-120.826
Bearing: SW
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 93: PT-PV-156 4’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.3012,-120.810
Bearing: W
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 94: PT-PV-157A Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.2925,-120.859
Bearing: N
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 95: PT-PV-157B Full Extraction

Weather: Partly cloudy

Lat/Lng: 45.2925,-120.859
Bearing: SW
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 96: PT-PV-160 5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2856,-120.858
Bearing: SE
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

| | |
|---|---|
| Project Name: Speedway | |
| Project Location: Sherman County, OR | |
| Client: Tetra Tech | Project Code: |
| Preparer: Sarah Ambrozak | Reviewer: Alex Lesky |
| Report Date: 2025-12-15 | Page Number: 24 of 35 |

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Media 97: PT-PV-162 3.5' Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2818,-120.864
Bearing: N
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 98: PT-PV-163 3.5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2848,-120.870
Bearing: E
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 99: PT-PV-164 A&B Full Extraction

Weather: Overcast

Lat/Lng: 45.2828,-120.874
Bearing: NE
Date Taken: 11/14/2025

Taken By: Toby Leyba
Tags: Extraction

Media 100: PT-PV-167 3.5' Extraction Cut off

Weather: Cloudy

Lat/Lng: 45.2964,-120.811
Bearing: NW
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 101: PT-PV-169 4.5' Extraction Cut Off

Weather: Cloudy

Lat/Lng: 45.2873,-120.811
Bearing: SE
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 102: PT-PV-172 4’ Extraction Cut Off

Weather: Cloudy

Lat/Lng: 45.2756,-120.815
Bearing: E
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 103: PT-PV-173 4’ Extraction Cut Off

Weather: Cloudy

Lat/Lng: 45.2738,-120.810
Bearing: SE
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 104: PT-PV-177 5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2966,-120.802
Bearing: NE
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 105: PT-PV-178 3.5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2905,-120.806
Bearing: NE
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 106: PT-PV-179 3’ Extraction Cut off

Weather: Mist

Lat/Lng: 45.2990,-120.795
Bearing: S
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 107: PT-PV-183 3.5’ Extraction Cut off

Weather: Clear

Lat/Lng: 45.2986,-120.780
Bearing: E
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

Media 108: PT-PV-184 3.5' Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2990,-120.772
Bearing: N
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 109: PT-PV-188 3.5’ Extraction Cut Off

Weather: Fog

Lat/Lng: 45.2917,-120.772
Bearing: E
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 110: PT-PV-189 4’ Extraction Cut Off

Weather: Fog

Lat/Lng: 45.2876,-120.784
Bearing: E
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 111: PT-PV-191 4’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2957,-120.765
Bearing: W
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

Media 112: PT-PV-193 4.5' Extraction Cut Off

Weather: Partly cloudy

Lat/Lng: 45.2883,-120.762
Bearing: SW
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 113: PT-PV-195 3.5' Extraction Cut Off

Weather: Fog

Lat/Lng: 45.2819,-120.781
Bearing: SW
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 114: PT-PV-197 3’ Extraction Cut Off

Weather: Fog

Lat/Lng: 45.2782,-120.787
Bearing: SE
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

Media 115:  PT-PV-198 5’ Extraction Cut off

Weather: Mist

Lat/Lng: 45.2809,-120.775
Bearing: W
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 116: PT-PV-203 3.5’ Extraction Cut Off

Weather: Partly cloudy

Lat/Lng: 45.2852,-120.748
Bearing: NW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 117: PT-PV-204 4’ Extraction Cut off

Weather: Mist

Lat/Lng: 45.2833,-120.759
Bearing: NE
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 118: PT-PV-205 4.5’ Extraction Cut off

Weather: Mist

Lat/Lng: 45.2790,-120.765
Bearing: NE
Date Taken: 11/15/2025

Taken By: Toby Leyba
Tags: Extraction

Media 119: PT-PV-206 3.5’ Extraction Cut off

Weather: Partly cloudy

Lat/Lng: 45.2780,-120.749
Bearing: E
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Extraction

Media 120: PT-PV-207 4’ Extraction Cut Off

Weather: Partly cloudy

Lat/Lng: 45.2746,-120.752
Bearing: E
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 121: PT-PV-211 4’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2665,-120.736
Bearing: NW
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Extraction

Media 122: PT-PV-212 3’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2611,-120.745
Bearing: S
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Extraction

Media 123: PT-PV-214 4’ Extraction Cut off

Weather: Clear

Lat/Lng: 45.2594,-120.733
Bearing: SE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Extraction

Media 124: PT-PV-217 3.5’ Extraction Cut off

Weather: Overcast

Lat/Lng: 45.2701,-120.717
Bearing: E
Date Taken: 11/16/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 125: PT-PV-221 3.5' Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2623,-120.715
Bearing: SW
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Extraction

Media 126: PT-PV-226 3.5’ Extraction Cut off

Weather: Sunny

Lat/Lng: 45.2697,-120.691
Bearing: NE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Extraction

Media 127: PT-PV-230 3.5' Extraction Cut off

Weather: Clear

Lat/Lng: 45.2593,-120.690
Bearing: SE
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Extraction

Media 128: PT-PV-233 4’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2588,-120.718
Bearing: S
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: log

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 129: PT-SB-01 A&B Full Extraction

Weather: Overcast

Lat/Lng: 45.3666,-120.706
Bearing: SW
Date Taken: 12/04/2025

Taken By: Toby Leyba
Tags: extraction

Media 130: PT-SB-02 4’ Extraction Cut Off

Weather: Mist

Lat/Lng: 45.3649,-120.707
Bearing: NW
Date Taken: 12/03/2025

Taken By: Toby Leyba
Tags: extraction

Media 131: PT-WTG-01 A&B Full Extraction

Weather: Overcast

Lat/Lng: 45.4183,-120.701
Bearing: NW
Date Taken: 12/10/2025

Taken By: Toby Leyba
Tags: extraction

Media 132: PT-WTG-02 6’ Extraction Cut Off

Weather: Cloudy

Lat/Lng: 45.3925,-120.665
Bearing: NE
Date Taken: 12/07/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



Powered By Filio

Media 133: PT-WTG-03 4.5’ Extraction Cut Off

Weather: Partly cloudy

Lat/Lng: 45.3545,-120.672
Bearing: NE
Date Taken: 12/06/2025

Taken By: Toby Leyba
Tags: Extraction

Media 134: PT-WTG-04 5’ Extraction Cut Off

Weather: Partly cloudy

Lat/Lng: 45.3424,-120.806
Bearing: NW
Date Taken: 11/20/2025

Taken By: Toby Leyba
Tags: Extraction

Media 135: PT-WTG-05 Full Extraction

Weather: Fog

Lat/Lng: 45.2995,-120.843
Bearing: S
Date Taken: 11/13/2025

Taken By: Toby Leyba
Tags: Extraction

Media 136: PT-WTG-06 3.5’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2643,-120.814
Bearing: N
Date Taken: 11/21/2025

Taken By: Toby Leyba
Tags: Extraction

ANS

Project Name: Speedway

Project Location: Sherman County, OR

Client: Tetra Tech

Project Code:

Preparer: Sarah Ambrozak

Reviewer: Alex Lesky

Report Date: 2025-12-15



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Media 137: PT-WTG-07 3’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2982,-120.760
Bearing: E
Date Taken: 11/18/2025

Taken By: Toby Leyba
Tags: Extraction

Media 138: PT-WTG-08 4’ Extraction Cut Off

Weather: Clear

Lat/Lng: 45.2656,-120.705
Bearing: SW
Date Taken: 11/17/2025

Taken By: Toby Leyba
Tags: Extraction

| | | |
|---|---|---|
| ANS | Project Name: Speedway | |
| | Project Location: Sherman County, OR | |
| | Client: Tetra Tech | Project Code: |
| | Preparer: Sarah Ambrozak | Reviewer: Alex Lesky |
| | Report Date: 2025-12-15 | Page Number: 35 of 35 |

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# Appendix G: Corrosion Evaluation Report

TETRA TECH

**SPEEDWAY SOLAR PROJECT**
**Grass Valley, Sherman County, Oregon**

# SOIL CORROSIVITY BASED ON LABORATORY TESTING

| Boring Location ID | Sample Number | Sampling Depth (feet) | USCS Soil Classification | USCS Soil Group | Lab Electrical Resistivity (Ohm-cm) | Soil Corrosivity Classification U.S. NBS (NIST) |
|---|---|---|---|---|---|---|
| SB-01 | Bulk | 2.0 – 5.0 | Silty Sand | SM | 7,360 | Mildly Corrosive |
| SB-02 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 8,140 | Mildly Corrosive |
| WTG-01 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 8,120 | Mildly Corrosive |
| WTG-02 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 8,500 | Mildly Corrosive |
| WTG-03 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 5,200 | Mildly Corrosive |
| WTG-04 | Bulk | 2.0 – 5.0 | Sandy Lean Clay with Gravel | CL | 7,300 | Mildly Corrosive |
| WTG-05 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 2,600 | Corrosive |
| WTG-06 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 4,200 | Mildly Corrosive |
| WTG-07 | Bulk | 2.0 – 5.0 | Sandy Lean Clay with Gravel | CL | 5,040 | Mildly Corrosive |
| WTG-08 | Bulk | 1.0 – 2.0 | Clayey Gravel with Sand | GC | 5,560 | Mildly Corrosive |
| PV-001 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 13,100 | Mildly Corrosive |
| PV-003 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay with Gravel | CL-ML | 4,400 | Mildly Corrosive |
| PV-008 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 4,400 | Mildly Corrosive |
| PV-012 | Bulk | 2.0 – 5.0 | Silty, Clayey Gravel with Sand | GC-GM | 6,800 | Mildly Corrosive |
| PV-015 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 5,810 | Mildly Corrosive |
| PV-016 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 6,100 | Mildly Corrosive |
| PV-021 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 7,810 | Mildly Corrosive |
| PV-024 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 2,800 | Corrosive |
| PV-026 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 8,890 | Mildly Corrosive |
| PV-029 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 2,290 | Corrosive |
| PV-034 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 3,900 | Mildly Corrosive |
| PV-036 | Bulk | 0.5 – 1.0 | Silty, Clayey Sand with Gravel | SC-SM | 3,900 | Mildly Corrosive |
| PV-040 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 3,740 | Mildly Corrosive |
| PV-043 | Bulk | 2.0 – 5.0 | Clayey Sand | SC | 3,000 | Corrosive |
| PV-045 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 4,100 | Mildly Corrosive |
| PV-047 | Bulk | 2.0 – 5.0 | Poorly Graded Sand with Silty Clay and Gravel | SP-SC | 4,900 | Mildly Corrosive |
| PV-049 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 13,800 | Mildly Corrosive |
| PV-052 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 4,390 | Mildly Corrosive |
| PV-058 | Bulk | 2.0 – 5.0 | Sandy Silt with Gravel | ML | 6,400 | Mildly Corrosive |
| PV-064 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 5,580 | Mildly Corrosive |
| PV-068 | Bulk | 2.0 – 5.0 | Silty Sand with Gravel | SM | 8,100 | Mildly Corrosive |
| PV-071 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 15,900 | Mildly Corrosive |
| PV-074 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 12,900 | Mildly Corrosive |
| PV-079 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 6,870 | Mildly Corrosive |
| PV-081 | Bulk | 2.0 – 5.0 | Lean Clay | CL | 8,550 | Mildly Corrosive |
| PV-084 | Bulk | 2.0 – 5.0 | Fat Clay with Sand | CH | 2,880 | Corrosive |
| PV-089 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 9,320 | Mildly Corrosive |
| PV-090 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 6,460 | Mildly Corrosive |
| PV-095 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 6,560 | Mildly Corrosive |
| PV-097 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 4,050 | Mildly Corrosive |
| PV-100 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 3,820 | Mildly Corrosive |
| PV-105 | Bulk | 1.0 – 2.0 | Silty Sand with Gravel | SM | 8,490 | Mildly Corrosive |
| PV-109 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 6,540 | Mildly Corrosive |
| PV-111 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 10,400 | Mildly Corrosive |
| PV-114 | Bulk | 2.0 – 5.0 | Silty Sand | SM | 2,500 | Corrosive |
| PV-119 | Bulk | 1.0 – 2.0 | Silty Clay with Sand | CL-ML | 3,100 | Mildly Corrosive |

TETRA TECH

**SPEEDWAY SOLAR PROJECT**
**Grass Valley, Sherman County, Oregon**

# SOIL CORROSIVITY BASED ON LABORATORY TESTING

| Boring Location ID | Sample Number | Sampling Depth (feet) | USCS Soil Classification | USCS Soil Group | Lab Electrical Resistivity (Ohm-cm) | Soil Corrosivity Classification U.S. NBS (NIST) |
|---|---|---|---|---|---|---|
| PV-121 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 2,700 | Corrosive |
| PV-123 | Bulk | 2.0 – 5.0 | Sandy Silt | ML | 3,100 | Mildly Corrosive |
| PV-126 | Bulk | 1.0 – 2.0 | Sandy Silt | ML | 2,400 | Corrosive |
| PV-127 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 7,430 | Mildly Corrosive |
| PV-132 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 3,500 | Mildly Corrosive |
| PV-137 | Bulk | 2.0 – 5.0 | Silty Sand with Gravel | SM | 2,000 | Corrosive |
| PV-142 | Bulk | 1.0 – 2.0 | Sandy Silt with Gravel | ML | 1,600 | Corrosive |
| PV-144 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 7,860 | Mildly Corrosive |
| PV-145 | Bulk | 2.0 – 5.0 | Sandy, Silty Clay | CL-ML | 10,500 | Mildly Corrosive |
| PV-151 | Bulk | 1.0 – 2.0 | Gravelly Lean Clay with Sand | CL | 2,300 | Corrosive |
| PV-154 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 3,200 | Mildly Corrosive |
| PV-158 | Bulk | 2.0 – 5.0 | Sandy Silty Clay | CL-ML | 4,400 | Mildly Corrosive |
| PV-160 | Bulk | 2.0 – 5.0 | Clayey Sand | SC | 13,800 | Mildly Corrosive |
| PV-164 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 2,900 | Corrosive |
| PV-169 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 3,500 | Mildly Corrosive |
| PV-172 | Bulk | 2.0 – 5.0 | Silty Clay with Sand | CL-ML | 3,500 | Mildly Corrosive |
| PV-178 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand with Gravel | SC-SM | 3,300 | Mildly Corrosive |
| PV-179 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 2,900 | Corrosive |
| PV-181 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 3,000 | Corrosive |
| PV-183 | Bulk | 2.0 – 5.0 | Lean Clay | CL | 1,800 | Corrosive |
| PV-188 | Bulk | 2.0 – 5.0 | Sandy Silty Clay | CL-ML | 4,700 | Mildly Corrosive |
| PV-189 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 4,400 | Mildly Corrosive |
| PV-193 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 6,250 | Mildly Corrosive |
| PV-195 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 3,200 | Mildly Corrosive |
| PV-198 | Bulk | 2.0 – 5.0 | Sandy Lean Clay | CL | 8,760 | Mildly Corrosive |
| PV-204 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 12,300 | Mildly Corrosive |
| PV-207 | Bulk | 2.0 – 5.0 | Lean Clay with Sand | CL | 6,040 | Mildly Corrosive |
| PV-210 | Bulk | 2.0 – 5.0 | Silty, Clayey Sand | SC-SM | 9,590 | Mildly Corrosive |
| PV-212 | Bulk | 1.0 – 2.0 | Gravelly Lean Clay | CL | 14,400 | Mildly Corrosive |
| PV-214 | Bulk | 2.0 – 5.0 | Clayey Sand with Gravel | SC | 9,190 | Mildly Corrosive |
| PV-217 | Bulk | 1.0 – 3.0 | Clayey Sand with Gravel | SC | 9,440 | Mildly Corrosive |
| PV-223 | Bulk | 1.0 – 2.0 | Lean Clay with Sand | CL | 4,760 | Mildly Corrosive |
| PV-226 | Bulk | 1.0 – 2.0 | Lean Clay with Sand | CL | 2,300 | Corrosive |
| PV-230 | Bulk | 1.0 – 2.0 | Lean Clay with Sand | CL | 6,550 | Mildly Corrosive |
| | | | | **TOTAL TESTS =** | **80** | **16 - Corrosive** |
| | | | | | | **64 - Mildly Corrosive** |

# SOIL CORROSIVITY BASED ON FIELD TESTING

| Electrical Resistivity ID | Field Electrical Resistance at 5 feet depth (ohms-meter) | Soil Corrosivity Classification U.S. NBS (NIST) |
|---|---|---|
| ERT-SB-01 | 52.2 | Mildly Corrosive |
| ERT-SB-02 | 84.4 | Mildly Corrosive |
| ERT-WTG-01 | 80.7 | Mildly Corrosive |
| ERT-WTG-02 | 64.1 | Mildly Corrosive |
| ERT-WTG-03 | 132.6 | Mildly Corrosive |
| ERT-WTG-04 | 48.7 | Mildly Corrosive |
| ERT-WTG-05 | 85.5 | Mildly Corrosive |
| ERT-WTG-06 | 96.4 | Mildly Corrosive |
| ERT-WTG-07 | 80.1 | Mildly Corrosive |
| ERT-WTG-08 | 78.3 | Mildly Corrosive |
| ERT-PV-001 | 95.1 | Mildly Corrosive |
| ERT-PV-003 | 85.6 | Mildly Corrosive |
| ERT-PV-007 | 59.4 | Mildly Corrosive |
| ERT-PV-008 | 108.8 | Mildly Corrosive |
| ERT-PV-012 | 124.3 | Mildly Corrosive |
| ERT-PV-014 | 217.6 | Mildly Corrosive |
| ERT-PV-015 | 68.6 | Mildly Corrosive |
| ERT-PV-016 | 141.8 | Mildly Corrosive |
| ERT-PV-019 | 95.0 | Mildly Corrosive |
| ERT-PV-021 | 51.2 | Mildly Corrosive |
| ERT-PV-024 | 140.7 | Mildly Corrosive |
| ERT-PV-025 | 111.8 | Mildly Corrosive |
| ERT-PV-026 | 69.7 | Mildly Corrosive |
| ERT-PV-029 | 62.7 | Mildly Corrosive |
| ERT-PV-03 | 62.9 | Mildly Corrosive |
| ERT-PV-034 | 143.4 | Mildly Corrosive |
| ERT-PV-035 | 180.6 | Mildly Corrosive |
| ERT-PV-036 | 286.2 | Mildly Corrosive |
| ERT-PV-040 | 104.9 | Mildly Corrosive |
| ERT-PV-043 | 167.1 | Mildly Corrosive |
| ERT-PV-045 | 101.3 | Mildly Corrosive |
| ERT-PV-047 | 91.5 | Mildly Corrosive |
| ERT-PV-049 | 42.4 | Mildly Corrosive |
| ERT-PV-051 | 48.4 | Mildly Corrosive |
| ERT-PV-052 | 9.7 | Corrosive |
| ERT-PV-056 | 12.8 | Corrosive |

# SOIL CORROSIVITY BASED ON FIELD TESTING

| Electrical Resistivity ID | Field Electrical Resistance at 5 feet depth (ohms-meter) | Soil Corrosivity Classification U.S. NBS (NIST) |
|---|---|---|
| ERT-PV-058 | 40.4 | Mildly Corrosive |
| ERT-PV-060 | 8.2 | Corrosive |
| ERT-PV-062 | 53.0 | Mildly Corrosive |
| ERT-PV-064 | 124.9 | Mildly Corrosive |
| ERT-PV-068 | 42.3 | Mildly Corrosive |
| ERT-PV-071 | 240.2 | Mildly Corrosive |
| ERT-PV-072 | 27.5 | Corrosive |
| ERT-PV-074 | 32.6 | Mildly Corrosive |
| ERT-PV-076 | 20.6 | Corrosive |
| ERT-PV-079 | 30.3 | Mildly Corrosive |
| ERT-PV-081 | 24.6 | Corrosive |
| ERT-PV-084 | 9.9 | Corrosive |
| ERT-PV-086 | 13.4 | Corrosive |
| ERT-PV-089 | 28.1 | Corrosive |
| ERT-PV-090 | 41.5 | Mildly Corrosive |
| ERT-PV-093 | 47.2 | Mildly Corrosive |
| ERT-PV-095 | 19.2 | Corrosive |
| ERT-PV-097 | 18.4 | Corrosive |
| ERT-PV-100 | 35.4 | Mildly Corrosive |
| ERT-PV-101 | 22.7 | Corrosive |
| ERT-PV-102 | 63.6 | Mildly Corrosive |
| ERT-PV-105 | 42.6 | Mildly Corrosive |
| ERT-PV-107 | 27.5 | Corrosive |
| ERT-PV-109 | 27.0 | Corrosive |
| ERT-PV-111 | 33.6 | Mildly Corrosive |
| ERT-PV-112 | 29.2 | Corrosive |
| ERT-PV-114 | 37.8 | Mildly Corrosive |
| ERT-PV-117 | 30.9 | Mildly Corrosive |
| ERT-PV-118 | 27.6 | Corrosive |
| ERT-PV-121 | 81.6 | Mildly Corrosive |
| ERT-PV-122 | 86.1 | Mildly Corrosive |
| ERT-PV-123 | 106.9 | Mildly Corrosive |
| ERT-PV-126 | 134.7 | Mildly Corrosive |
| ERT-PV-127 | 17.2 | Corrosive |
| ERT-PV-128 | 223.9 | Mildly Corrosive |
| ERT-PV-130 | 76.7 | Mildly Corrosive |

# SOIL CORROSIVITY BASED ON FIELD TESTING

| Electrical Resistivity ID | Field Electrical Resistance at 5 feet depth (ohms-meter) | Soil Corrosivity Classification U.S. NBS (NIST) |
|---|---|---|
| ERT-PV-132 | 161.1 | Mildly Corrosive |
| ERT-PV-134 | 247.8 | Mildly Corrosive |
| ERT-PV-136 | 112.8 | Mildly Corrosive |
| ERT-PV-137 | 96.6 | Mildly Corrosive |
| ERT-PV-141 | 92.3 | Mildly Corrosive |
| ERT-PV-142 | 177.1 | Mildly Corrosive |
| ERT-PV-144 | 39.1 | Mildly Corrosive |
| ERT-PV-145 | 25.9 | Corrosive |
| ERT-PV-147 | 47.4 | Mildly Corrosive |
| ERT-PV-151 | 90.3 | Mildly Corrosive |
| ERT-PV-154 | 90.7 | Mildly Corrosive |
| ERT-PV-156 | 186.3 | Mildly Corrosive |
| ERT-PV-158 | 101.7 | Mildly Corrosive |
| ERT-PV-160 | 28.2 | Corrosive |
| ERT-PV-162 | 41.4 | Mildly Corrosive |
| ERT-PV-163 | 177.6 | Mildly Corrosive |
| ERT-PV-164 | 59.3 | Mildly Corrosive |
| ERT-PV-167 | 211.5 | Mildly Corrosive |
| ERT-PV-169 | 79.2 | Mildly Corrosive |
| ERT-PV-172 | 283.9 | Mildly Corrosive |
| ERT-PV-173 | 137.3 | Mildly Corrosive |
| ERT-PV-177 | 143.8 | Mildly Corrosive |
| ERT-PV-178 | 109.9 | Mildly Corrosive |
| ERT-PV-179 | 119.7 | Mildly Corrosive |
| ERT-PV-181 | 82.1 | Mildly Corrosive |
| ERT-PV-183 | 452.3 | Mildly Corrosive |
| ERT-PV-184 | 146.3 | Mildly Corrosive |
| ERT-PV-188 | 155.5 | Mildly Corrosive |
| ERT-PV-189 | 289.4 | Mildly Corrosive |
| ERT-PV-191 | 60.5 | Mildly Corrosive |
| ERT-PV-193 | 76.6 | Mildly Corrosive |
| ERT-PV-195 | 98.1 | Mildly Corrosive |
| ERT-PV-197 | 72.2 | Mildly Corrosive |
| ERT-PV-198 | 68.5 | Mildly Corrosive |

TETRA TECH

**SPEEDWAY SOLAR PROJECT**
**Grass Valley, Sherman County, Oregon**

# SOIL CORROSIVITY BASED ON FIELD TESTING

| Electrical Resistivity ID | Field Electrical Resistance at 5 feet depth (ohms-meter) | Soil Corrosivity Classification U.S. NBS (NIST) |
|---|---|---|
| ERT-PV-203 | 140.9 | Mildly Corrosive |
| ERT-PV-204 | 93.6 | Mildly Corrosive |
| ERT-PV-205 | 101.7 | Mildly Corrosive |
| ERT-PV-206 | 102.5 | Mildly Corrosive |
| ERT-PV-207 | 79.6 | Mildly Corrosive |
| ERT-PV-210 | 92.2 | Mildly Corrosive |
| ERT-PV-211 | 71.0 | Mildly Corrosive |
| ERT-PV-212 | 174.9 | Mildly Corrosive |
| ERT-PV-214 | 70.6 | Mildly Corrosive |
| ERT-PV-217 | 108.8 | Mildly Corrosive |
| ERT-PV-221 | 105.9 | Mildly Corrosive |
| ERT-PV-223 | 81.9 | Mildly Corrosive |
| ERT-PV-226 | 143.0 | Mildly Corrosive |
| ERT-PV-230 | 150.7 | Mildly Corrosive |
| **TOTAL TESTS =** | **120** | **19 - Corrosive** |
| | | **101 - Mildly Corrosive** |

October 30, 2025

Tetra Tech

Attn:
Vinay B. Singhal, PE
Civil/Geotechnical Discipline Lead
Cell: 267.760.7050
Direct: 215.702.4097
Vinay.Singhal@tetratech.com
6 Century Drive, Suite 300
Parsippany, NJ 07054

Reference: Atmospheric Corrosion Evaluation for the Speedway solar project in Oregon, USA

Dear Mr. Singhal:

The objective of this report is to evaluate the atmospheric corrosion of galvanized steel structural posts to be installed at the Speedway solar project in Oregon (45.343908°, -120.761344°). The evaluation hereinbelow includes the collection and review of local climate parameters to establish atmospheric corrosivity, identification of corrosion rates, and calculations to establish the service life of the galvanized steel posts.

## 1. Methodology

There are normally two methodologies that can be used to classify the corrosivity of an atmosphere in a specific area. One is developed by the International Standards Organization (ISO) and the other is based on qualitative descriptions.

ISO 9223 and ISO 9224 Standard Method

The ISO 9223 Standard "Corrosion of metals and alloys: Corrosivity of atmospheres – Classification, determination and estimation" and ISO 9224 "Corrosion of metals and alloys: Corrosivity of atmospheres – Guiding values for the corrosivity categories" use four key factors to identify the atmospheric corrosivity at a specific location. The four factors are:

a. Annual average temperature T: T is expressed in degree Celsius (°C).
b. Annual average relative humidity RH. RH is expressed as a percentage (%).
c. Annual average $SO_2$ deposition $P_d$. $P_d$ is expressed as milligrams per square meter per day [mg/ ($m^2$.d)].
d. Annual average $Cl^-$ deposition $S_d$. $S_d$ is expressed as milligrams per square meter per day [mg/($m^2$.d)].

The atmospheric corrosivity categories presented in the ISO 9223 and ISO 9224 standards are:

| Category | Corrosivity |
|---|---|
| C1 | Very Low |

| | |
|---|---|
| C2 | Low |
| C3 | Medium |
| C4 | High |
| C5 | Very High |

The atmospheric corrosion category of the Speedway solar project in Oregon will be calculated based on the ISO methodology that uses average temperature T, average relative humidity RH, average $SO_2$ deposition $P_{d,}$ and average $Cl^-$ deposition $S_d$. Once data are collected and analyzed for each of the four factors, the values are entered into equation (1) and (2) of ISO 9223 to calculate the first-year corrosion rates of carbon steel and zinc in such atmospheric environment.

Corrosivity Categories based on Qualitative Descriptions

The atmospheric corrosivity categories presented in industry publications are:

| Category | Corrosivity |
|---|---|
| Rural | Least corrosive (does not include chemical pollutants) |
| Urban | Corrosive (similar to rural with some industry activity) |
| Industrial | Corrosive/Very Corrosive (exposed to contaminants from heavy industrial) |
| Marine | Very Corrosive (exposed to sea salt/chlorides/moisture) |

The project site is located in northern Oregon and approximately 120 miles away from the Pacific Ocean coastline. The closest city The Dalles is approximate 30 miles northwest of the project site. The site is surrounded by open fields, agricultural lands and wind farms. Accordingly, the atmospheric corrosivity category of the project site can be classified as “Rural”.

The Dose-Response functions used by the ISO 9223 and ISO 9224 standards are considered to be more accurate since it is based on actual environmental data from the area under consideration. In this evaluation, the method of Dose-Response functions based on ISO 9223 and 9224 standards is used.

## 2. Atmospheric Parameters

According to the Koppen-Geiger Climate Classification, the site is classified as Cold Semi-arid climate (BSk). The average annual precipitation at the site is 327.19 mm.

a. Average temperature T: The temperature data in this study are obtained from NOAA (National Oceanic and Atmospheric Administration). The closest weather monitoring station with long term weather records is Municipal airport, which is 27 miles from the site. The data used in this report has been collected hourly between Jan 1996 and Dec 2024. The long-term temperature at the site is calculated by averaging the mean daily temperature. As a result, the annual average temperature T at the project site is 12.88°C.

b. Average relative humidity RH: The relative humidity data in this study are obtained from NOAA (National Oceanic and Atmospheric Administration). The closest weather monitoring station with long term weather records is Municipal airport, which is 27 miles from the site. The data used in this report has been collected hourly between Jan 1996 and Dec 2024. The long-term

relative humidity at the site is calculated by averaging the mean daily relative humidity. As a result, the long-term average relative humidity RH at the site is 60.86%.

c. Average $SO_2$ deposition $P_d$: The $SO_2$ deposition was obtained from the Ozone Monitoring Instrument (OMI) onboard NASA's Aura satellite, which provides spatial and temporal global observations of the key atmospheric pollutants. The data for the project site was the average of the daily mean atmospheric $SO_2$ concentration within 15-km distance from the project site and covered a temporal range from Jan 2005 to Dec 2024. We calculated the $SO_2$ deposition rate from the daily average atmosphere concentration using the equation $P_d$ (deposition) = 0.8 x $P_c$ (concentration) suggested in ISO 9223. The 20-year-average $SO_2$ deposition rate at the project site is 3.86 mg/($m^2$.d).

d. Annual average $Cl^-$ deposition data were collected by the National Atmospheric Deposition Program National Trends Network (NTN). No $Cl^-$ deposition data was found directly at the project site. The closest monitoring station is Columbia River Gorge, WA (WA98), which is approximate 29 miles north of the project site. The average annual $Cl^-$ deposition at Columbia River Gorge between 2002 and 2023 is 5.96 kg/(ha.yr)) or 1.63 mg/($m^2$.d). It is assumed that the project site has the same deposition rate and the value of 1.63 mg/($m^2$.d) is used as $S_d$ in the calculation hereinbelow.

**3. Corrosion Rates Calculations**

Based on ISO 9223, the first-year corrosion rates of steel and zinc could be calculated by equation (1) and (2) of 9223:

$$r_{corr\text{-}steel} = 1.77 \times P_d^{0.52} \times e^{0.020 \times RH - 0.054 \times (T-10)} + 0.102 \times S_d^{0.62} \times e^{0.033 \times RH + 0.040 \times T} \quad \text{(equation 1)}$$

$$r_{corr\text{-}zinc} = 0.0129 \times P_d^{0.44} \times e^{0.046 \times RH - 0.071 \times (T-10)} + 0.0175 \times S_d^{0.57} \times e^{0.008 \times RH + 0.085 \times T} \quad \text{(equation 2)}$$

Using the values deducted earlier, $r_{corr\text{-}zinc}$ and $r_{corr\text{-}steel}$ could be calculated respectively. They are:

$r_{corr\text{-}steel}$ = 12.1 µm/a
$r_{corr\text{-}zinc}$ = 0.4 µm/a

Based on Table 2 of ISO 9223 and the corrosion rates of steel and zinc, the atmospheric environment at the project site could be classified as "C2 Low Corrosivity" for both steel and the zinc coating.

If the uncertainty levels are considered as shown in Annex A of ISO 9223, the corrosion rates of carbon steel and zinc are expected to fall between the following ranges:

8.1 µm/a < $r_{corr\text{-}steel}$ < 18.2 µm/a
0.3 µm/a < $r_{corr\text{-}zinc}$ < 0.6 µm/a

If the upper limits are considered, the atmospheric environment at the project site could be classified as "C2 Low Corrosivity" for both steel and the zinc coating.

## 4. Service Life Calculations

The long-term total corrosion of steel and zinc could be calculated based on equation (1) and the parameters in Table 2 of ISO 9224. A design life of 35 years is used for the following calculations as a demonstration.

$D_{steel\ long\ term}$ in μm = $r_{corr\text{-}steel} \times t^{b\text{-}steel}$
$D_{zinc\ long\ term}$ in μm = $r_{corr\text{-}zinc} \times t^{b\text{-}zinc}$

Where,

t is the exposure time, expressed in years
$r_{corr\text{-}steel}$ and $r_{corr\text{-}zinc}$ are first-year corrosion rates calculated earlier, in μm/a
b-steel and b-zinc are environment-specific time exponent, reported in Table 2 of 9224
b-steel and b-zinc equal 0.523 and 0.813 respectively.

Therefore, after 35 years:

$D_{steel\ long\ term}$ = 77.7 μm
$D_{zinc\ long\ term}$ = 7.2 μm

## 5. Summary of Atmospheric Corrosion

The service life calculations are based on a wall thickness of 130 mils or 3300 μm for steel posts. Two types of zinc coating are evaluated, the first continuous pre-galvanizing per ASTM A653 (G90) and the second post-fabrication batch hot-dipped galvanizing (referred to as HDG thereafter) per ASTM A123. The zinc coating thickness is approximately 0.75 mils (19 μm) for G90 or 3 mils (76 μm) for HDG.

Table 1 below, summarizes the total corrosion and remaining material thickness after the assumed design life of 25 years and 35 years.

Table 1 Summary of Service Life Calculations

| **Material** | | **Steel Tube** | **G90** | **HDG** |
|---|---|---|---|---|
| Original Thickness, μm | | 3300 | 19 | 76 |
| First Year Corrosion Rate, μm/a | | 12.1 | 0.4 | 0.4 |
| After 25 Years | Total Corrosion, μm | 65.1 | 5.5 | 5.5 |
| | Total Corrosion, % | 2% | 29% | 7% |
| | Remaining Materials, μm | 3234.9 | 13.5 | 70.5 |
| After 35 Years | Total Corrosion, μm | 77.7 | 7.2 | 7.2 |
| | Total Corrosion, % | 2% | 38% | 9% |
| | Remaining Materials, μm | 3222.3 | 11.8 | 68.8 |

1. The atmospheric corrosivity at the project site is considered “C2 Low Corrosivity” for both steel and the zinc coating.

2. It is estimated that after 35 years of usage, 91% or 68.8 μm of the HDG zinc coating will remain, and 62% or 11.8 μm of the G90 zinc coating will remain. If G90 coating is selected, limited corrosion is expected on the surfaces of the steel posts. If HDG coating is selected, only aesthetic corrosion is expected at the end of the 35-year design life.

We appreciate the opportunity to work with you. Please feel free to contact us at (443) 510-8955 or yzhang@essentialcorrosion.com if you have any questions and/or require additional information.

Sincerely,

Yaofu Zhang
AMPP Certified Corrosion Specialist
Principal Corrosion Engineer
*www.essentialcorrosion.com*

**Limitations**

This corrosion risk evaluation is prepared by researching previous literatures, reports and data. No actual field tests were conducted for this assessment. The evaluation is based on the parameters and assumptions identified in this report. Project site conditions could be different in the future. Additional material loss, for example, the combined effects of sand erosion and atmospheric corrosion, droplet erosion, galvanic corrosion, etc. are not considered. All services provided herein were performed by personnel who are experienced and skilled in providing these types of services and in accordance with the standards of workmanship in this profession. No other warrantees or guarantees either expressed or implied are provided.

February 24, 2026

Tetra Tech

Attn:
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Civil/Geotechnical Discipline Lead
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Direct: 215.702.4097
Vinay.Singhal@tetratech.com
6 Century Drive, Suite 300
Parsippany, NJ 07054

Reference: Below-Grade (Soil) Corrosion Evaluation for the Speedway solar project in Oregon, USA.

Dear Mr. Singhal:

The objective of the below-grade (soil) corrosion evaluation is to determine the corrosion rate and estimate the life expectancy of the underground sections of the galvanized steel posts at the Speedway solar project in Oregon (45.343908°, -120.761344°). The project site covers an area of approximately 20,000 hectares. The evaluation is based on the geotechnical data gathered and provided by Tetra Tech and ANS published corrosion rates of test coupons, and the project design parameters.

## 1. Background

The project site is located in northern Oregon and approximately 120 miles away from the Pacific Ocean coastline. The closest city The Dalles is approximate 30 miles northwest of the project site. The site is surrounded by open fields, agricultural lands and wind farms, so it is expected that this site may be influenced by rural activities. The corrosion evaluation is based on third-party geotechnical studies/data provided by Tetra Tech and ANS, specifically, 120 in-situ Electrical Resistivity Testing (ERTs) and laboratory chemical analysis on 80 samples.

The solar modules are supported by structural posts, which will be directly driven into the ground. The galvanized steel posts typically are low carbon steel and are coated with zinc through batch or continuous hot-dip galvanizing process. These posts are spaced evenly to support an array of solar panels. The posts are grounded with copper cables, which are connected to the solar plant grounding system. The posts installed at the speedway solar project are assumed to be W6x9 or W8x24 piles, and these posts are expected to be galvanized with 3 mils of HDG zinc coating or 0.75 mils of G90 zinc coating.

## 2. Corrosion Evaluation Data

### 2.1 Soil Resistivity

Soil resistivity is one of the most critical parameters to determine soil corrosivity. Soil resistivity can be measured both in-situ and in the lab. The lower the resistivity, the higher the corrosivity

levels. Although all soil resistivity classifications are similar to each other, there is no single industry-wide classification system. Some systems with too many categories tend to lead to misclassification. Therefore, this evaluation chose to follow the U.S. National Bureau of Standards Study with only three categories and they are shown in Table 1 below [1].

Table 1 – Soil Corrosivity/Soil Resistivity Classification

| **Soil Corrosivity** | **Soil Resistivity (Ω·m)** |
|---|---|
| Extremely Corrosive | Less than 5 |
| Corrosive | 5 to 30 |
| Mildly Corrosive | 30 to 540 |

A total of 10 (ERTs) in-situ soil resistivity were recorded at the electrode spacing of 1 ft, 2 ft, 3 ft, 5 ft, 10 ft, 25 ft, 50 ft, 75 ft, 100 ft and 200 ft. In addition, a total of 110 (ERTs) in-situ soil resistivity measurements were recorded at the electrode spacing of 1 ft, 2 ft, 3 ft, 5 ft, 10 ft, 25 ft and 50 ft. The corrosion tends to develop near the soil/air transitioning point and external moment tend to be concentrated at the same spot of the steel posts. It is understood that the posts would be embedded between the depth of 4 ft and 8 ft, the corrosion evaluation hereinbelow is primarily based on in-situ soil resistivities within the top 5 ft. The in-situ soil resistivity values are summarized in Appendix A.

Among all soil resistivity measurements, only 1 sample locations (1%) is less than 5 Ω·m, 10 sample locations (8%) are greater than 5 Ω·m amd less than 15 Ω·m, 19 sample locations (16%) are greater than 15 Ω·m and less than 30 Ω·m, and the remaining 90 soil sample locations (75%) are greater than 30 Ω·m and less than 540 Ω·m. The soil resistivity data indicate that the overall soil environment is considered “Mildly Corrosive” with “Corrosive” areas based on Table 1. The lowest soil resistivity (most corrosive) is encountered at ERT-PV-0060 at 7.37 Ω·m. The median soil resistivity of all samples 61.95 Ω·m is considered in the galvanic corrosion evaluation of this report for galvanic corrosion calculations. The minimum resistivity is also considered in the overall corrosion evaluation.

The project site has an area of approximately 20,000 acres. With 120 readings taken over the entire project area, each sample represents approximately 167 acres of area.

### 2.2 Soil Chemistries

Soil samples were analyzed in the lab by Tetra Tech. The results were provided to Essential Corrosion Protection for review. A summary of the laboratory results is summarized in Appendix B.

Soil Resistivity

Out of the 80 laboratory samples, 3 have resistivity values greater than 15 Ω·m and less than 30 Ω·m, 71 samples have resistivity between 30 Ω·m and 540 Ω·m, and 6 samples have resistivity greater than 540 Ω·m. It is understood that the resistivity is the “as-is” values. In other words, the samples are not artificially further saturated with water. The results are somewhat different from the in-situ measurements, probably contributed by the fact that laboratory analysis is based on a small amount of soils at a certain location and at a certain depth.

pH (Hydrogen Ion) Tests

Electrolytes are classified as acidic, neutral or alkaline in accordance with the results of pH tests. The effect of pH on the corrosion rate of ferrous metals is relatively stable between pH 4 and 10 [2]. Below 4, the rate increases and above 10, the rate tends to decrease.

The measured pH ranged from 7.5 to 9.8. The pH values of all locations are above the critical value of 4.0 and in the alkaline range. This indicates that the pH of the soil samples is not expected to contribute to the corrosion of the subgrade metallic structures.

Chloride Tests

Laboratory measurements of the concentration (parts per million) of chloride ions are analyzed in conjunction with soil resistivity to determine the corrosivity of soil with respect to metals. Generally, as the chloride concentration increases, the resistivity tends to decrease and the corrosivity increases. Soils with higher chloride concentrations usually represent areas that have been contaminated with salts from a marine environment or from road deicing salts. Chloride ions attack the surfaces of metallic structures and promote accelerated corrosion. There is no widely accepted corrosion threshold for chloride. ACI-318 Building Code limits chloride concentration to 500 ppm [3]. U.S. Federal Highway Administration set the maximum permissible levels of soluble chlorides to be 100 ppm [4].

The reported chloride concentrations of all soil samples at the project site are below 500 ppm. In addition, the chloride levels in 89% of the samples are below 100 ppm, indicating the project site overall has limited concerns for chloride-induced corrosion.

Sulfate Tests

The sulfates of sodium, magnesium, calcium and potassium are often found in soils or dissolved in groundwater. Compared to chloride, the effects of sulfate are less pronounced. However, studies [5] show high levels of sulfate still accelerated corrosion by forming $Fe^{2+}$ or $FeSO_4$ products. Sulfate concentration over 1,500 ppm will have considerable effects. Under anaerobic conditions, high levels of sulfate also allow microbially-induced corrosion to develop by making sulfates readily available for sulfate-reducing bacteria.

The measured sulfate concentrations at the site are all below 1,500 ppm. The sulfate is not expected to significantly contribute to the corrosion of the steel posts at the project site.

RedOx

RedOx potential indicates the oxidation / reduction status of the soil, and is sometimes used as surrogate parameter for the presence of sulfate-reducing bacteria (SRB). A well aerated environment with a RedOx potential over +400 mV is not likely to support SRB activities. Accordingly, a Redox potential over +400 mV is considered “Non-Corrosive”, 200 – 400 mV “Slightly Corrosive”, 100 – 200 mV “Moderately Corrosive”, and less than 100 mV “Severely Corrosive” [2].

Based on the Redox testing results, the project site are “Moderately” corrosive in terms of oxidizing capacity of the soil.

### 3. Site-specific Design Parameters

The site-specific design parameters as provided to ECP are included in Table 4 below and the corrosion evaluation is based on them.

Table 4 – Site-Specific Design Parameters

| | | |
|---|---|---|
| Lowest Resistivity | 7.37 Ω·m | |
| Median Resistivity | 61.95 Ω·m | |
| Total Number of Steel Posts | 1,460,000 | |
| Posts Embedment Depth | 1.82 m | 6 ft |
| Type of Steel Posts | W6x9 and W8x24 | |
| Web Thickness | 4318 µm | 170 mils |
| Post Spacing | 7.62 m | 25 ft |
| Zinc Coating Thickness | 76 µm | 3 mils |
| Total Copper Grounding Length | 237,428 m | 779,000 ft |
| Copper Grounding Depth | 0.8 m | 2.5 ft |
| Equivalent Copper Cable Diameter | 8.23 mm | 0.027 ft |

To be conservative, the post type W6X9 with the thinnest web thickness is used in the calculations hereinbelow, and the largest copper grounding wire is used as well.

### 4. Analysis Methodology and Calculations

The methodology used to evaluate the corrosion of the subsurface metallic structures (posts) at the site is based on known electrochemical parameters and formulas. This methodology uses specific site design data and evaluates the corrosion of the metallic structures by calculating the corrosion rate(s) and the corrosion loss of the below-grade portion of the posts over the life of the plant.

This evaluation focuses on the corrosion of steel and zinc coating. Although copper itself will corrode over time, copper is nobler and generally more resistant to corrosion. When copper is connected with steel and zinc, copper is the cathode. For the purpose of this evaluation, copper corrosion is not considered.

This evaluation includes soil corrosion and galvanic corrosion. The corrosivity of soil affects corrosion both due to soil and due to galvanic connection. The relative surface area of copper/steel and copper/zinc plays a role in determining the galvanic corrosion rates.

In most cases, the contribution of galvanic corrosion to the overall corrosion loss is not significant. The calculations for estimating the combined effects of soil and galvanic corrosion is very complex and must include many factors and assumptions (i.e., galvanic circuits of both copper/zinc and copper/steel; soil corrosion circuits). In this evaluation, the numerical addition of soil corrosion rates and galvanic corrosion rates are calculated at the end of this report as conservative estimates.

### 4.1 Galvanic Corrosion

The galvanic corrosion analysis will be made between three metals for this solar site and these metals are carbon steel, copper and zinc. The galvanic current for the zinc/copper and the steel/copper cell is calculated using ohm's law. The corrosion rate is calculated using the galvanic current and the consumption rate of steel (20 lbs/amp/year) and zinc (24 lbs/amp/year) [5].

#### 4.1.1 Galvanic Current

The galvanic current is calculated based on the following:

$$I = \Delta V / R_{Circuit}$$

Where:
I = corrosion current in amps;
ΔV = voltage of zinc or steel to earth – voltage of copper to earth, in volts; and
$R_{Circuit}$ = circuit resistance in ohms (resistance to remote earth of the posts, the copper and the resistance of inter-connecting cables).

#### 1) Delta V – Driving Voltage (Potential) of Metals

The potential of the metals for this calculation is obtained from published data of Practical Galvanic Series for Metals in Neutral Soils and Water [5]. The voltage/potential is with respect to a copper/copper sulfate reference electrode.

The voltage for:
- Steel is -0.5 to -0.8 volt, -0.6 volt is used
- Zinc is -1.1 volt, -1.05 volt is used for galvanizing steel
- Copper is -0.2 volt. It is assumed that copper will be polarized to -0.4 when connected with steel. It is assumed that copper will be polarized to -0.75 when connected with zinc.

In this valuation, we assumed the native potential of -0.6 V for steel, -1.05 V for zinc and -0.2 V for copper. When copper is connected to steel, copper is assumed to be polarized to the numerical average of the copper native potentials and steel native potentials. "-0.4" is the average of "-0.6" and "-0.2". When copper is connected to zinc, it is assumed that zinc will be polarized even more than the numerical average, as zinc's native potential is more electro-negative.

These assumptions are conservative in nature. In reality, copper's polarized potentials may be much closer to steel's or zinc's native potential (when connected with steel or zinc respectively). However, calculations to estimate the polarized potentials are rather complex, involving the nature of the metals, the relative relationships between the total surface areas of the copper and the zinc/steel, the circuit resistance and etc. In our opinion, using conservative assumptions in this evaluation adequately estimate the risks of galvanic corrosion, without being sidetracked by the efforts to accurately calculate the polarized potentials.

Therefore:
- The Driving Voltage (ΔV) for Copper and Zinc for this evaluation is considered as:

0.3 V (ΔV = 1.05 - 0.75 = 0.3 V)

- The Driving Voltage for Copper and Steel for this evaluation is considered as:

0.2 V (ΔV = 0.6 - 0.4 = 0.2 V)

**2) Circuit Resistance**

The circuit resistance is a function of the earth resistance of the anodic metal, the earth resistance of the cathodic metal, and the linear resistance of the interconnecting cables. The earth resistances of the anodic and cathodic metals are calculated based on published equations, utilizing design and soil resistivity data. The resistance of the interconnecting copper cables is negligible and therefore not considered in the calculations.

Resistance-to-Earth of Posts

The resistance to earth calculations for the galvanized steel posts is performed using Dwight's Formula ("Calculations of Resistance to Ground" by H.B. Dwight):

$$R_{Posts} = (\frac{0.0052\rho}{NL})(\ln\left(\frac{8L}{d}\right) - 1 + \left(\frac{2L}{S}\right)\ln(0.656N))$$

Where:

$R_{Posts}$ = resistance in ohm
L = underground post length in foot (6.0 ft)
N = the number of posts (1,460,000 assumed)
S = post spacing in ft (25 ft assumed)
d = post diameter, calculated based on the cross-section shape of the post (0.522 ft)
ρ = resistivity in Ω-cm (6,195 Ω-cm)

The resistance to remote earth of the steel support posts (the posts in the formula are referred to as anodes) was calculated to be:

$R_{Posts}$ = $3.73 \times 10^{-5}$ ohm

Note: It should be indicated that the resistance values obtained from the above formula will be much lower than the actual resistance of the installed posts because of the paralleling factor due to a very large number of posts and a small area of installation.

The resistance of Copper Cables

The calculation is based on the total length of directly buried ground cables and the use of bare copper grounding cables. The total length of copper ground cables is approximately 779,000 ft. The equivalent cable diameter is approximately 0.027 ft. The resistance-to-earth of the cables installed horizontally is calculated using the Dwight's formula. It is also assumed that the grounding cable will be buried at an average depth of 2.5 ft.

The Dwight's formula for a horizontal cable is:

$$R_{Cables} = \frac{0.00521\rho}{L}(\ln(\frac{4L^2 + 4L\sqrt{S^2 + L^2}}{dS}) + \frac{S}{L} - \frac{\sqrt{S^2 + L^2}}{L} - 1)$$

Where:
$R_{Cables}$ = Resistance to earth of horizontal cable in ohms
L = length of cable in feet (779,000 ft assumed)
ρ = soil resistivity in Ω·cm (6,195 Ω-cm)
S = twice the depth of cable in feet (5 ft)
d = equivalent diameter of cable in feet (0.027 ft)

The resistance to remote earth of the copper cables was calculated to be:

$R_{Cables} = 1.21 \times 10^{-3}$ ohm

The circuit Resistance is: $R_{Circuit} = R_{Posts} + R_{Cables} = 1.25 \times 10^{-3}$ ohm

**3) Galvanic/Corrosion Current**

The galvanic current for the zinc (galvanized posts) and the steel posts is calculated using the formula:

$$I = \Delta V / R_{circuit}$$

Where:
I = corrosion current in amps;
ΔV = the voltage difference between metals in volts;
$R_{Circuit}$ = circuit resistance in ohms

The galvanic currents (excluding the resistance of the utility ground) are:

$I_{zinc}$ = $\Delta V / R_{circuite} = (1.05 – 0.75) / (1.25 \times 10^{-3}) = 240.4$ amps
$I_{steel}$ = $\Delta V / R_{circuite} = (0.6 – 0.4) / (1.25 \times 10^{-3}) = 160.3$ amps

It is expected that the actual galvanic current may be less than the values calculated above because the ΔV between the post and the copper cable will be smaller due to the polarization of copper cables (change in potential) once the galvanized posts are connected to the ground cables.

### 4.1.2 Galvanic Corrosion Rate

The corrosion rate of zinc and steel is calculated based on the galvanic current and their consumption rate (lbs. per ampere per year). The consumption rate for steel is 20 lbs. per ampere per year and the consumption rate of zinc is 24 lbs. per ampere per year.

- Corrosion Rate of zinc: $CR_{zinc} = I_{zinc} \times 24 = 240.4 \times 24 = 5{,}771$ lbs. per year
- Corrosion Rate of steel: $CR_{steel} = I_{steel} \times 20 = 160.3 \times 20 = 3{,}206$lbs. per year

The corrosion rate of zinc and steel can also be expressed in mils per year (mpy) by converting the galvanic current using the corrosion rate formula:

$$CR = I_{corr} \times KEW/dA$$

Where:
CR = The corrosion rate. Its units are given by the choice of K
$I_{corr}$ = The corrosion current in amperes.
K = A constant that defines the units for the corrosion rate ($1.288 \times 10^5\ mils/(A\ cm\ year)$)
EW = The equivalent weight in grams/equivalent, 32.7 for zinc and 27.9 for steel
D = Density in g/cm³, 7.13 for zinc and 7.86 for steel.
A = Area of the sample in cm², 19,043,628,552 cm².

The calculated corrosion rates are:
Corrosion Rate of Zinc: $CR_{zinc} = 7.45 \times 10^{-3}$ mpy
Corrosion Rate of Steel: $CR_{steel} = 3.85 \times 10^{-3}$ mpy
$CR_{steel} = 7.70 \times 10^{-3}$ mpy (both sides)

### 4.2 Soil Corrosion Analysis Using Published Data

The overall soil corrosivity at the project site is considered “Mildly Corrosive” based on the in-situ soil resistivity measurements, and the soil chemistry concentrations.

There have been studies done where bare steel and galvanized steel have been buried in the ground and then periodically retrieved to measure metal loss due to corrosion. One of the best-documented studies of this kind is the National Bureau of Standards study (Romanoff study) [6], which was conducted between 1910 and 1955. The study involves over 300 buried iron and steel samples from many locations across the United States in a variety of soil conditions. Just note, the corrosion rate estimates are based on the assumption that the corrosion rates are primarily influenced by the soil resistivity and the soil pH. In reality, many other factors – including but not limited to the groundwater levels, the soil textures, and the bacteria activities – may also play a role in determining the corrosion rates in different soils. The calculations included herein should be considered order-of-magnitude estimates. Therefore, corrosion rates can only be estimated for a soil resistivity range, but not for a specific value. It should also be noted that this evaluation is based on uniform weight loss calculations and does not account for non-uniform corrosion that could have an impact on the overall results.

Based on the in-situ field data (0-5 ft used), the lowest soil resistivity measured at the project site is 2.85 Ω·m. Based on the testing results of the geotechnical report, the soil environment at the project site is overall alkaline. The corrosion rates of zinc/steel for alkaline soil environment at different resistivity tiers are tabulated in Table 5. The steel corrosion rates indicate both sides of the steel posts.

Table 5 – Corrosion Rates in Alkaline Soils Based on the Romanoff Study

| Soil Resistivity (Ω·m) | Zinc Corrosion Rate (mpy) | Steel Corrosion Rate[a] (mpy) | Copper Corrosion Rate[a] (mpy) |
|---|---|---|---|
| 5-15 | 0.23 | 1.94 | 0.0273 |
| 15-30 | 0.16 | 1.31 | 0.0067 |
| 30+ | 0.13 | 1.17 | |

a. Steel and copper corrode from both sides.

### 4.3 Combined Corrosion Rates

Table 6 – Estimated Corrosion Rates

| Soil resistivity (Ω·m) | Galvanic Corrosion (mpy) | | Soil Corrosion (mpy) | | |
|---|---|---|---|---|---|
| | Zinc | Steel | Zinc | Steel | Copper |
| 5-15 | 0.01 | 0.01 | 0.23 | 1.94 | 0.0273 |
| 15-30 | 0.01 | 0.01 | 0.16 | 1.31 | 0.0067 |
| 30+ | 0.01 | 0.01 | 0.13 | 1.17 | |

a. Steel and copper corrode from both sides.

The calculations for determining a combined corrosion rate for soil and galvanic corrosion is very complex and must include numerous factors and assumptions that are part of the various electrochemical circuits (galvanic corrosion circuits and soil corrosion circuits) that are present at a solar power plant. This is because a galvanic current flow from the post to the soil will change the electrical surface characteristics of the post and as such will affect the electrochemical parameters of the circuit responsible for the development of the localized soil corrosion cells on the post surfaces. In most cases, the galvanic corrosion rates are small and their contribution to the overall corrosion of the posts is not significant. The estimated corrosion rates are conservative in nature. In other words, the corrosion rates used in the calculations are probably higher than the corrosion rates the steel posts would actually experience. Based on calculations, if the maximum corrosion rates are considered (numerical sum of the galvanic corrosion rate and the soil corrosion rate):

Table 7 – Estimated Corrosion Rates

| Soil resistivity (Ω·m) | Total Corrosion (mpy) | | |
|---|---|---|---|
| | Zinc | Steel (both side) | Copper (both side) |
| 5-15 | 0.23 | 1.95 | 0.0273 |
| 15-30 | 0.17 | 1.31 | 0.0067 |
| 30+ | 0.13 | 1.18 | |

### 4.4 Service Life Calculations

Galvanized Steel Corrosion

It is assumed that the steel post starts to corrode once 100% of the zinc coating is consumed. Just note in reality, it is expected that steel will start to corrode some time before the galvanization is fully consumed. The design life is assumed to be 35 years.

HDG zinc coating with 3 mils thickness is used as an example for the life span calculation below.

The corrosion rates in “Mildly Corrosive” soil environment:

$SL_{zinc}$ = 100% × 3 mils / 0.13 mpy = 22 years;

$SL_{steel}$ = 35 – 22 = 13 years

Corrosion of steel over 13 years = 13 × 1.18 mpy = 15.4 mils or 390 μm

The steel pile W6X9 is expected to corrode approximately 15.4 mils or 9% after 35 years.

The corrosion rates in “Corrosive” soil environment:

$SL_{zinc}$ = 100% × 3 mils / 0.23 mpy = 13 years;

$SL_{steel}$ = 35 – 13 = 22 years

Corrosion of steel over 22 years = 22 × 1.95 mpy = 42.9 mils or 1089 μm

The steel pile W6X9 is expected to corrode approximately 42.9 mils or 25.2% after 35 years.

Copper Corrosion

The corrosion rates in “Mildly Corrosive” soil environment:

Corrosion of copper over 35 years = 35 × 0.0067 mpy = 0.23 mils or 5.96 μm
The copper wire is expected to corrode approximately 0.23 mils or 0.07% of the 8230 μm original thickness after 35 years.

The corrosion rates in “Corrosive” soil environment:

Corrosion of copper over 35 years = 35 × 0.0273 mpy = 0.96 mils or 24.3 μm
The copper wire is expected to corrode approximately 0.96 mils or 0.3% of the 8230 μm original thickness after 35 years.

## 1. Conclusions and Recommendations

1. The overall soil environment for the project site is considered “Mildly Corrosive” with “Corrosive” spots.

2. The project site is approximately 20,000 acres. With 120 soil resistivity measurements taken over the entire project area, each sample represents approximately 167 acres. Given this spacing, significant variation between individual readings is possible. Additional samples are recommended.

3. At certain spots such as the edges and the corners of the steel piles, the galvanization may be thinner and may corrode faster. At these locations, steel is expected to experience more severe corrosion. The steel pile may also experience localized corrosion such as pitting and crevice corrosion.

4. In the “Mildly Corrosive” soil environment (resistivity greater than 30 Ω·m) of the project site, it is expected that 3 mils of HDG will take approximately 22 years to be completely corroded at the project site. Limited corrosion (9.0%) of the steel underneath is expected at the end of the 35-year design life.

5. In the “Corrosive” soil environment of the project site with soil resistivity between 5 and 15 Ω·m, it is expected that 3 mils of HDG will take approximately 13 years to be completely corroded at the project site. Some corrosion (25.2%) of the steel underneath is expected at the end of the 35-year design life.

We appreciate the opportunity to work with you on this project. Please feel free to contact us at +1 (443) 510-8955 or yzhang@essentialcorrosion.com if you have any questions and/or require additional information.

Sincerely,

Yaofu Zhang
AMPP Certified Corrosion Specialist
Principal Corrosion Engineer
www.essentialcorrosion.com

**Appendix A In-Situ Soil Resistivity Data**
**Appendix B Laboratory Soil Corrosivity Analysis**

**Limitations**

This corrosion risk evaluation is prepared by researching previous literatures, reports and data. No actual field tests were conducted for this assessment. The evaluation is based on the parameters and assumptions identified in this report. Project site conditions could be different in the future. Additional material loss, for example, microbiologically induced corrosion, crevice corrosion, electrolytic corrosion, etc. are not considered. All services provided herein were performed by personnel who are experienced and skilled in providing these types of services and in accordance with the standards of workmanship in this profession. No other warrantees or guarantees either expressed or implied are provided.

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**Appendix A In-Situ Soil Resistivity Data**

**Appendix A In-Situ Soil Resistivity Data**

| Sample Location | Direction | Depth (ft) | Resistivity (Ω·m) | Sample Location | Direction | Depth (ft) | Resistivity (Ω·m) |
|---|---|---|---|---|---|---|---|
| ERT-PV-001 | NS | 5 | 94.27 | ERT-PV-0128 | EW | 5 | 211.41 |
| ERT-PV-003 | NS | 2 | 61.72 | ERT-PV-0130 | NS | 3 | 73.18 |
| ERT-PV-007 | NS | 5 | 57.45 | ERT-PV-0132 | EW | 5 | 150.51 |
| ERT-PV-008 | NS | 5 | 106.86 | ERT-PV-0134 | EW | 5 | 105.92 |
| ERT-PV-0012 | EW | 5 | 114.30 | ERT-PV-0136 | NS | 5 | 108.51 |
| ERT-PV-0014 | EW | 5 | 212.48 | ERT-PV-0137 | EW | 3 | 90.43 |
| ERT-PV-0015 | NS | 5 | 53.22 | ERT-PV-0141 | NS | 5 | 87.87 |
| ERT-PV-0016 | EW | 5 | 140.09 | ERT-PV-0142 | EW | 2 | 159.56 |
| ERT-PV-0019 | NS | 5 | 74.89 | ERT-PV-0144 | EW | 1 | 15.62 |
| ERT-PV-0021 | EW | 5 | 50.29 | ERT-PV-0145 | NS | 1 | 22.26 |
| ERT-PV-0024 | NS | 5 | 131.73 | ERT-PV-0147 | EW | 1 | 29.93 |
| ERT-PV-0025 | NS | 5 | 108.57 | ERT-PV-0151 | NS | 5 | 85.8 |
| ERT-PV-0026 | NS | 3 | 67.88 | ERT-PV-0154 | EW | 5 | 88.51 |
| ERT-PV-0029 | NS | 5 | 53.49 | ERT-PV-0156 | NS | 5 | 182.76 |
| ERT-PV-0031 | NS | 5 | 61.33 | ERT-PV-0158 | NS | 5 | 94.95 |
| ERT-PV-0034 | EW | 5 | 142.43 | ERT-PV-0160 | EW | 1 | 24.25 |
| ERT-PV-0035 | NS | 5 | 166.17 | ERT-PV-0162 | EW | 5 | 39.68 |
| ERT-PV-0036 | NS | 5 | 284.40 | ERT-PV-0163 | NS | 2 | 156.64 |
| ERT-PV-0040 | EW | 1 | 71.70 | ERT-PV-0164 | EW | 5 | 58.31 |
| ERT-PV-0043 | EW | 5 | 159.49 | ERT-PV-0165 | NS | 1 | 185.26 |
| ERT-PV-0045 | NS | 5 | 90.58 | ERT-PV-0169 | EW | 3 | 70.84 |
| ERT-PV-0047 | NS | 1 | 43.59 | ERT-PV-0172 | NS | 1 | 169.26 |
| ERT-PV-0049 | NS | 1 | 34.02 | ERT-PV-0173 | NS | 5 | 137.25 |
| ERT-PV-0051 | NS | 3 | 43.62 | ERT-PV-0177 | NS | 5 | 140.63 |
| ERT-PV-0052 | NS | 1 | 7.49 | ERT-PV-0178 | EW | 5 | 109.67 |
| ERT-PV-0056 | NS | 1 | 11.51 | ERT-PV-0179 | NS | 5 | 112.04 |
| ERT-PV-0058 | NS | 5 | 38.92 | ERT-PV-0181 | NS | 5 | 79.03 |
| ERT-PV-0060 | NS | 5 | 7.37 | ERT-PV-0183 | NS | 3 | 393.8 |
| ERT-PV-0062 | EW | 1 | 31.39 | ERT-PV-0184 | NS | 5 | 131.89 |
| ERT-PV-0064 | NS | 2 | 89.86 | ERT-PV-0188 | NS | 5 | 155.3 |
| ERT-PV-0068 | NS | 5 | 35.84 | ERT-PV-0189 | EW | 3 | 280.96 |
| ERT-PV-0071 | EW | 5 | 251.03 | ERT-PV-0191 | NS | 1 | 28.21 |
| ERT-PV-0072 | EW | 5 | 23.67 | ERT-PV-0193 | NS | 2 | 56.24 |
| ERT-PV-0074 | EW | 1 | 17.05 | ERT-PV-0195 | EW | 5 | 89.09 |
| ERT-PV-0076 | NS | 1 | 18.61 | ERT-PV-0197 | EW | 1 | 32.8 |
| ERT-PV-0079 | EW | 1 | 14.21 | ERT-PV-0198 | NS | 1 | 65.99 |
| ERT-PV-0081 | EW | 1 | 17.49 | ERT-PV-0203 | NS | 1 | 69.95 |
| ERT-PV-0084 | EW | 5 | 8.67 | ERT-PV-0204 | EW | 1 | 54.59 |
| ERT-PV-0086 | EW | 3 | 11.16 | ERT-PV-0205 | NS | 3 | 81.2 |
| ERT-PV-0089 | NS | 5 | 27.29 | ERT-PV-0206 | NS | 1 | 66.26 |
| ERT-PV-0090 | NS | 5 | 38.28 | ERT-PV-0207 | EW | 1 | 64.95 |
| ERT-PV-0093 | NS | 5 | 43.49 | ERT-PV-0210 | NS | 1 | 82.63 |
| ERT-PV-0095 | NS | 1 | 8.95 | ERT-PV-0211 | EW | 2 | 42.64 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ERT-PV-0097 | NS | 1 | 14.37 | ERT-PV-0212 | NS | 1 | 59.62 |
| ERT-PV-100 | EW | 1 | 9.85 | ERT-PV-0214 | EW | 3 | 60.96 |
| ERT-PV-101 | EW | 5 | 22.13 | ERT-PV-0217 | NS | 1 | 73.94 |
| ERT-PV-0102 | EW | 2 | 48.77 | ERT-PV-0221 | EW | 1 | 56.85 |
| ERT-PV-0105 | EW | 1 | 23.25 | ERT-PV-0223 | EW | 3 | 76.05 |
| ERT-PV-0107 | NS | 5 | 27.19 | ERT-PV-0226 | NS | 5 | 137.68 |
| ERT-PV-0109 | NS | 1 | 12.79 | ERT-PV-0230 | EW | 1 | 55.87 |
| ERT-PV-0111 | EW | 5 | 25.05 | ERT-WTG-01 | NS | 3 | 79.83 |
| ERT-PV-0112 | EW | 5 | 28.04 | ERT-WTG-02 | NS | 5 | 62.18 |
| ERT-PV-0114 | EW | 1 | 25.35 | ERT-WTG-03 | EW | 5 | 121.95 |
| ERT-PV-0117 | NS | 1 | 25.02 | ERT-WTG-04 | NS | 2 | 38.44 |
| ERT-PV-0118 | NS | 1 | 25.39 | ERT-WTG-05 | NS | 3 | 74.8 |
| ERT-PV-0121 | NS | 5 | 76.05 | ERT-WTG-06 | EW | 1 | 71.75 |
| ERT-PV-0122 | EW | 5 | 17.17 | ERT-WTG-07 | EW | 2 | 44.23 |
| ERT-PV-0123 | NS | 5 | 105.43 | ERT-WTG-08 | EW | 1 | 35.2 |
| ERT-PV-0126 | EW | 5 | 127.86 | ERT-SB-01 | EW | 2 | 42.95 |
| ERT-PV-0127 | EW | 5 | 16.38 | ERT-SB-02 | EW | 2 | 49.47 |

**Appendix B Laboratory Soil Corrosivity Analysis**

**Appendix B Laboratory Soil Corrosivity Analysis**

| Sample Location | Depth (ft) | Sulfate (ppm) | Chloride (ppm) | pH | Resistivity, (Ω·m) | Redox (mV) |
|---|---|---|---|---|---|---|
| SB-01 | 2.0 – 5.0 | <15 | 111 | 9.3 | 73.6 | 115 |
| SB-02 | 2.0 – 5.0 | <15 | 66 | 7.9 | 81.4 | 125 |
| WTG-01 | 2.0 – 5.0 | <15 | 24 | 9.5 | 81.2 | 119 |
| WTG-02 | 2.0 – 5.0 | <15 | 69 | 9.6 | 85.0 | 121 |
| WTG-03 | 2.0 – 5.0 | <15 | 27 | 8.8 | 478.0 | 147 |
| WTG-04 | 2.0 – 5.0 | 90 | 42 | 8.3 | 73.0 | 256 |
| WTG-05 | 2.0 – 5.0 | <15 | <10 | 7.8 | 477.0 | 264 |
| WTG-06 | 2.0 – 5.0 | 60 | 12 | 7.7 | 716.0 | 266 |
| WTG-07 | 2.0 – 5.0 | <15 | 36 | 8 | 50.4 | 262 |
| WTG-08 | 1.0 – 2.0 | 90 | 33 | 7.8 | 55.6 | 276 |
| PV-001 | 2.0 – 5.0 | <15 | 93 | 9 | 131.0 | 103 |
| PV-003 | 2.0 – 5.0 | <15 | 75 | 8 | 207.0 | 154 |
| PV-008 | 2.0 – 5.0 | 30 | 2.8 | 8.9 | 328.0 | 133 |
| PV-012 | 2.0 – 5.0 | <15 | 24 | 8 | 326.0 | 157 |
| PV-015 | 2.0 – 5.0 | <15 | 243 | 9.6 | 58.1 | 120 |
| PV-016 | 2.0 – 5.0 | <15 | 24 | 9.5 | 211.0 | 126 |
| PV-021 | 2.0 – 5.0 | <15 | 153 | 9.4 | 78.1 | 123 |
| PV-024 | 2.0 – 5.0 | <15 | 18 | 9.6 | 231.0 | 122 |
| PV-026 | 2.0 – 5.0 | <15 | 42 | 8.9 | 88.9 | 142 |
| PV-029 | 2.0 – 5.0 | 210 | 153 | 8.7 | 22.9 | 125 |
| PV-034 | 2.0 – 5.0 | 30 | 153 | 9.6 | 189.0 | 125 |
| PV-036 | 0.5 – 1.0 | <15 | <10 | 8.6 | 1170.0 | 155 |
| PV-040 | 2.0 – 5.0 | 120 | 60 | 8.7 | 37.4 | 152 |
| PV-043 | 2.0 – 5.0 | 30 | 21 | 8.1 | 320.0 | 216 |
| PV-045 | 2.0 – 5.0 | <15 | 36 | 8.4 | 155.0 | 214 |
| PV-047 | 2.0 – 5.0 | <15 | <10 | 8 | 564.0 | 168 |
| PV-049 | 2.0 – 5.0 | <15 | <10 | 8.1 | 138.0 | 168 |
| PV-052 | 2.0 – 5.0 | <15 | <10 | 8.5 | 43.9 | 163 |
| PV-058 | 2.0 – 5.0 | <15 | 87 | 8.6 | 236.0 | 174 |
| PV-064 | 2.0 – 5.0 | 180 | 144 | 9.7 | 55.8 | 148 |
| PV-068 | 2.0 – 5.0 | 60 | 114 | 7.6 | 1210.0 | 188 |
| PV-071 | 2.0 – 5.0 | 60 | 75 | 7.5 | 159.0 | 175 |
| PV-074 | 2.0 – 5.0 | 150 | 60 | 8.7 | 129.0 | 143 |
| PV-079 | 2.0 – 5.0 | <15 | 105 | 8.1 | 68.7 | 222 |
| PV-081 | 2.0 – 5.0 | 30 | 114 | 8.3 | 85.5 | 219 |
| PV-084 | 2.0 – 5.0 | <15 | 33 | 9.2 | 28.8 | 213 |
| PV-089 | 2.0 – 5.0 | <15 | 39 | 9.5 | 93.2 | 195 |
| PV-090 | 2.0 – 5.0 | <15 | 12 | 9.2 | 64.6 | 166 |
| PV-095 | 2.0 – 5.0 | <15 | 45 | 8.9 | 65.6 | 204 |
| PV-097 | 2.0 – 5.0 | <15 | 69 | 9.5 | 40.5 | 182 |
| PV-100 | 2.0 – 5.0 | <15 | 48 | 8.7 | 38.2 | 205 |
| PV-105 | 1.0 – 2.0 | <15 | 45 | 8.4 | 84.9 | 236 |
| PV-109 | 2.0 – 5.0 | <15 | 60 | 9.2 | 65.4 | 224 |

| | | | | | | |
|---|---|---|---|---|---|---|
| PV-111 | 2.0 – 5.0 | <15 | 39 | 8.6 | 104.0 | 236 |
| PV-114 | 2.0 – 5.0 | 90 | <10 | 8.3 | 221.0 | 238 |
| PV-119 | 1.0 – 2.0 | <15 | <10 | 8.3 | 172.0 | 243 |
| PV-121 | 2.0 – 5.0 | <15 | 21 | 8.8 | 371.0 | 222 |
| PV-123 | 2.0 – 5.0 | <15 | 15 | 9.1 | 194.0 | 187 |
| PV-126 | 1.0 – 2.0 | <15 | <10 | 8.2 | 372.0 | 230 |
| PV-127 | 2.0 – 5.0 | <15 | 66 | 9.6 | 74.3 | 199 |
| PV-132 | 2.0 – 5.0 | 30 | <10 | 8.5 | 462.0 | 216 |
| PV-137 | 2.0 – 5.0 | <15 | 15 | 8.3 | 373.0 | 168 |
| PV-142 | 1.0 – 2.0 | <15 | 12 | 9.8 | 16.0 | 204 |
| PV-144 | 2.0 – 5.0 | <15 | 33 | 8.5 | 78.6 | 174 |
| PV-145 | 2.0 – 5.0 | <15 | 42 | 9.7 | 105.0 | 150 |
| PV-151 | 1.0 – 2.0 | 120 | 18 | 9.8 | 247.0 | 169 |
| PV-154 | 2.0 – 5.0 | 30 | 15 | 8.6 | 239.0 | 189 |
| PV-158 | 2.0 – 5.0 | 120 | 18 | 8.6 | 372.0 | 212 |
| PV-160 | 2.0 – 5.0 | <15 | 39 | 9.7 | 138.0 | 180 |
| PV-164 | 2.0 – 5.0 | <15 | 12 | 8.4 | 199.0 | 225 |
| PV-169 | 2.0 – 5.0 | <15 | 12 | 8.5 | 753.0 | 216 |
| PV-172 | 2.0 – 5.0 | <15 | 15 | 9.2 | 396.0 | 198 |
| PV-178 | 2.0 – 5.0 | <15 | 15 | 9.2 | 285.0 | 193 |
| PV-179 | 2.0 – 5.0 | <15 | 12 | 8.4 | 238.0 | 218 |
| PV-181 | 2.0 – 5.0 | 30 | <10 | 8.4 | 288.0 | 210 |
| PV-183 | 2.0 – 5.0 | 30 | <10 | 8 | 480.0 | 234 |
| PV-188 | 2.0 – 5.0 | <15 | 24 | 9.2 | 553.0 | 216 |
| PV-189 | 2.0 – 5.0 | <15 | 27 | 8.6 | 388.0 | 233 |
| PV-193 | 2.0 – 5.0 | 30 | 42 | 8.4 | 62.5 | 232 |
| PV-195 | 2.0 – 5.0 | 30 | <10 | 8 | 271.0 | 244 |
| PV-198 | 2.0 – 5.0 | <15 | 42 | 8.8 | 87.6 | 234 |
| PV-204 | 2.0 – 5.0 | 30 | 45 | 8.3 | 123.0 | 226 |
| PV-207 | 2.0 – 5.0 | 30 | 84 | 7.6 | 60.4 | 243 |
| PV-210 | 2.0 – 5.0 | <15 | 90 | 8.5 | 95.9 | 226 |
| PV-212 | 1.0 – 2.0 | <15 | 39 | 7.8 | 144.0 | 247 |
| PV-214 | 2.0 – 5.0 | <15 | 24 | 8.5 | 91.9 | 222 |
| PV-217 | 1.0 – 3.0 | 30 | 42 | 8.4 | 94.4 | 242 |
| PV-223 | 1.0 – 2.0 | 30 | 39 | 7.9 | 47.6 | 256 |
| PV-226 | 1.0 – 2.0 | <15 | <10 | 8.1 | 323.0 | 262 |
| PV-230 | 1.0 – 2.0 | <15 | 60 | 8.3 | 65.5 | 259 |

# Appendix H: Seismic Design Parameters

# ASCE Hazards Report

**Address:**
Y:45.365833 X:-120.707000
,

| | | | |
|---|---|---|---|
| **Standard:** | ASCE/SEI 7-22 | **Latitude:** | 45.365833 |
| **Risk Category:** | I | **Longitude:** | -120.707 |
| **Soil Class:** | C - Very Dense Soil and Soft Rock | **Elevation:** | 2198.806392514033 ft (NAVD 88) |

# Seismic

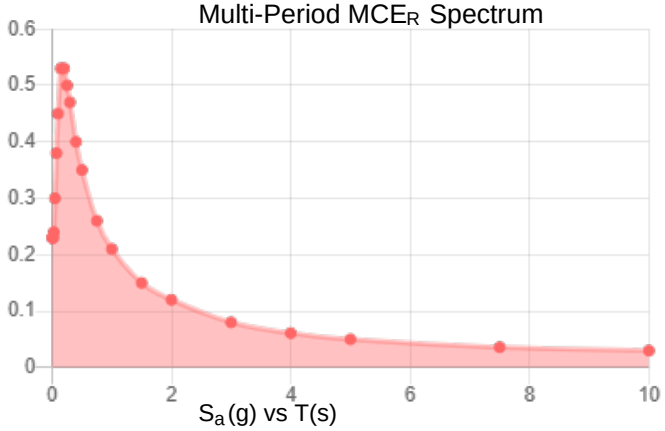
**Site Soil Class:** C - Very Dense Soil and Soft Rock

**Results:**

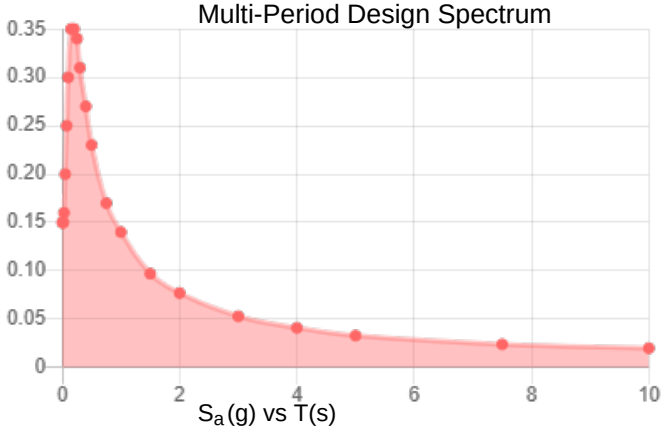
| | | | |
|---|---|---|---|
| $PGA_M$ : | 0.21 | $T_L$ : | 16 |
| $S_{MS}$ : | 0.48 | $S_S$ : | 0.43 |
| $S_{M1}$ : | 0.21 | $S_1$ : | 0.15 |
| $S_{DS}$ : | 0.32 | $V_{S30}$ : | 530 |
| $S_{D1}$ : | 0.14 | | |

**Seismic Design Category: C**

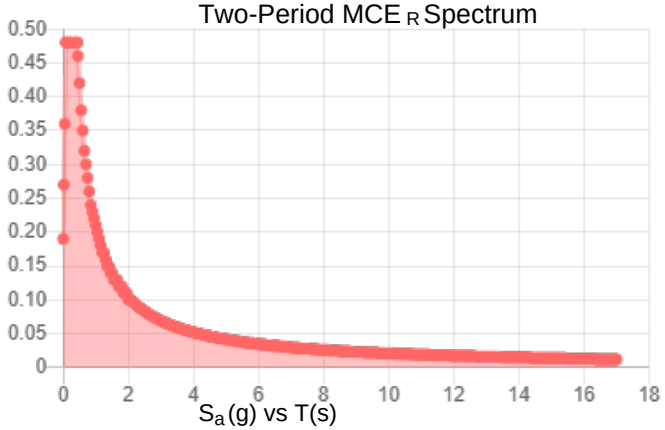
Multi-Period $MCE_R$ Spectrum



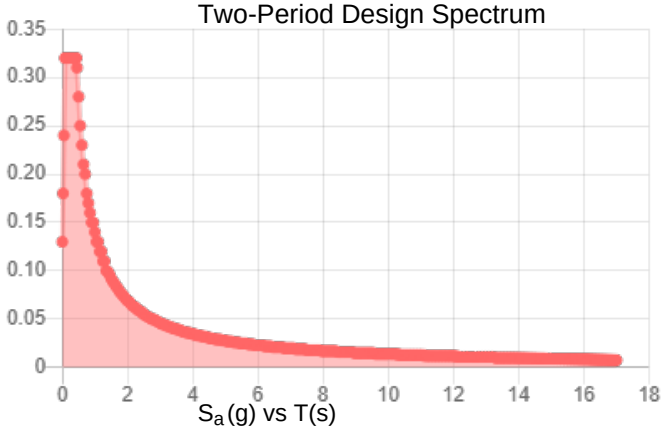

Multi-Period Design Spectrum




Two-Period $MCE_R$ Spectrum




Two-Period Design Spectrum




$MCE_R$ Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Design Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

**Data Accessed:** Tue Oct 14 2025

**Date Source:**
**USGS Seismic Design Maps based on ASCE/SEI 7-22 and ASCE/SEI 7-22 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-22 Ch. 21 are available from USGS.**

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# Appendix I: USDA-NRCS Soil Survey Report

United States Department of Agriculture

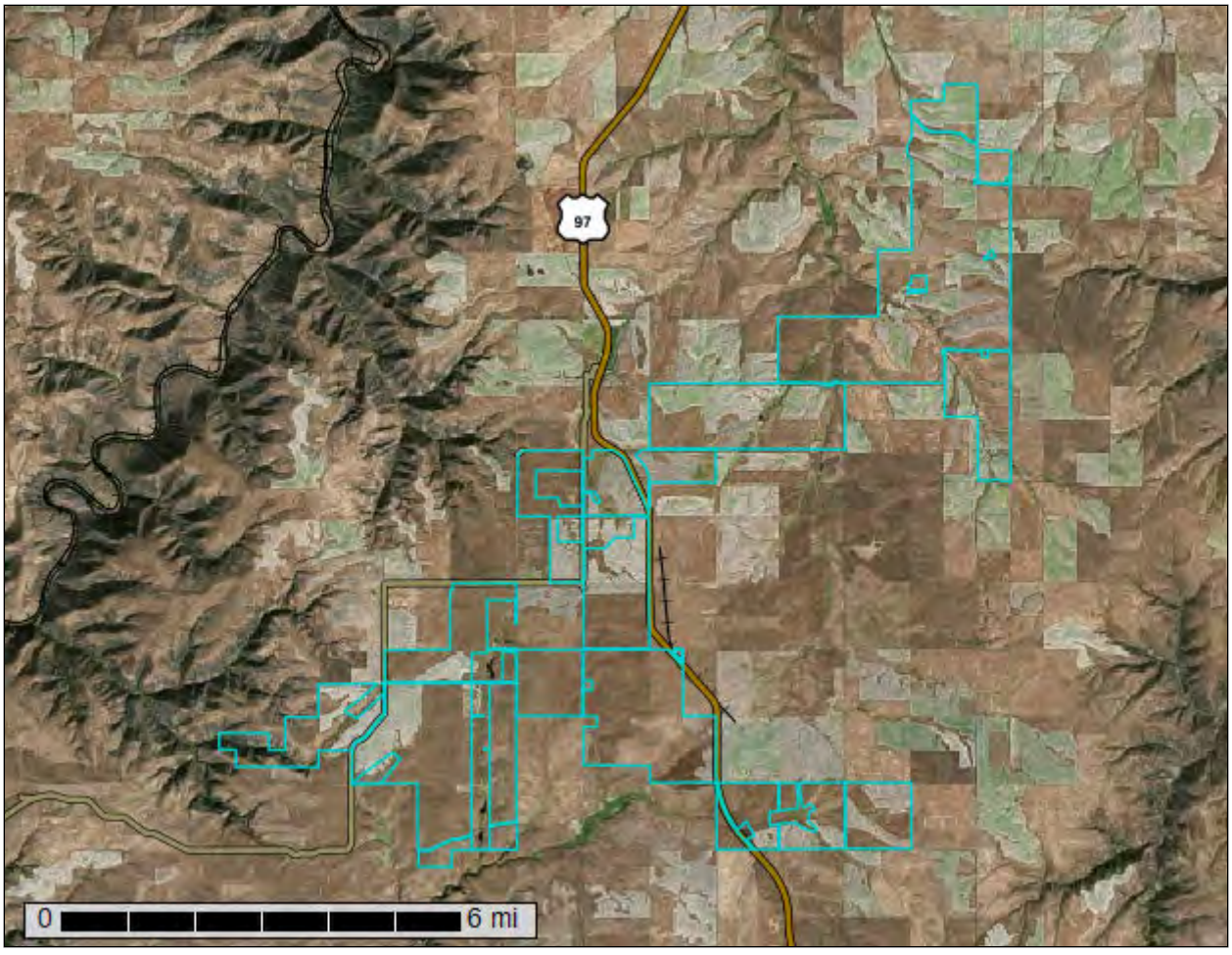
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Sherman County, Oregon

## Speedway Solar - Geotechnical Exploration




September 24, 2025

# Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

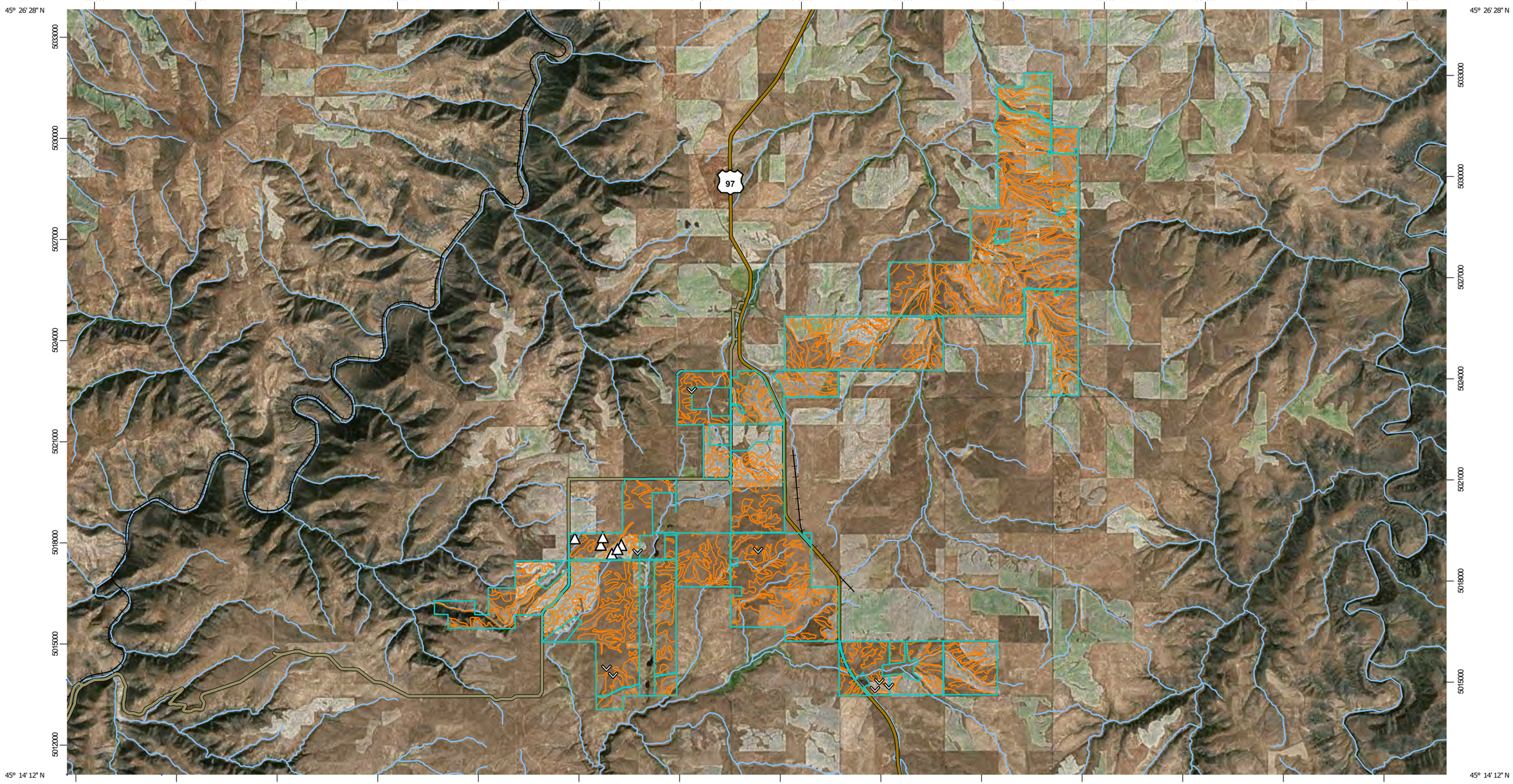
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report
## Soil Map




Map Scale: 1:111,000 if printed on B landscape (17" x 11") sheet.

N

Meters
0 1500 3000 6000 9000

Feet
0 5000 10000 20000 30000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

## MAP LEGEND

**Area of Interest (AOI)**
- Area of Interest (AOI)

**Soils**
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

**Special Point Features**
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

**Water Features**
- Streams and Canals

**Transportation**
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

**Background**
- Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sherman County, Oregon
Survey Area Data: Version 19, Aug 28, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2020—Jun 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| 1B | Anderly silt loam, 1 to 7 percent slopes | 377.4 | 2.0% |
| 1C | Anderly silt loam, 7 to 15 percent slopes | 171.6 | 0.9% |
| 6C | Bakeoven very stony loam, 2 to 20 percent slopes | 10.1 | 0.1% |
| 7B | Cantala silt loam, 1 to 7 percent slopes | 2,229.9 | 11.6% |
| 7C | Cantala silt loam, 7 to 15 percent slopes | 261.6 | 1.4% |
| 8B | Condon silt loam, 1 to 7 percent slopes | 8,864.2 | 46.0% |
| 8C | Condon silt loam, 7 to 15 percent slopes | 1,281.8 | 6.7% |
| 9D | Condon silt loam, 15 to 35 percent north slopes | 31.3 | 0.2% |
| 10C | Condon-Bakeoven complex, 2 to 20 percent slopes | 4,344.6 | 22.6% |
| 12A | Endersby-Hermiston complex, 0 to 3 percent slopes | 310.0 | 1.6% |
| 16D | Lickskillet very stony loam, 7 to 40 percent south slopes | 105.0 | 0.5% |
| 17C | Lickskillet-Bakeoven complex, 2 to 20 percent slopes | 229.0 | 1.2% |
| 18E | Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes | 121.3 | 0.6% |
| 31B | Walla Walla silt loam, 1 to 7 percent slopes | 651.3 | 3.4% |
| 31C | Walla Walla silt loam, 7 to 15 percent slopes | 115.9 | 0.6% |
| 32D | Walla Walla silt loam, 15 to 35 percent north slopes | 0.1 | 0.0% |
| 37E | Wrentham-Rock outcrop complex, 35 to 70 percent north slopes | 147.4 | 0.8% |
| W | Water | 4.8 | 0.0% |
| **Totals for Area of Interest** | | **19,257.3** | **100.0%** |

# Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas

shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# Sherman County, Oregon

## 1B—Anderly silt loam, 1 to 7 percent slopes

### Map Unit Setting

*National map unit symbol:* 221t
*Elevation:* 1,000 to 2,000 feet
*Mean annual precipitation:* 12 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 110 to 150 days
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Anderly and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Anderly

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

#### Typical profile

*Ap1 - 0 to 8 inches:* silt loam
*Ap2 - 8 to 10 inches:* silt loam
*Bw1 - 10 to 18 inches:* silt loam
*Bw2 - 18 to 30 inches:* silt loam
*2R - 30 to 40 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 1 to 7 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 6.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 1C—Anderly silt loam, 7 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 221v
*Elevation:* 1,000 to 2,000 feet
*Mean annual precipitation:* 12 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 110 to 150 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Anderly and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Anderly

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

#### Typical profile

*Ap1 - 0 to 8 inches:* silt loam
*Ap2 - 8 to 10 inches:* silt loam
*Bw1 - 10 to 18 inches:* silt loam
*Bw2 - 18 to 30 inches:* silt loam
*2R - 30 to 40 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 7 to 15 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 6.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 6C—Bakeoven very stony loam, 2 to 20 percent slopes

### Map Unit Setting

*National map unit symbol:* 222r
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Bakeoven and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Bakeoven

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Loess and residuum weathered from basalt

#### Typical profile

*A - 0 to 2 inches:* very stony loam
*Bw1 - 2 to 5 inches:* very cobbly loam
*Bw2 - 5 to 7 inches:* very cobbly loam
*R - 7 to 17 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 2 to 20 percent
*Depth to restrictive feature:* 4 to 10 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very low (about 0.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R008XY150OR - Very Shallow Loam 10-14 PZ
*Hydric soil rating:* No

## 7B—Cantala silt loam, 1 to 7 percent slopes

### Map Unit Setting

*National map unit symbol:* 222s
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Cantala and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cantala

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess

#### Typical profile

*Ap - 0 to 9 inches:* silt loam
*A - 9 to 15 inches:* silt loam
*Bw1 - 15 to 31 inches:* silt loam
*Bw2 - 31 to 60 inches:* silt loam
*R - 60 to 64 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 1 to 7 percent
*Depth to restrictive feature:* 60 to 70 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very high (about 13.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 2e
*Hydrologic Soil Group:* B
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 7C—Cantala silt loam, 7 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 222t
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Cantala and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cantala

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess

#### Typical profile

*Ap - 0 to 9 inches:* silt loam
*A - 9 to 15 inches:* silt loam
*Bw1 - 15 to 31 inches:* silt loam
*Bw2 - 31 to 60 inches:* silt loam
*R - 60 to 64 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 7 to 15 percent
*Depth to restrictive feature:* 60 to 70 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very high (about 13.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* B
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 8B—Condon silt loam, 1 to 7 percent slopes

### Map Unit Setting

*National map unit symbol:* 222v
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Condon and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Condon

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

#### Typical profile

*A1 - 0 to 3 inches:* silt loam
*A2 - 3 to 12 inches:* silt loam
*Bw1 - 12 to 19 inches:* silt loam
*Bw2 - 19 to 30 inches:* silt loam
*R - 30 to 40 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 1 to 7 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 6.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 8C—Condon silt loam, 7 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* 222w
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Condon and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Condon

#### Setting

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

#### Typical profile

*A1 - 0 to 3 inches:* silt loam
*A2 - 3 to 12 inches:* silt loam
*Bw1 - 12 to 19 inches:* silt loam
*Bw2 - 19 to 30 inches:* silt loam
*R - 30 to 40 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 7 to 15 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 6.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 9D—Condon silt loam, 15 to 35 percent north slopes

### Map Unit Setting

*National map unit symbol:* 222x
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Condon, north, and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Condon, North

#### Setting

*Landform:* Canyons
*Landform position (two-dimensional):* Summit, shoulder
*Landform position (three-dimensional):* Interfluve, nose slope, crest
*Down-slope shape:* Convex, linear
*Across-slope shape:* Convex, linear
*Parent material:* Loess over fractured basalt

#### Typical profile

*A1 - 0 to 3 inches:* silt loam
*A2 - 3 to 12 inches:* silt loam
*Bw1 - 12 to 19 inches:* silt loam
*Bw2 - 19 to 30 inches:* silt loam
*R - 30 to 40 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 15 to 35 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 6.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* C
*Ecological site:* R008XY230OR - Droughty North 10-14 PZ
*Hydric soil rating:* No

## 10C—Condon-Bakeoven complex, 2 to 20 percent slopes

### Map Unit Setting

*National map unit symbol:* 221g
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 12 inches
*Mean annual air temperature:* 48 to 50 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Condon and similar soils:* 50 percent
*Bakeoven and similar soils:* 40 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Condon

#### Setting

*Landform:* Patterned ground on plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Convex
*Parent material:* Loess over fractured basalt

#### Typical profile

*A1 - 0 to 3 inches:* silt loam
*A2 - 3 to 12 inches:* silt loam
*Bw1 - 12 to 19 inches:* silt loam
*Bw2 - 19 to 30 inches:* silt loam
*R - 30 to 40 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 2 to 20 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 6.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* C
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

**Description of Bakeoven**

**Setting**

*Landform:* Patterned ground on plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess and residuum weathered from basalt

**Typical profile**

*A - 0 to 2 inches:* very stony loam
*Bw1 - 2 to 5 inches:* very cobbly loam
*Bw2 - 5 to 7 inches:* very cobbly loam
*R - 7 to 17 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 2 to 20 percent
*Depth to restrictive feature:* 4 to 10 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very low (about 0.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R008XY150OR - Very Shallow Loam 10-14 PZ
*Hydric soil rating:* No

## 12A—Endersby-Hermiston complex, 0 to 3 percent slopes

**Map Unit Setting**

*National map unit symbol:* 221j
*Elevation:* 200 to 2,000 feet
*Mean annual precipitation:* 11 to 16 inches
*Mean annual air temperature:* 48 to 54 degrees F
*Frost-free period:* 100 to 170 days
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Endersby and similar soils:* 50 percent
*Hermiston and similar soils:* 40 percent
*Minor components:* 3 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Endersby

#### Setting

*Landform:* Terraces
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 16 inches:* fine sandy loam
*H2 - 16 to 31 inches:* fine sandy loam
*H3 - 31 to 40 inches:* very gravelly sand
*H4 - 40 to 60 inches:* stratified loamy sand to silt loam

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Somewhat excessively drained
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* Rare
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Moderate (about 7.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 1
*Land capability classification (nonirrigated):* 2c
*Hydrologic Soil Group:* A
*Ecological site:* R010XY005OR - LOAMY BOTTOM
*Hydric soil rating:* No

### Description of Hermiston

#### Setting

*Landform:* Flood plains
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Silty alluvium

#### Typical profile

*H1 - 0 to 21 inches:* silt loam
*H2 - 21 to 37 inches:* very fine sandy loam
*H3 - 37 to 60 inches:* silt loam

#### Properties and qualities

*Slope:* 0 to 3 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* Rare
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 10 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* High (about 11.6 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 1
*Land capability classification (nonirrigated):* 2c
*Hydrologic Soil Group:* B
*Ecological site:* R010XY005OR - LOAMY BOTTOM
*Hydric soil rating:* No

**Minor Components**

**Riverwash**

*Percent of map unit:* 3 percent
*Landform:* Flood plains
*Hydric soil rating:* Yes

## 16D—Lickskillet very stony loam, 7 to 40 percent south slopes

**Map Unit Setting**

*National map unit symbol:* 221n
*Elevation:* 200 to 2,800 feet
*Mean annual precipitation:* 11 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Lickskillet, south, and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Lickskillet, South**

**Setting**

*Landform:* Canyons
*Landform position (two-dimensional):* Backslope
*Landform position (three-dimensional):* Side slope
*Down-slope shape:* Convex
*Across-slope shape:* Convex
*Parent material:* Loess mixed with colluvium from basalt

**Typical profile**

*A - 0 to 9 inches:* very stony loam
*Bw1 - 9 to 13 inches:* very gravelly loam
*Bw2 - 13 to 19 inches:* very gravelly clay loam
*R - 19 to 29 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 7 to 40 percent
*Depth to restrictive feature:* 12 to 20 inches to lithic bedrock

*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 2.0 inches)

**Interpretive groups**
*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R008XY210OR - Shallow South 10-14 PZ
*Hydric soil rating:* No

## 17C—Lickskillet-Bakeoven complex, 2 to 20 percent slopes

**Map Unit Setting**
*National map unit symbol:* 221p
*Elevation:* 2,000 to 2,600 feet
*Mean annual precipitation:* 11 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Not prime farmland

**Map Unit Composition**
*Lickskillet and similar soils:* 50 percent
*Bakeoven and similar soils:* 40 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Lickskillet**

**Setting**
*Landform:* Canyons
*Landform position (two-dimensional):* Summit, shoulder
*Landform position (three-dimensional):* Interfluve, nose slope, crest
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess mixed with colluvium from basalt

**Typical profile**
*A - 0 to 9 inches:* very stony loam
*Bw1 - 9 to 13 inches:* very gravelly loam
*Bw2 - 13 to 19 inches:* very gravelly clay loam
*R - 19 to 29 inches:* unweathered bedrock

**Properties and qualities**
*Slope:* 2 to 20 percent
*Depth to restrictive feature:* 12 to 20 inches to lithic bedrock
*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 2.0 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R008XY140OR - Shallow Loam 10-14 PZ
*Hydric soil rating:* No

## Description of Bakeoven

**Setting**

*Landform:* Canyons
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess mixed with colluvium from basalt

**Typical profile**

*A - 0 to 2 inches:* very stony loam
*Bw1 - 2 to 5 inches:* very cobbly loam
*Bw2 - 5 to 7 inches:* very cobbly loam
*R - 7 to 17 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 2 to 20 percent
*Depth to restrictive feature:* 4 to 10 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Very low (about 0.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R008XY150OR - Very Shallow Loam 10-14 PZ
*Hydric soil rating:* No

## 18E—Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes

### Map Unit Setting

*National map unit symbol:* 221q
*Elevation:* 200 to 2,800 feet
*Mean annual precipitation:* 11 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Lickskillet, south, and similar soils:* 55 percent
*Rock outcrop:* 30 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Lickskillet, South

#### Setting

*Landform:* Canyons
*Landform position (two-dimensional):* Backslope, footslope
*Landform position (three-dimensional):* Head slope, side slope
*Down-slope shape:* Concave
*Across-slope shape:* Concave
*Parent material:* Loess mixed with colluvium from basalt

#### Typical profile

*A - 0 to 9 inches:* very stony loam
*Bw1 - 9 to 13 inches:* very gravelly loam
*Bw2 - 13 to 19 inches:* very gravelly clay loam
*R - 19 to 29 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 40 to 70 percent
*Depth to restrictive feature:* 12 to 20 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Calcium carbonate, maximum content:* 5 percent
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
*Available water supply, 0 to 60 inches:* Very low (about 2.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* D
*Ecological site:* R008XY210OR - Shallow South 10-14 PZ
*Hydric soil rating:* No

**Description of Rock Outcrop**

**Setting**

*Landform:* Canyons
*Landform position (two-dimensional):* Shoulder, backslope
*Landform position (three-dimensional):* Side slope, free face
*Down-slope shape:* Convex
*Across-slope shape:* Convex

**Typical profile**

*R - 0 to 60 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 40 to 70 percent
*Depth to restrictive feature:* 0 inches to lithic bedrock

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8
*Hydrologic Soil Group:* D
*Hydric soil rating:* No

## 31B—Walla Walla silt loam, 1 to 7 percent slopes

**Map Unit Setting**

*National map unit symbol:* 2229
*Elevation:* 1,000 to 2,000 feet
*Mean annual precipitation:* 12 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 110 to 150 days
*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Walla walla and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Walla Walla**

**Setting**

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

**Typical profile**

*H1 - 0 to 17 inches:* silt loam
*H2 - 17 to 66 inches:* silt loam

**Properties and qualities**

*Slope:* 1 to 7 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* High (about 11.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 2e
*Land capability classification (nonirrigated):* 2e
*Hydrologic Soil Group:* B
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 31C—Walla Walla silt loam, 7 to 15 percent slopes

**Map Unit Setting**

*National map unit symbol:* 222b
*Elevation:* 1,000 to 2,000 feet
*Mean annual precipitation:* 12 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 110 to 150 days
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Walla walla and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Walla Walla**

**Setting**

*Landform:* Plateaus
*Landform position (two-dimensional):* Summit
*Landform position (three-dimensional):* Interfluve
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

**Typical profile**

*H1 - 0 to 17 inches:* silt loam
*H2 - 17 to 66 inches:* silt loam

**Properties and qualities**

*Slope:* 7 to 15 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* High (about 11.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 3e
*Land capability classification (nonirrigated):* 3e
*Hydrologic Soil Group:* B
*Ecological site:* R008XY120OR - Loamy 12-14 PZ
*Hydric soil rating:* No

## 32D—Walla Walla silt loam, 15 to 35 percent north slopes

**Map Unit Setting**

*National map unit symbol:* 222c
*Elevation:* 1,000 to 2,000 feet
*Mean annual precipitation:* 12 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 110 to 150 days
*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Walla walla, north, and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Walla Walla, North**

**Setting**

*Landform:* Canyons
*Landform position (two-dimensional):* Footslope
*Landform position (three-dimensional):* Interfluve, base slope
*Down-slope shape:* Linear
*Across-slope shape:* Linear
*Parent material:* Loess over fractured basalt

**Typical profile**

*H1 - 0 to 17 inches:* silt loam
*H2 - 17 to 66 inches:* silt loam

**Properties and qualities**

*Slope:* 15 to 35 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* High (about 11.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e
*Hydrologic Soil Group:* B
*Ecological site:* R008XY220OR - North 10-14 PZ
*Hydric soil rating:* No

## 37E—Wrentham-Rock outcrop complex, 35 to 70 percent north slopes

### Map Unit Setting

*National map unit symbol:* 222k
*Elevation:* 200 to 2,800 feet
*Mean annual precipitation:* 11 to 13 inches
*Mean annual air temperature:* 48 to 52 degrees F
*Frost-free period:* 100 to 150 days
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Wrentham, north, and similar soils:* 60 percent
*Rock outcrop:* 25 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Wrentham, North

#### Setting

*Landform:* Canyons
*Landform position (two-dimensional):* Summit, shoulder
*Landform position (three-dimensional):* Interfluve, nose slope, crest
*Down-slope shape:* Concave
*Across-slope shape:* Concave
*Parent material:* Loess over fractured basalt

#### Typical profile

*H1 - 0 to 17 inches:* silt loam
*H2 - 17 to 32 inches:* extremely cobbly silt loam
*H3 - 32 to 36 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 35 to 70 percent
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock
*Drainage class:* Well drained
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)
*Depth to water table:* More than 80 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Available water supply, 0 to 60 inches:* Low (about 4.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 7s
*Hydrologic Soil Group:* C
*Ecological site:* R008XY230OR - Droughty North 10-14 PZ
*Hydric soil rating:* No

**Description of Rock Outcrop**

**Setting**

*Landform:* Canyons
*Landform position (three-dimensional):* Side slope, free face
*Down-slope shape:* Convex
*Across-slope shape:* Convex

**Typical profile**

*R - 0 to 60 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 35 to 70 percent
*Depth to restrictive feature:* 0 inches to lithic bedrock

**Interpretive groups**

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 8
*Hydrologic Soil Group:* D
*Hydric soil rating:* No

## W—Water

**Map Unit Composition**

*Water:* 100 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

# Soil Information for All Uses

## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## Building Site Development

Building site development interpretations are designed to be used as tools for evaluating soil suitability and identifying soil limitations for various construction purposes. As part of the interpretation process, the rating applies to each soil in its described condition and does not consider present land use. Example interpretations can include corrosion of concrete and steel, shallow excavations, dwellings with and without basements, small commercial buildings, local roads and streets, and lawns and landscaping.

### Corrosion of Concrete

ENG

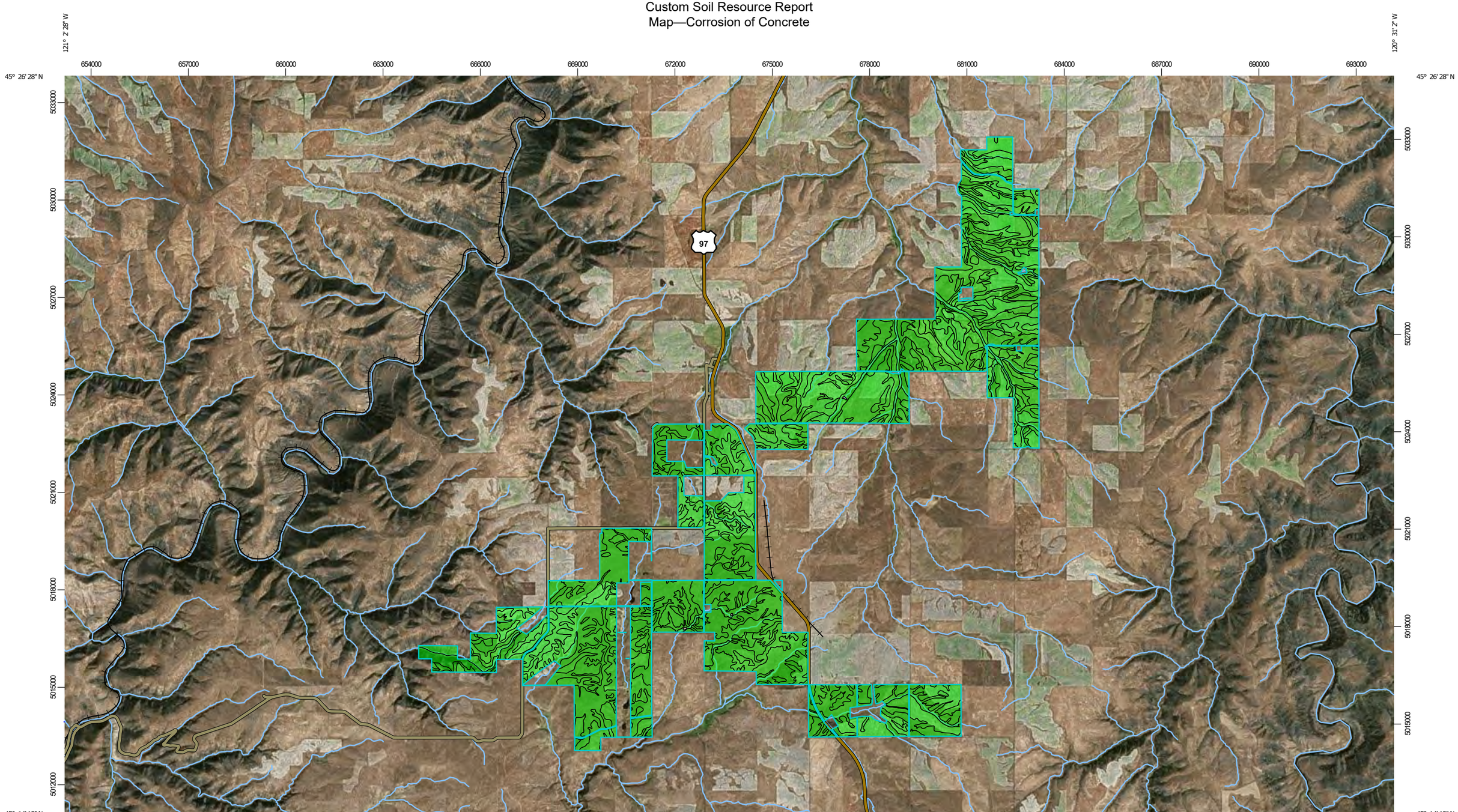
Engineering

AGR

Agronomy

"Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens concrete. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the concrete in installations that are entirely within one kind of soil or within one soil layer.

The risk of corrosion is expressed as "low," "moderate," or "high."




Map Scale: 1:111,000 if printed on B landscape (17" x 11") sheet.

N

Meters
0 1500 3000 6000 9000

Feet
0 5000 10000 20000 30000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

High

Moderate

Low

Not rated or not available

**Soil Rating Lines**

High

Moderate

Low

Not rated or not available

**Soil Rating Points**

High

Moderate

Low

Not rated or not available

**Water Features**

Streams and Canals

**Transportation**

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

**Background**

Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sherman County, Oregon
Survey Area Data: Version 19, Aug 28, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2020—Jun 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Table—Corrosion of Concrete

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| 1B | Anderly silt loam, 1 to 7 percent slopes | Low | 377.4 | 2.0% |
| 1C | Anderly silt loam, 7 to 15 percent slopes | Low | 171.6 | 0.9% |
| 6C | Bakeoven very stony loam, 2 to 20 percent slopes | Low | 10.1 | 0.1% |
| 7B | Cantala silt loam, 1 to 7 percent slopes | Low | 2,229.9 | 11.6% |
| 7C | Cantala silt loam, 7 to 15 percent slopes | Low | 261.6 | 1.4% |
| 8B | Condon silt loam, 1 to 7 percent slopes | Low | 8,864.2 | 46.0% |
| 8C | Condon silt loam, 7 to 15 percent slopes | Low | 1,281.8 | 6.7% |
| 9D | Condon silt loam, 15 to 35 percent north slopes | Low | 31.3 | 0.2% |
| 10C | Condon-Bakeoven complex, 2 to 20 percent slopes | Low | 4,344.6 | 22.6% |
| 12A | Endersby-Hermiston complex, 0 to 3 percent slopes | Low | 310.0 | 1.6% |
| 16D | Lickskillet very stony loam, 7 to 40 percent south slopes | Low | 105.0 | 0.5% |
| 17C | Lickskillet-Bakeoven complex, 2 to 20 percent slopes | Low | 229.0 | 1.2% |
| 18E | Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes | Low | 121.3 | 0.6% |
| 31B | Walla Walla silt loam, 1 to 7 percent slopes | Low | 651.3 | 3.4% |
| 31C | Walla Walla silt loam, 7 to 15 percent slopes | Low | 115.9 | 0.6% |
| 32D | Walla Walla silt loam, 15 to 35 percent north slopes | Low | 0.1 | 0.0% |
| 37E | Wrentham-Rock outcrop complex, 35 to 70 percent north slopes | Low | 147.4 | 0.8% |
| W | Water | | 4.8 | 0.0% |
| **Totals for Area of Interest** | | | **19,257.3** | **100.0%** |

### Rating Options—Corrosion of Concrete

*Aggregation Method:* Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

*Component Percent Cutoff: None Specified*

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

*Tie-break Rule:* Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

## Corrosion of Steel

ENG

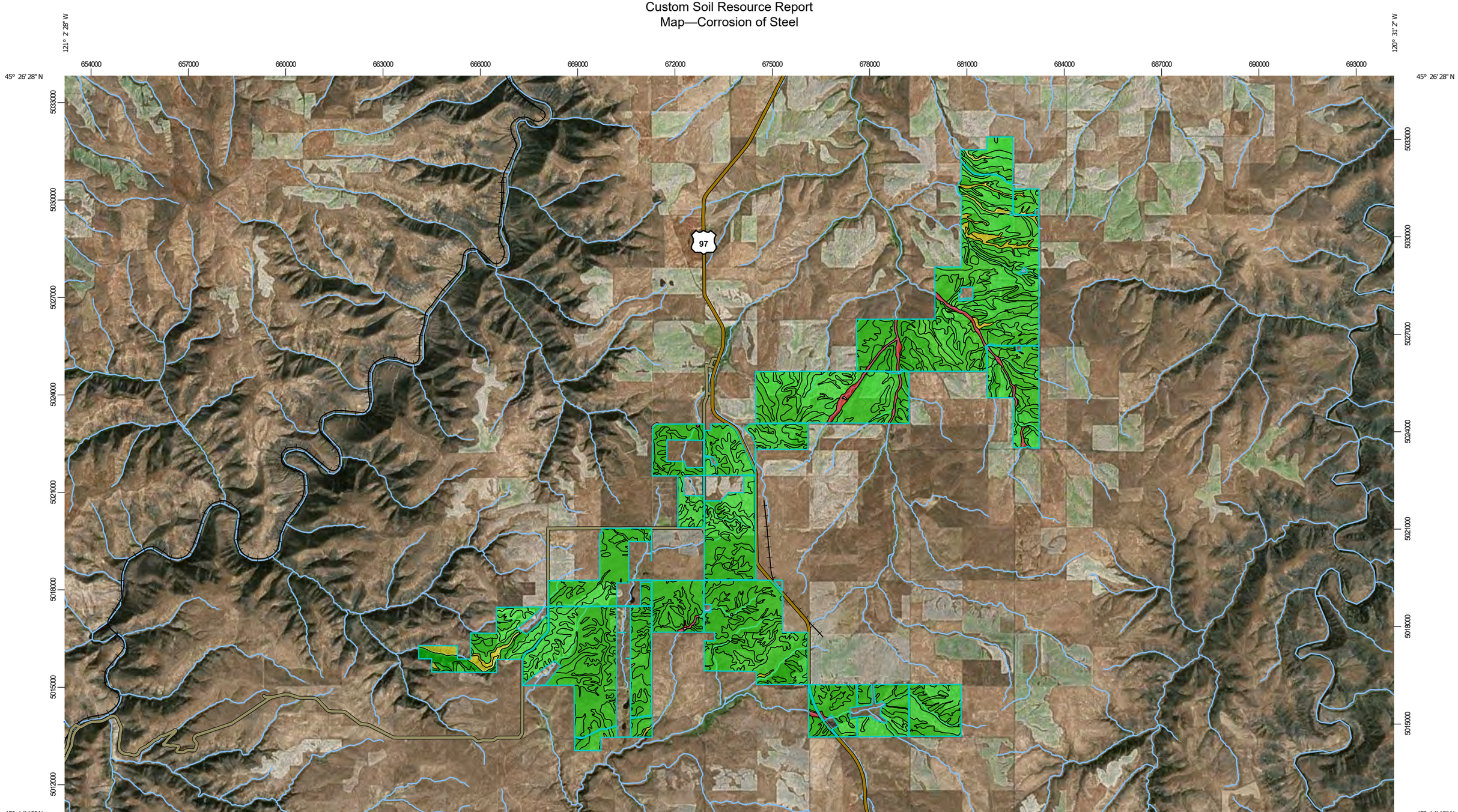
Engineering

AGR

Agronomy

"Risk of corrosion" pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel in installations that are entirely within one kind of soil or within one soil layer.

The risk of corrosion is expressed as "low," "moderate," or "high."




Map Scale: 1:111,000 if printed on B landscape (17" x 11") sheet.

N

Meters
0 1500 3000 6000 9000

Feet
0 5000 10000 20000 30000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

High

Moderate

Low

Not rated or not available

**Soil Rating Lines**

High

Moderate

Low

Not rated or not available

**Soil Rating Points**

High

Moderate

Low

Not rated or not available

**Water Features**

Streams and Canals

**Transportation**

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

**Background**

Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sherman County, Oregon
Survey Area Data: Version 19, Aug 28, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 1, 2020—Jun 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Table—Corrosion of Steel

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| 1B | Anderly silt loam, 1 to 7 percent slopes | Low | 377.4 | 2.0% |
| 1C | Anderly silt loam, 7 to 15 percent slopes | Low | 171.6 | 0.9% |
| 6C | Bakeoven very stony loam, 2 to 20 percent slopes | Low | 10.1 | 0.1% |
| 7B | Cantala silt loam, 1 to 7 percent slopes | Low | 2,229.9 | 11.6% |
| 7C | Cantala silt loam, 7 to 15 percent slopes | Low | 261.6 | 1.4% |
| 8B | Condon silt loam, 1 to 7 percent slopes | Low | 8,864.2 | 46.0% |
| 8C | Condon silt loam, 7 to 15 percent slopes | Low | 1,281.8 | 6.7% |
| 9D | Condon silt loam, 15 to 35 percent north slopes | Low | 31.3 | 0.2% |
| 10C | Condon-Bakeoven complex, 2 to 20 percent slopes | Low | 4,344.6 | 22.6% |
| 12A | Endersby-Hermiston complex, 0 to 3 percent slopes | High | 310.0 | 1.6% |
| 16D | Lickskillet very stony loam, 7 to 40 percent south slopes | Moderate | 105.0 | 0.5% |
| 17C | Lickskillet-Bakeoven complex, 2 to 20 percent slopes | Moderate | 229.0 | 1.2% |
| 18E | Lickskillet-Rock outcrop complex, 40 to 70 percent south slopes | Moderate | 121.3 | 0.6% |
| 31B | Walla Walla silt loam, 1 to 7 percent slopes | Low | 651.3 | 3.4% |
| 31C | Walla Walla silt loam, 7 to 15 percent slopes | Low | 115.9 | 0.6% |
| 32D | Walla Walla silt loam, 15 to 35 percent north slopes | Low | 0.1 | 0.0% |
| 37E | Wrentham-Rock outcrop complex, 35 to 70 percent north slopes | Low | 147.4 | 0.8% |
| W | Water | | 4.8 | 0.0% |
| **Totals for Area of Interest** | | | **19,257.3** | **100.0%** |

## Rating Options—Corrosion of Steel

*Aggregation Method:* Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

*Component Percent Cutoff: None Specified*

Components whose percent composition is below the cutoff value will not be considered. If no cutoff value is specified, all components in the database will be considered. The data for some contrasting soils of minor extent may not be in the database, and therefore are not considered.

*Tie-break Rule:* Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

# References

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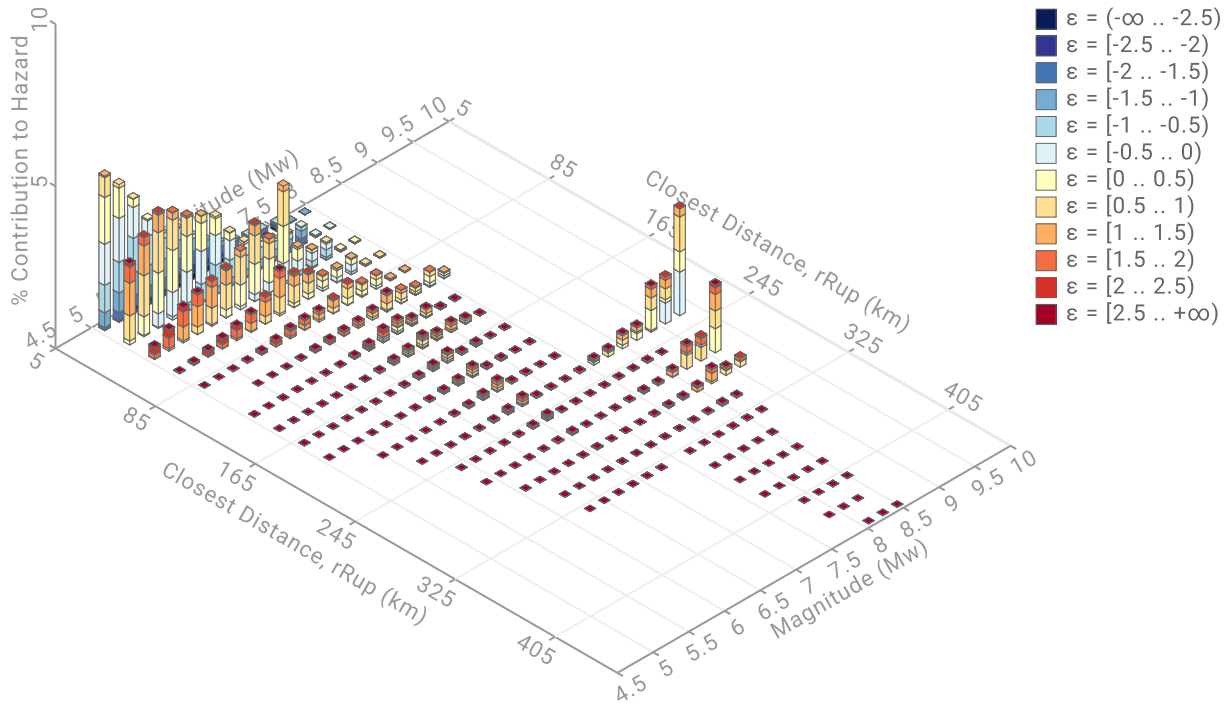
# Attachment B-3. Probabilistic Seismic Hazard Deaggregation – 475-Year Return Time

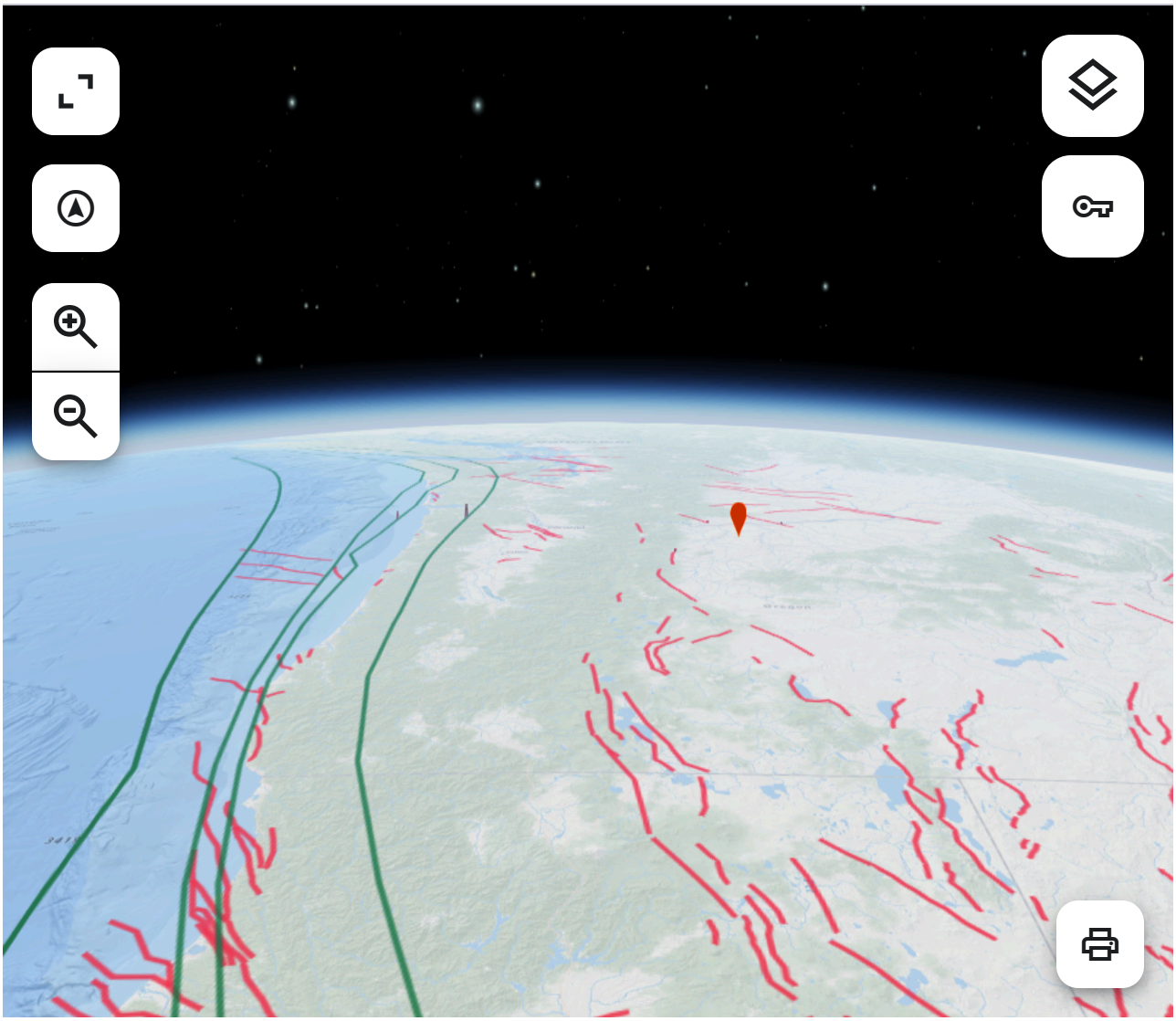
# Disaggregation Report

## Disaggregation

Save Plot as PNG



## Geographical Disaggregation




## Parameter Summary

**Model**: NSHM Conterminous U.S. 2023

**Latitude**: 45.342041 °

**Longitude**: -120.758384 °

**Site Class**: B (Vs30 1080)

**Intensity Measure Type**: PGA

**Return Period**: 475 (10% in 50)

**Component**: Total

# Disaggregation Summary: Total

## Disaggregation targets

**Return period** : 475 yrs

**Exceedance rate** : 2.105e-3 $yr^{-1}$

**PGA ground motion** : 5.573e-2 g

## Recovered targets

**Return period** : 472.88127 yrs

**Exceedance rate** : 2.115e-3 $yr^{-1}$

## Totals

**Binned** : 100 %

**Residual** : 0 %

**Trace** : 1.65 %

## Mean (over all sources)

**m** : 6.55

**r** : 74.91 km

**$\varepsilon_0$** : 0.24 σ

## Mode (largest m-r bin)

**m** : 5.1

**r** : 12.27 km

**$\varepsilon_0$** : -0.17 σ

**Contribution** : 4.75 %

## Mode (largest m-r-$\varepsilon_0$ bin)

**m** : 5.1

**r** : 14.98 km

**$\varepsilon_0$** : 0.24 σ

**Contribution** : 1.44 %

## Discretization

**r** : min = 0.0, max = 1000.0, Δ = 20.0 km

**m** : min = 4.4, max = 9.4, Δ = 0.2

**ε** : min = -3.0, max = 3.0, Δ = 0.5 σ

## Epsilon keys

**ε0** : [-∞ .. -2.5)

**ε1** : [-2.5 .. -2.0)

**ε2** : [-2.0 .. -1.5)

**ε3** : [-1.5 .. -1.0)

**ε4** : [-1.0 .. -0.5)

**ε5** : [-0.5 .. 0.0)

**ε6** : [0.0 .. 0.5)

**ε7** : [0.5 .. 1.0)

**ε8** : [1.0 .. 1.5)

**ε9** : [1.5 .. 2.0)

**ε10** : [2.0 .. 2.5)

**ε11** : [2.5 .. +∞]

## Disaggregation Contributions: Total

| Source Set ↳ Source | Type | r | m | $\varepsilon_0$ | lon | lat | az | % |
|---|---|---|---|---|---|---|---|---|
| WUS Branch Average (opt) | Grid | | | | | | | 72.55 |
| WUS Branch Average | FaultSystem | | | | | | | 9.82 |
| Warm Springs (3) | | 59.91 | 6.80 | 0.73 | 121.422°W | 44.978°N | 232.35 | 2.07 |
| Warwick (4) | | 46.51 | 6.65 | 0.18 | 121.006°W | 45.722°N | 335.53 | 1.45 |
| Arlington - Shutler Butte (1) | | 58.15 | 6.83 | 0.37 | 120.242°W | 45.719°N | 43.66 | 1.06 |
| Cascadia (full, bottom) | Interface | | | | | | | 5.62 |
| Cascadia (full, bottom) | | 224.90 | 9.14 | 0.37 | 123.515°W | 45.866°N | 286.17 | 5.62 |
| Cascadia (full, middle) | Interface | | | | | | | 3.34 |
| Cascadia (full, middle) | | 278.34 | 8.96 | 0.98 | 124.239°W | 45.871°N | 283.49 | 3.34 |
| WA Intraslab | Slab | | | | | | | 2.26 |
| OR Intraslab | Slab | | | | | | | 1.77 |

## Application Metadata

**Application**: Disaggregation
**URL**: https://earthquake.usgs.gov/nshmp/hazard/disagg

**Repository**: nshmp-apps
**Version**: 21.1.5
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

**Repository** : nshmp-haz
**Version**: 2.8.1
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

**Repository** : nshmp-lib
**Version**: 1.7.15
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

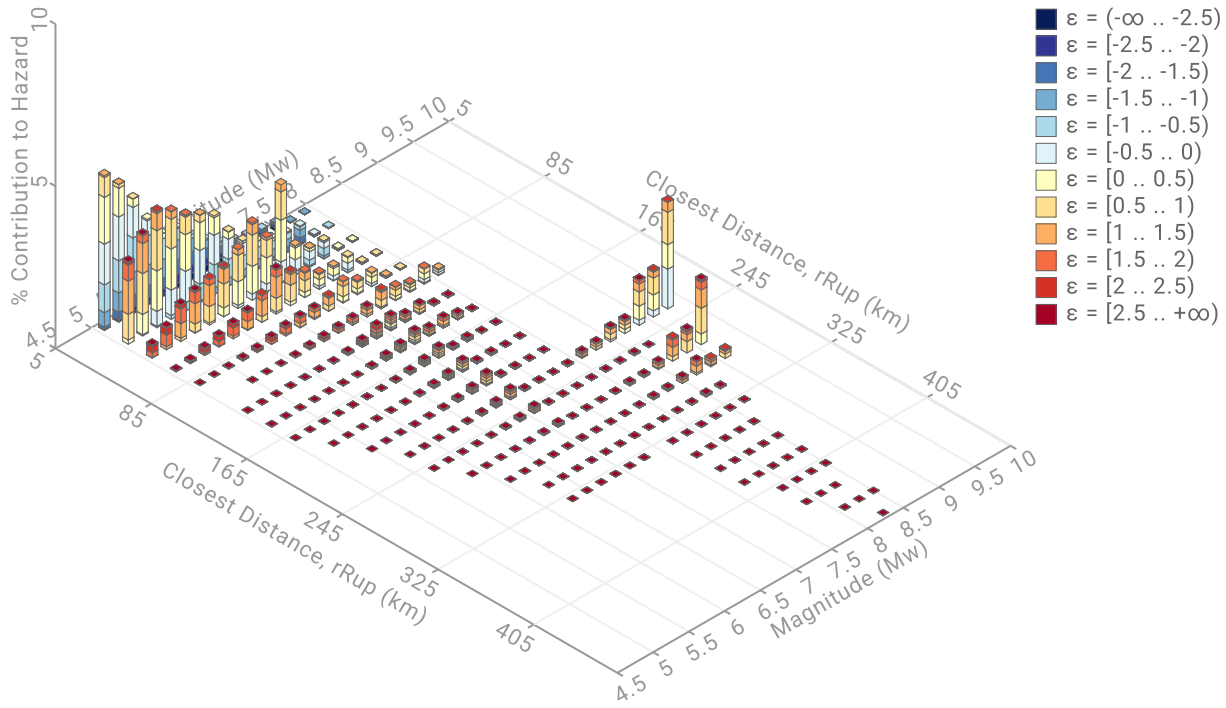
**Repository** : nshm-conus
**Version**: 6.1.3
**URL**: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus

January 05, 2026, 07:13 AM

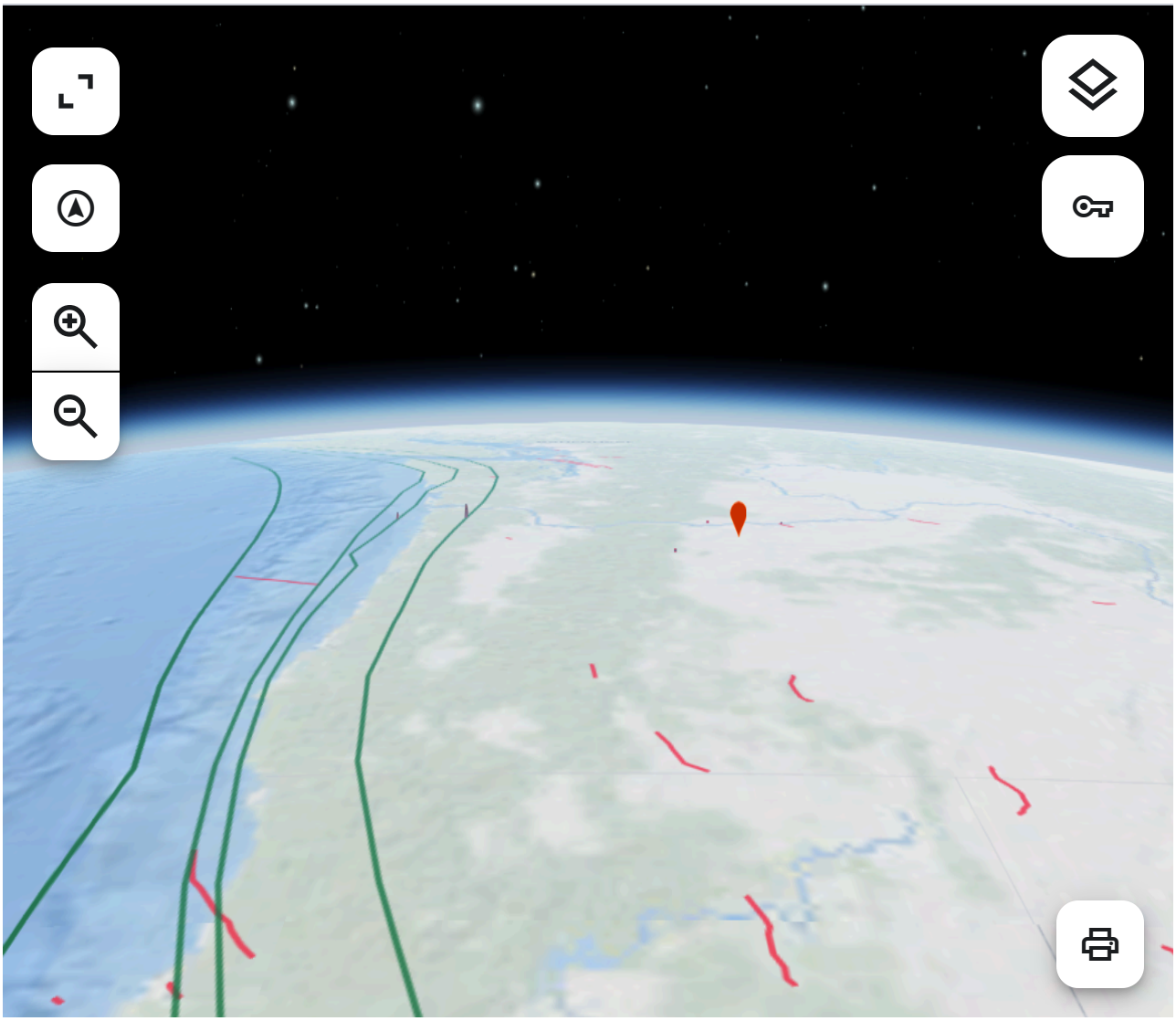
# Disaggregation Report

## Disaggregation

Save Plot as PNG



## Geographical Disaggregation




## Parameter Summary

**Model**: NSHM Conterminous U.S. 2023

**Latitude**: 45.342041 °

**Longitude**: -120.758384 °

**Site Class**: BC (Vs30 760)

**Intensity Measure Type**: PGA

**Return Period**: 475 (10% in 50)

**Component**: Total

# Disaggregation Summary: Total

## Disaggregation targets

**Return period** : 475 yrs

**Exceedance rate** : 2.105e-3 $yr^{-1}$

**PGA ground motion** : 6.550e-2 g

## Recovered targets

**Return period** : 472.37404 yrs

**Exceedance rate** : 2.117e-3 $yr^{-1}$

## Totals

**Binned** : 100 %

**Residual** : 0 %

**Trace** : 1.65 %

## Mean (over all sources)

**m** : 6.53

**r** : 74.12 km

**$\varepsilon_0$** : 0.25 σ

## Mode (largest m-r bin)

**m** : 5.1

**r** : 12.28 km

**$\varepsilon_0$** : -0.17 σ

**Contribution** : 4.76 %

## Mode (largest m-r-$\varepsilon_0$ bin)

**m** : 5.1

**r** : 14.95 km

**$\varepsilon_0$** : 0.24 σ

**Contribution** : 1.44 %

## Discretization

**r** : min = 0.0, max = 1000.0, Δ = 20.0 km

**m** : min = 4.4, max = 9.4, Δ = 0.2

**ε** : min = -3.0, max = 3.0, Δ = 0.5 σ

## Epsilon keys

**ε0** : [-∞ .. -2.5)

**ε1** : [-2.5 .. -2.0)

**ε2** : [-2.0 .. -1.5)

**ε3** : [-1.5 .. -1.0)

**ε4** : [-1.0 .. -0.5)

**ε5** : [-0.5 .. 0.0)

**ε6** : [0.0 .. 0.5)

**ε7** : [0.5 .. 1.0)

**ε8** : [1.0 .. 1.5)

**ε9** : [1.5 .. 2.0)

**ε10** : [2.0 .. 2.5)

**ε11** : [2.5 .. +∞]

## Disaggregation Contributions: Total

| Source Set ↳ Source | Type | r | m | $\varepsilon_0$ | lon | lat | az | % |
|---|---|---|---|---|---|---|---|---|
| WUS Branch Average (opt) | Grid | | | | | | | 72.93 |
| WUS Branch Average | FaultSystem | | | | | | | 9.8 |
| Warm Springs (3) | | 59.91 | 6.80 | 0.75 | 121.422°W | 44.978°N | 232.35 | 2.06 |
| Warwick (4) | | 46.51 | 6.65 | 0.19 | 121.006°W | 45.722°N | 335.53 | 1.45 |
| Arlington - Shutler Butte (1) | | 58.15 | 6.83 | 0.38 | 120.242°W | 45.719°N | 43.66 | 1.06 |
| Cascadia (full, bottom) | Interface | | | | | | | 5.56 |
| Cascadia (full, bottom) | | 224.90 | 9.14 | 0.44 | 123.515°W | 45.866°N | 286.17 | 5.56 |
| Cascadia (full, middle) | Interface | | | | | | | 3.17 |
| Cascadia (full, middle) | | 278.34 | 8.96 | 1.08 | 124.239°W | 45.871°N | 283.49 | 3.17 |
| WA Intraslab | Slab | | | | | | | 2.38 |
| OR Intraslab | Slab | | | | | | | 1.75 |

## Application Metadata

**Application**: Disaggregation
**URL**: https://earthquake.usgs.gov/nshmp/hazard/disagg

**Repository**: nshmp-apps
**Version**: 21.1.5
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

**Repository** : nshmp-haz
**Version**: 2.8.1
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

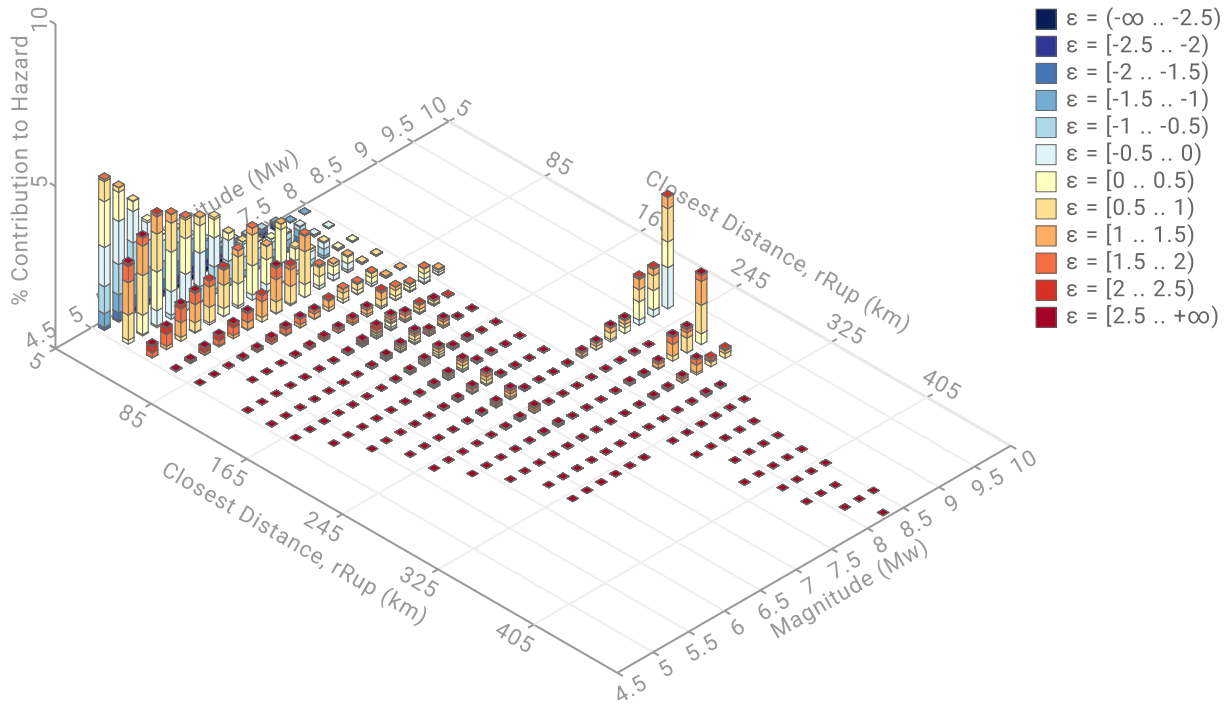
**Repository** : nshmp-lib
**Version**: 1.7.15
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

**Repository** : nshm-conus
**Version**: 6.1.3
**URL**: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus

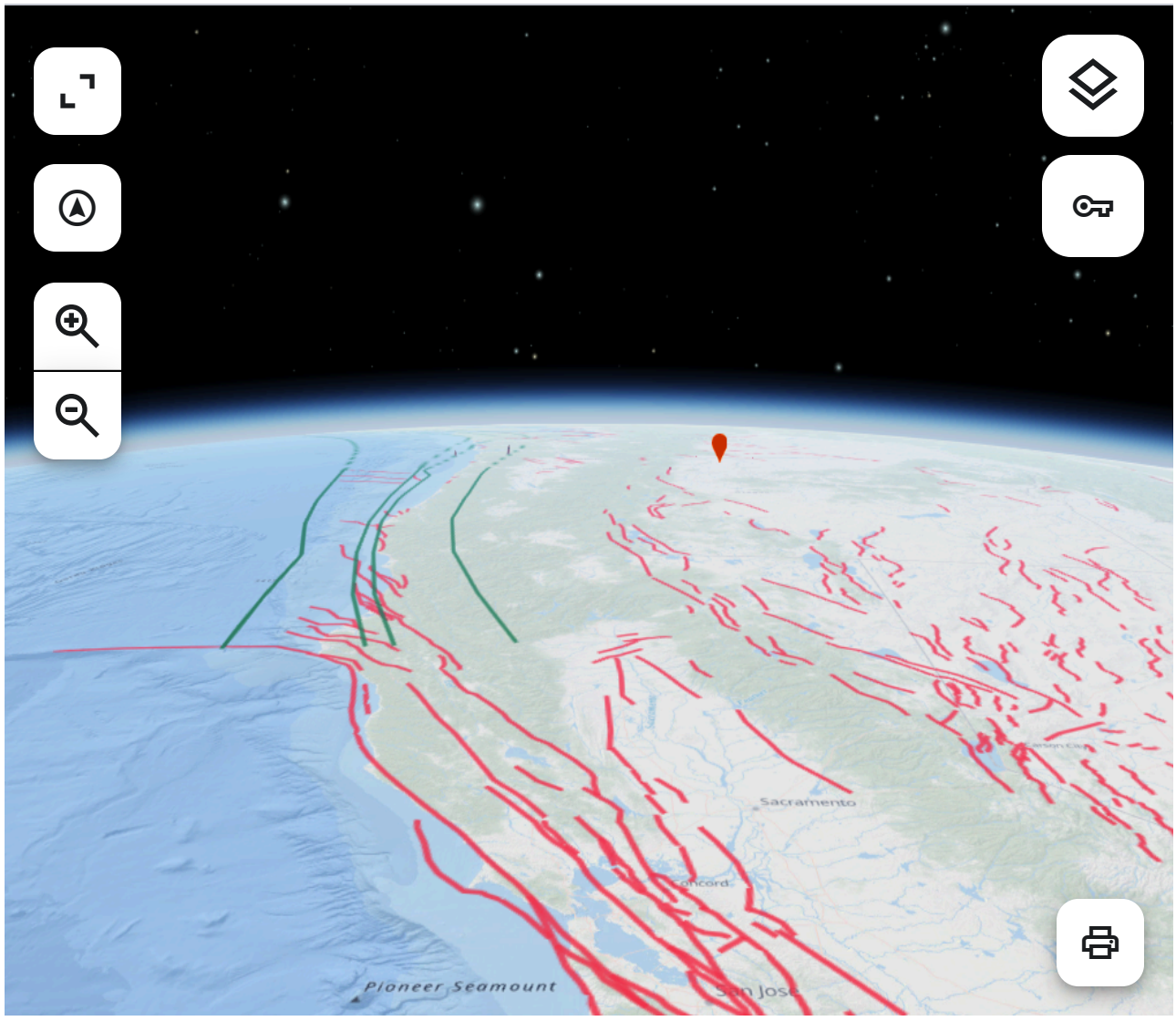
January 05, 2026, 07:13 AM

# Disaggregation Report

## Disaggregation



## Geographical Disaggregation




CHS, Esri, GEBCO, Garmin, NaturalVue | City of Medford, County of Jackson, OR, Oreg... Powered by Esri

## Parameter Summary

**Model**: NSHM Conterminous U.S. 2023

**Latitude**: 45.359288 °

**Longitude**: -120.754074 °

**Site Class**: C (Vs30 530)

**Intensity Measure Type**: PGA

**Return Period**: 475 (10% in 50)

**Component**: Total

# Disaggregation Summary: Total

## Disaggregation targets

**Return period** : 475 yrs

**Exceedance rate** : 2.105e-3 yr⁻¹

**PGA ground motion** : 7.799e-2 g

## Recovered targets

**Return period** : 471.37157 yrs

**Exceedance rate** : 2.121e-3 yr⁻¹

## Totals

**Binned** : 100 %

**Residual** : 0 %

**Trace** : 1.66 %

## Mean (over all sources)

**m** : 6.57

**r** : 77.21 km

**$\varepsilon_0$** : 0.28 σ

## Mode (largest m-r bin)

**m** : 5.1

**r** : 12.28 km

**$\varepsilon_0$** : -0.15 σ

**Contribution** : 4.65 %

## Mode (largest m-r-$\varepsilon_0$ bin)

**m** : 5.1

**r** : 14.85 km

**$\varepsilon_0$** : 0.24 σ

**Contribution** : 1.41 %

## Discretization

**r** : min = 0.0, max = 1000.0, Δ = 20.0 km

**m** : min = 4.4, max = 9.4, Δ = 0.2

**ε** : min = -3.0, max = 3.0, Δ = 0.5 σ

## Epsilon keys

**ε0** : [-∞ .. -2.5)

**ε1** : [-2.5 .. -2.0)

**ε2** : [-2.0 .. -1.5)

**ε3** : [-1.5 .. -1.0)

**ε4** : [-1.0 .. -0.5)

**ε5** : [-0.5 .. 0.0)

**ε6** : [0.0 .. 0.5)

**ε7** : [0.5 .. 1.0)

**ε8** : [1.0 .. 1.5)

**ε9** : [1.5 .. 2.0)

**ε10** : [2.0 .. 2.5)

**ε11** : [2.5 .. +∞]

## Disaggregation Contributions: Total

| Source Set ↳ Source | Type | r | m | $\varepsilon_0$ | lon | lat | az | % |
|---|---|---|---|---|---|---|---|---|
| WUS Branch Average (opt) | Grid | | | | | | | 71.59 |
| WUS Branch Average | FaultSystem | | | | | | | 9.56 |
| Warm Springs (3) | | 61.47 | 6.80 | 0.83 | 121.422°W | 44.978°N | 231.24 | 1.84 |
| Warwick (4) | | 44.92 | 6.65 | 0.17 | 121.006°W | 45.722°N | 334.12 | 1.49 |
| Arlington - Shutler Butte (1) | | 56.52 | 6.83 | 0.36 | 120.250°W | 45.725°N | 43.86 | 1.08 |
| Cascadia (full, bottom) | Interface | | | | | | | 5.87 |
| Cascadia (full, bottom) | | 224.87 | 9.14 | 0.40 | 123.515°W | 45.866°N | 285.68 | 5.87 |
| Cascadia (full, middle) | Interface | | | | | | | 3.48 |
| Cascadia (full, middle) | | 278.28 | 8.96 | 1.03 | 124.239°W | 45.871°N | 283.09 | 3.48 |
| WA Intraslab | Slab | | | | | | | 2.74 |
| OR Intraslab | Slab | | | | | | | 1.88 |

## Application Metadata

**Application**: Disaggregation
**URL**: https://earthquake.usgs.gov/nshmp/hazard/disagg

**Repository**: nshmp-apps
**Version**: 21.4.1
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

**Repository** : nshmp-haz
**Version**: 2.8.2
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

**Repository** : nshmp-lib
**Version**: 1.7.15
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

**Repository** : nshm-conus
**Version**: 6.1.3
**URL**: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus.git

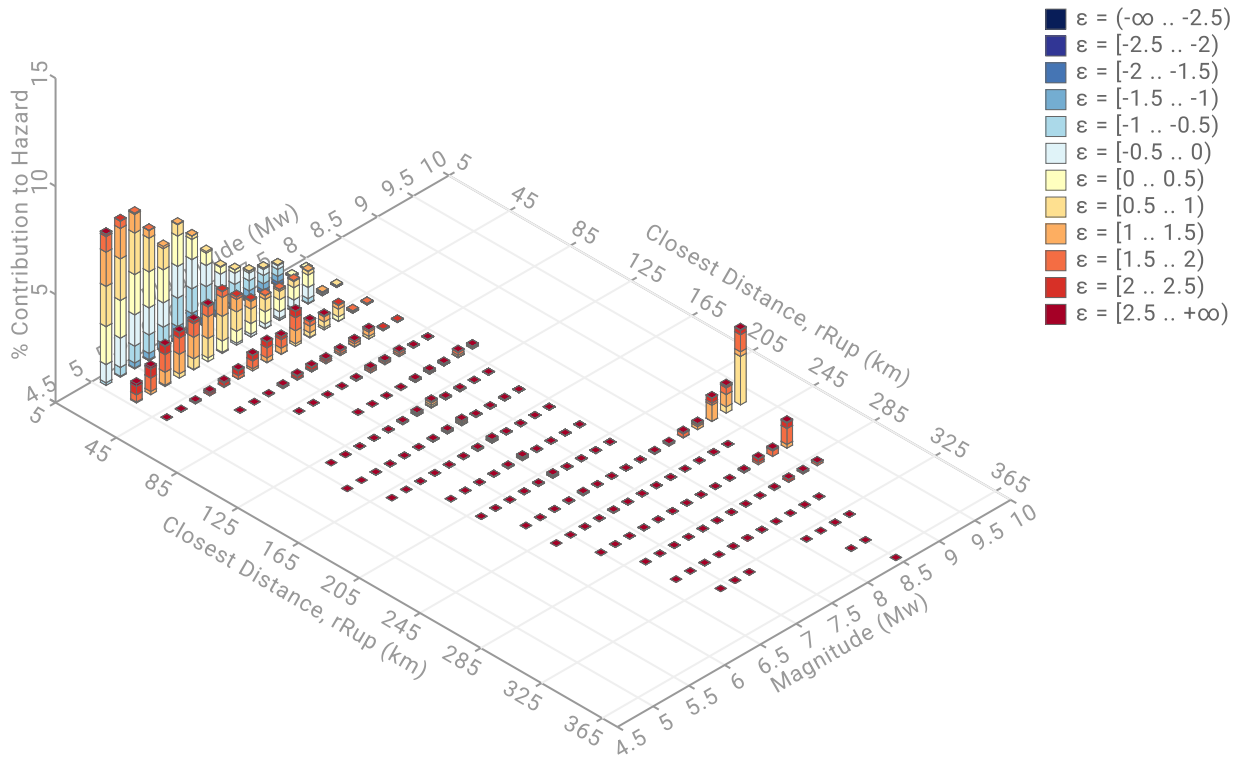
January 23, 2026, 08:24 AM

# Attachment B-4. Probabilistic Seismic Hazard Deaggregation – 2,475-Year Return Time

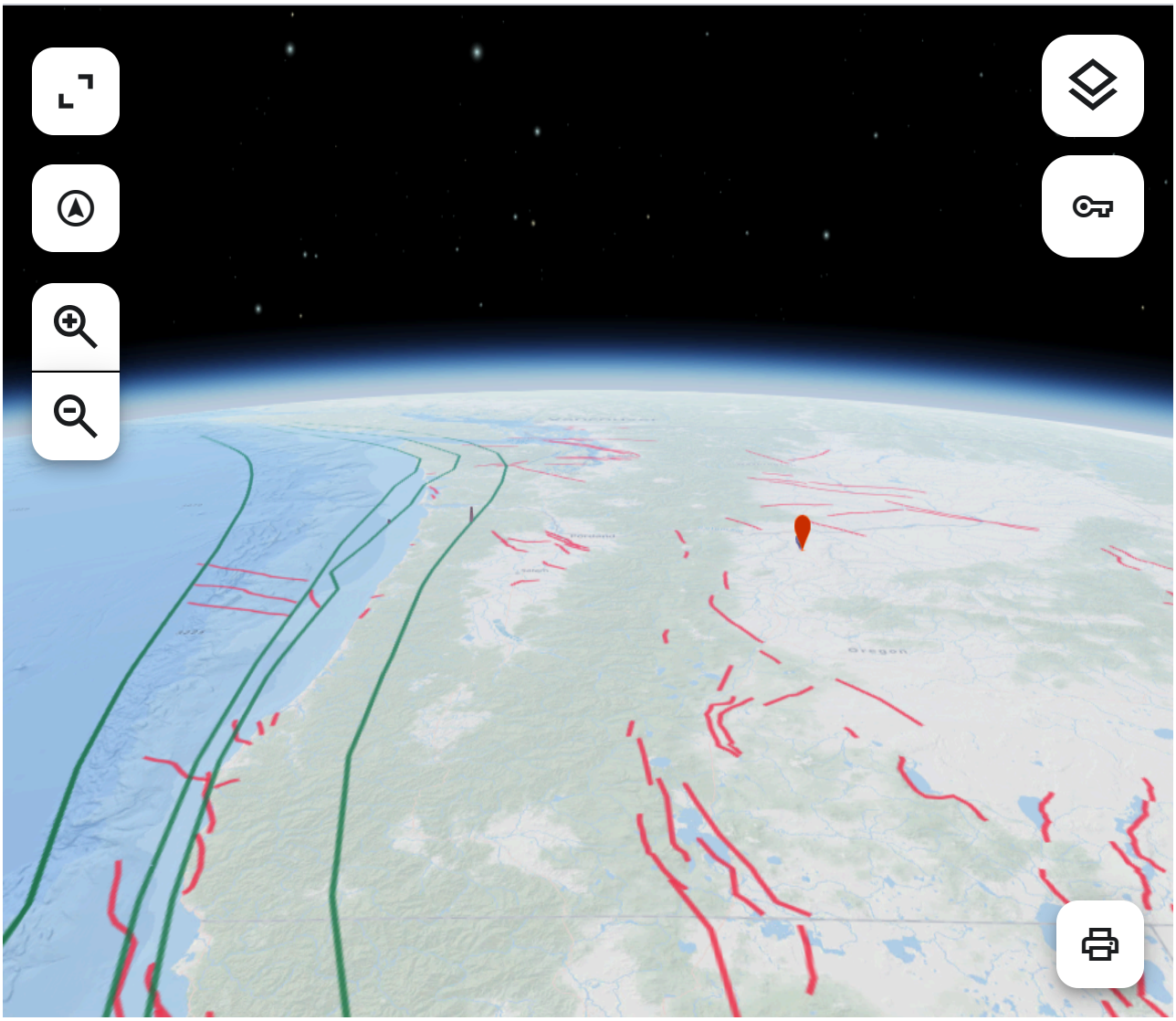
# Disaggregation Report

## Disaggregation

Save Plot as PNG



## Geographical Disaggregation




## Parameter Summary

**Model**: NSHM Conterminous U.S. 2023

**Latitude**: 45.342041 °

**Longitude**: -120.758384 °

**Site Class**: B (Vs30 1080)

**Intensity Measure Type**: PGA

**Return Period**: 2475 (2% in 50)

**Component**: Total

# Disaggregation Summary: Total

## Disaggregation targets

**Return period** : 2475 yrs

**Exceedance rate** : 4.040e-4 $yr^{-1}$

**PGA ground motion** : 1.356e-1 g

## Recovered targets

**Return period** : 2472.6532 yrs

**Exceedance rate** : 4.044e-4 $yr^{-1}$

## Totals

**Binned** : 100 %

**Residual** : 0 %

**Trace** : 1.15 %

## Mean (over all sources)

**m** : 6.42

**r** : 44.62 km

**$\varepsilon_0$** : 0.55 σ

## Mode (largest m-r bin)

**m** : 5.3

**r** : 11 km

**$\varepsilon_0$** : 0.5 σ

**Contribution** : 7.22 %

## Mode (largest m-r-$\varepsilon_0$ bin)

**m** : 9.28

**r** : 224.9 km

**$\varepsilon_0$** : 0.81 σ

**Contribution** : 2.24 %

## Discretization

**r** : min = 0.0, max = 1000.0, Δ = 20.0 km

**m** : min = 4.4, max = 9.4, Δ = 0.2

**ε** : min = -3.0, max = 3.0, Δ = 0.5 σ

## Epsilon keys

**ε0** : [-∞ .. -2.5)

**ε1** : [-2.5 .. -2.0)

**ε2** : [-2.0 .. -1.5)

**ε3** : [-1.5 .. -1.0)

**ε4** : [-1.0 .. -0.5)

**ε5** : [-0.5 .. 0.0)

**ε6** : [0.0 .. 0.5)

**ε7** : [0.5 .. 1.0)

**ε8** : [1.0 .. 1.5)

**ε9** : [1.5 .. 2.0)

**ε10** : [2.0 .. 2.5)

**ε11** : [2.5 .. +∞]

## Disaggregation Contributions: Total

| Source Set ↳ Source | Type | r | m | $\varepsilon_0$ | lon | lat | az | % |
|---|---|---|---|---|---|---|---|---|
| WUS Branch Average (opt) | Grid | | | | | | | 85.5 |
| PointSourceFinite: -120.758, 45.436 | | 10.49 | 5.77 | 0.02 | 120.758°W | 45.436°N | 0.00 | 1.76 |
| PointSourceFinite: -120.758, 45.427 | | 9.75 | 5.74 | -0.10 | 120.758°W | 45.427°N | 0.00 | 1.73 |
| PointSourceFinite: -120.758, 45.418 | | 9.01 | 5.71 | -0.18 | 120.758°W | 45.418°N | 0.00 | 1.69 |
| PointSourceFinite: -120.758, 45.409 | | 8.29 | 5.69 | -0.26 | 120.758°W | 45.409°N | 0.00 | 1.66 |
| PointSourceFinite: -120.758, 45.436 | | 11.55 | 5.79 | 0.09 | 120.758°W | 45.436°N | 0.00 | 1.62 |
| PointSourceFinite: -120.758, 45.427 | | 10.79 | 5.75 | -0.03 | 120.758°W | 45.427°N | 0.00 | 1.6 |
| PointSourceFinite: -120.758, 45.418 | | 10.04 | 5.73 | -0.11 | 120.758°W | 45.418°N | 0.00 | 1.57 |
| PointSourceFinite: -120.758, 45.445 | | 11.25 | 5.80 | 0.09 | 120.758°W | 45.445°N | 0.00 | 1.55 |
| PointSourceFinite: -120.758, 45.463 | | 12.78 | 5.86 | 0.22 | 120.758°W | 45.463°N | 0.00 | 1.55 |
| PointSourceFinite: -120.758, 45.409 | | 9.31 | 5.70 | -0.19 | 120.758°W | 45.409°N | 0.00 | 1.54 |
| PointSourceFinite: -120.758, 45.400 | | 7.59 | 5.66 | -0.35 | 120.758°W | 45.400°N | 0.00 | 1.51 |
| PointSourceFinite: -120.758, 45.454 | | 12.01 | 5.83 | 0.16 | 120.758°W | 45.454°N | 0.00 | 1.51 |
| PointSourceFinite: -120.758, 45.472 | | 13.54 | 5.90 | 0.28 | 120.758°W | 45.472°N | 0.00 | 1.47 |
| PointSourceFinite: -120.758, 45.445 | | 12.31 | 5.82 | 0.16 | 120.758°W | 45.445°N | 0.00 | 1.43 |
| PointSourceFinite: -120.758, 45.392 | | 6.93 | 5.64 | -0.44 | 120.758°W | 45.392°N | 0.00 | 1.43 |
| PointSourceFinite: -120.758, 45.463 | | 13.86 | 5.88 | 0.28 | 120.758°W | 45.463°N | 0.00 | 1.43 |
| PointSourceFinite: -120.758, 45.400 | | 8.60 | 5.68 | -0.28 | 120.758°W | 45.400°N | 0.00 | 1.41 |
| PointSourceFinite: -120.758, 45.481 | | 14.31 | 5.93 | 0.34 | 120.758°W | 45.481°N | 0.00 | 1.4 |
| PointSourceFinite: -120.758, 45.454 | | 13.08 | 5.85 | 0.22 | 120.758°W | 45.454°N | 0.00 | 1.39 |
| PointSourceFinite: -120.758, 45.490 | | 15.08 | 5.96 | 0.39 | 120.758°W | 45.490°N | 0.00 | 1.36 |
| PointSourceFinite: -120.758, 45.472 | | 14.63 | 5.91 | 0.33 | 120.758°W | 45.472°N | 0.00 | 1.35 |
| PointSourceFinite: -120.758, 45.392 | | 7.90 | 5.66 | -0.36 | 120.758°W | 45.392°N | 0.00 | 1.34 |
| PointSourceFinite: -120.758, 45.481 | | 15.41 | 5.95 | 0.39 | 120.758°W | 45.481°N | 0.00 | 1.29 |
| PointSourceFinite: -120.758, 45.499 | | 15.84 | 5.99 | 0.43 | 120.758°W | 45.499°N | 0.00 | 1.25 |
| PointSourceFinite: -120.758, 45.490 | | 16.18 | 5.98 | 0.43 | 120.758°W | 45.490°N | 0.00 | 1.25 |
| PointSourceFinite: -120.758, 45.383 | | 6.31 | 5.62 | -0.53 | 120.758°W | 45.383°N | 0.00 | 1.23 |
| PointSourceFinite: -120.758, 45.508 | | 16.61 | 6.02 | 0.48 | 120.758°W | 45.508°N | 0.00 | 1.19 |
| PointSourceFinite: -120.758, 45.517 | | 17.38 | 6.05 | 0.52 | 120.758°W | 45.517°N | 0.00 | 1.17 |
| PointSourceFinite: -120.758, 45.383 | | 7.23 | 5.64 | -0.46 | 120.758°W | 45.383°N | 0.00 | 1.16 |
| PointSourceFinite: -120.758, 45.499 | | 16.95 | 6.01 | 0.48 | 120.758°W | 45.499°N | 0.00 | 1.15 |
| PointSourceFinite: -120.758, 45.526 | | 18.14 | 6.09 | 0.56 | 120.758°W | 45.526°N | 0.00 | 1.09 |
| PointSourceFinite: -120.758, 45.508 | | 17.71 | 6.04 | 0.52 | 120.758°W | 45.508°N | 0.00 | 1.09 |
| PointSourceFinite: -120.758, 45.517 | | 18.48 | 6.07 | 0.56 | 120.758°W | 45.517°N | 0.00 | 1.07 |
| PointSourceFinite: -120.758, 45.374 | | 5.76 | 5.61 | -0.61 | 120.758°W | 45.374°N | 0.00 | 1.03 |
| PointSourceFinite: -120.758, 45.526 | | 19.24 | 6.11 | 0.59 | 120.758°W | 45.526°N | 0.00 | 1.01 |
| Cascadia (full, bottom) | Interface | | | | | | | 5.38 |
| Cascadia (full, bottom) | | 224.90 | 9.16 | 1.23 | 123.515°W | 45.866°N | 286.17 | 5.38 |
| WUS Branch Average | FaultSystem | | | | | | | 3.38 |
| Cascadia (full, middle) | Interface | | | | | | | 1.71 |
| Cascadia (full, middle) | | 278.34 | 8.99 | 1.87 | 124.239°W | 45.871°N | 283.49 | 1.71 |
| OR Intraslab | Slab | | | | | | | 1.08 |

## Application Metadata

**Application**: Disaggregation
**URL**: https://earthquake.usgs.gov/nshmp/hazard/disagg

**Repository**: nshmp-apps
**Version**: 21.1.5
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

**Repository** : nshmp-haz
**Version**: 2.8.1
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

**Repository** : nshmp-lib
**Version**: 1.7.15
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

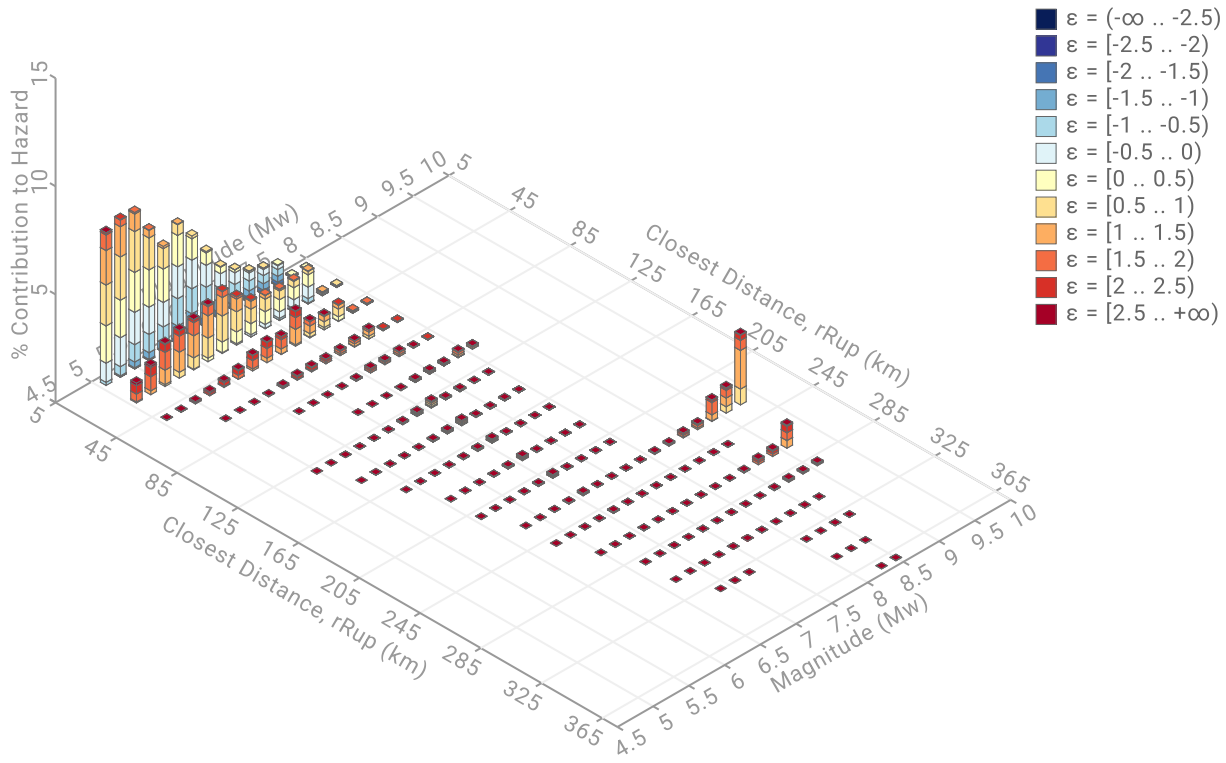
**Repository** : nshm-conus
**Version**: 6.1.3
**URL**: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus

January 05, 2026, 07:13 AM

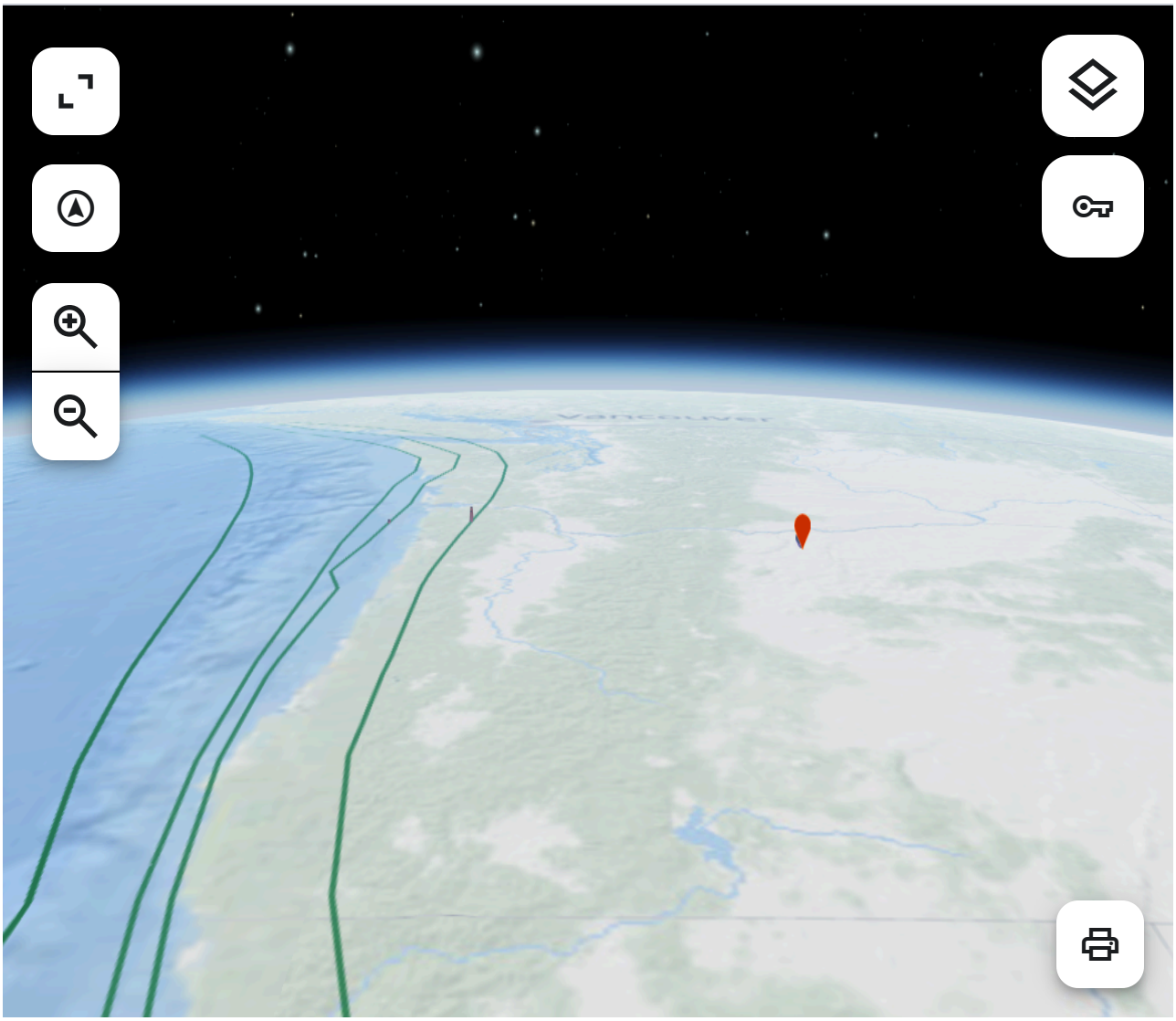
# Disaggregation Report

## Disaggregation

Save Plot as PNG



## Geographical Disaggregation




## Parameter Summary

**Model**: NSHM Conterminous U.S. 2023

**Latitude**: 45.342041 °

**Longitude**: -120.758384 °

**Site Class**: BC (Vs30 760)

**Intensity Measure Type**: PGA

**Return Period**: 2475 (2% in 50)

**Component**: Total

# Disaggregation Summary: Total

## Disaggregation targets

**Return period** : 2475 yrs

**Exceedance rate** : 4.040e-4 $yr^{-1}$

**PGA ground motion** : 1.583e-1 g

## Recovered targets

**Return period** : 2454.0915 yrs

**Exceedance rate** : 4.075e-4 $yr^{-1}$

## Totals

**Binned** : 100 %

**Residual** : 0 %

**Trace** : 1.16 %

## Mean (over all sources)

**m** : 6.39

**r** : 43.24 km

**$\varepsilon_0$** : 0.55 σ

## Mode (largest m-r bin)

**m** : 5.3

**r** : 11.03 km

**$\varepsilon_0$** : 0.49 σ

**Contribution** : 7.28 %

## Mode (largest m-r-$\varepsilon_0$ bin)

**m** : 5.3

**r** : 12.17 km

**$\varepsilon_0$** : 0.75 σ

**Contribution** : 2 %

## Discretization

**r** : min = 0.0, max = 1000.0, Δ = 20.0 km

**m** : min = 4.4, max = 9.4, Δ = 0.2

**ε** : min = -3.0, max = 3.0, Δ = 0.5 σ

## Epsilon keys

**ε0** : [-∞ .. -2.5)

**ε1** : [-2.5 .. -2.0)

**ε2** : [-2.0 .. -1.5)

**ε3** : [-1.5 .. -1.0)

**ε4** : [-1.0 .. -0.5)

**ε5** : [-0.5 .. 0.0)

**ε6** : [0.0 .. 0.5)

**ε7** : [0.5 .. 1.0)

**ε8** : [1.0 .. 1.5)

**ε9** : [1.5 .. 2.0)

**ε10** : [2.0 .. 2.5)

**ε11** : [2.5 .. +∞]

# Disaggregation Contributions: Total

| Source Set ↳ Source | Type | r | m | $\varepsilon_0$ | lon | lat | az | % |
|---|---|---|---|---|---|---|---|---|
| WUS Branch Average (opt) | Grid | | | | | | | 86.12 |
| PointSourceFinite: -120.758, 45.436 | | 10.50 | 5.77 | 0.02 | 120.758°W | 45.436°N | 0.00 | 1.76 |
| PointSourceFinite: -120.758, 45.427 | | 9.76 | 5.74 | -0.10 | 120.758°W | 45.427°N | 0.00 | 1.74 |
| PointSourceFinite: -120.758, 45.418 | | 9.02 | 5.71 | -0.18 | 120.758°W | 45.418°N | 0.00 | 1.7 |
| PointSourceFinite: -120.758, 45.409 | | 8.29 | 5.69 | -0.27 | 120.758°W | 45.409°N | 0.00 | 1.66 |
| PointSourceFinite: -120.758, 45.436 | | 11.55 | 5.79 | 0.08 | 120.758°W | 45.436°N | 0.00 | 1.62 |
| PointSourceFinite: -120.758, 45.427 | | 10.79 | 5.75 | -0.04 | 120.758°W | 45.427°N | 0.00 | 1.61 |
| PointSourceFinite: -120.758, 45.418 | | 10.04 | 5.73 | -0.12 | 120.758°W | 45.418°N | 0.00 | 1.57 |
| PointSourceFinite: -120.758, 45.463 | | 12.79 | 5.86 | 0.22 | 120.758°W | 45.463°N | 0.00 | 1.56 |
| PointSourceFinite: -120.758, 45.445 | | 11.25 | 5.80 | 0.09 | 120.758°W | 45.445°N | 0.00 | 1.56 |
| PointSourceFinite: -120.758, 45.409 | | 9.31 | 5.70 | -0.20 | 120.758°W | 45.409°N | 0.00 | 1.54 |
| PointSourceFinite: -120.758, 45.454 | | 12.02 | 5.83 | 0.15 | 120.758°W | 45.454°N | 0.00 | 1.51 |
| PointSourceFinite: -120.758, 45.400 | | 7.59 | 5.66 | -0.36 | 120.758°W | 45.400°N | 0.00 | 1.51 |
| PointSourceFinite: -120.758, 45.472 | | 13.55 | 5.89 | 0.28 | 120.758°W | 45.472°N | 0.00 | 1.48 |
| PointSourceFinite: -120.758, 45.445 | | 12.32 | 5.82 | 0.15 | 120.758°W | 45.445°N | 0.00 | 1.44 |
| PointSourceFinite: -120.758, 45.463 | | 13.87 | 5.88 | 0.27 | 120.758°W | 45.463°N | 0.00 | 1.43 |
| PointSourceFinite: -120.758, 45.392 | | 6.93 | 5.64 | -0.45 | 120.758°W | 45.392°N | 0.00 | 1.43 |
| PointSourceFinite: -120.758, 45.481 | | 14.32 | 5.92 | 0.33 | 120.758°W | 45.481°N | 0.00 | 1.41 |
| PointSourceFinite: -120.758, 45.400 | | 8.60 | 5.68 | -0.29 | 120.758°W | 45.400°N | 0.00 | 1.41 |
| PointSourceFinite: -120.758, 45.454 | | 13.09 | 5.85 | 0.21 | 120.758°W | 45.454°N | 0.00 | 1.39 |
| PointSourceFinite: -120.758, 45.490 | | 15.09 | 5.96 | 0.38 | 120.758°W | 45.490°N | 0.00 | 1.37 |
| PointSourceFinite: -120.758, 45.472 | | 14.64 | 5.91 | 0.33 | 120.758°W | 45.472°N | 0.00 | 1.36 |
| PointSourceFinite: -120.758, 45.392 | | 7.90 | 5.65 | -0.38 | 120.758°W | 45.392°N | 0.00 | 1.33 |
| PointSourceFinite: -120.758, 45.481 | | 15.42 | 5.94 | 0.38 | 120.758°W | 45.481°N | 0.00 | 1.3 |
| PointSourceFinite: -120.758, 45.499 | | 15.86 | 5.99 | 0.43 | 120.758°W | 45.499°N | 0.00 | 1.26 |
| PointSourceFinite: -120.758, 45.490 | | 16.19 | 5.97 | 0.43 | 120.758°W | 45.490°N | 0.00 | 1.26 |
| PointSourceFinite: -120.758, 45.383 | | 6.31 | 5.62 | -0.54 | 120.758°W | 45.383°N | 0.00 | 1.23 |
| PointSourceFinite: -120.758, 45.508 | | 16.64 | 6.02 | 0.48 | 120.758°W | 45.508°N | 0.00 | 1.2 |
| PointSourceFinite: -120.758, 45.517 | | 17.40 | 6.05 | 0.52 | 120.758°W | 45.517°N | 0.00 | 1.18 |
| PointSourceFinite: -120.758, 45.499 | | 16.96 | 6.00 | 0.47 | 120.758°W | 45.499°N | 0.00 | 1.16 |
| PointSourceFinite: -120.758, 45.383 | | 7.23 | 5.63 | -0.47 | 120.758°W | 45.383°N | 0.00 | 1.16 |
| PointSourceFinite: -120.758, 45.526 | | 18.17 | 6.08 | 0.56 | 120.758°W | 45.526°N | 0.00 | 1.11 |
| PointSourceFinite: -120.758, 45.508 | | 17.73 | 6.04 | 0.52 | 120.758°W | 45.508°N | 0.00 | 1.11 |
| PointSourceFinite: -120.758, 45.517 | | 18.50 | 6.07 | 0.56 | 120.758°W | 45.517°N | 0.00 | 1.08 |
| PointSourceFinite: -120.758, 45.374 | | 5.76 | 5.61 | -0.63 | 120.758°W | 45.374°N | 0.00 | 1.02 |
| PointSourceFinite: -120.758, 45.526 | | 19.27 | 6.10 | 0.59 | 120.758°W | 45.526°N | 0.00 | 1.02 |
| Cascadia (full, bottom) | Interface | | | | | | | 5 |
| Cascadia (full, bottom) | | 224.90 | 9.16 | 1.33 | 123.515°W | 45.866°N | 286.17 | 5 |
| WUS Branch Average | FaultSystem | | | | | | | 3.38 |
| Cascadia (full, middle) | Interface | | | | | | | 1.51 |
| Cascadia (full, middle) | | 278.34 | 8.99 | 1.94 | 124.239°W | 45.871°N | 283.49 | 1.51 |
| OR Intraslab | Slab | | | | | | | 1.13 |

## Application Metadata

**Application**: Disaggregation
**URL**: https://earthquake.usgs.gov/nshmp/hazard/disagg

**Repository**: nshmp-apps
**Version**: 21.1.5
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

**Repository** : nshmp-haz
**Version**: 2.8.1
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

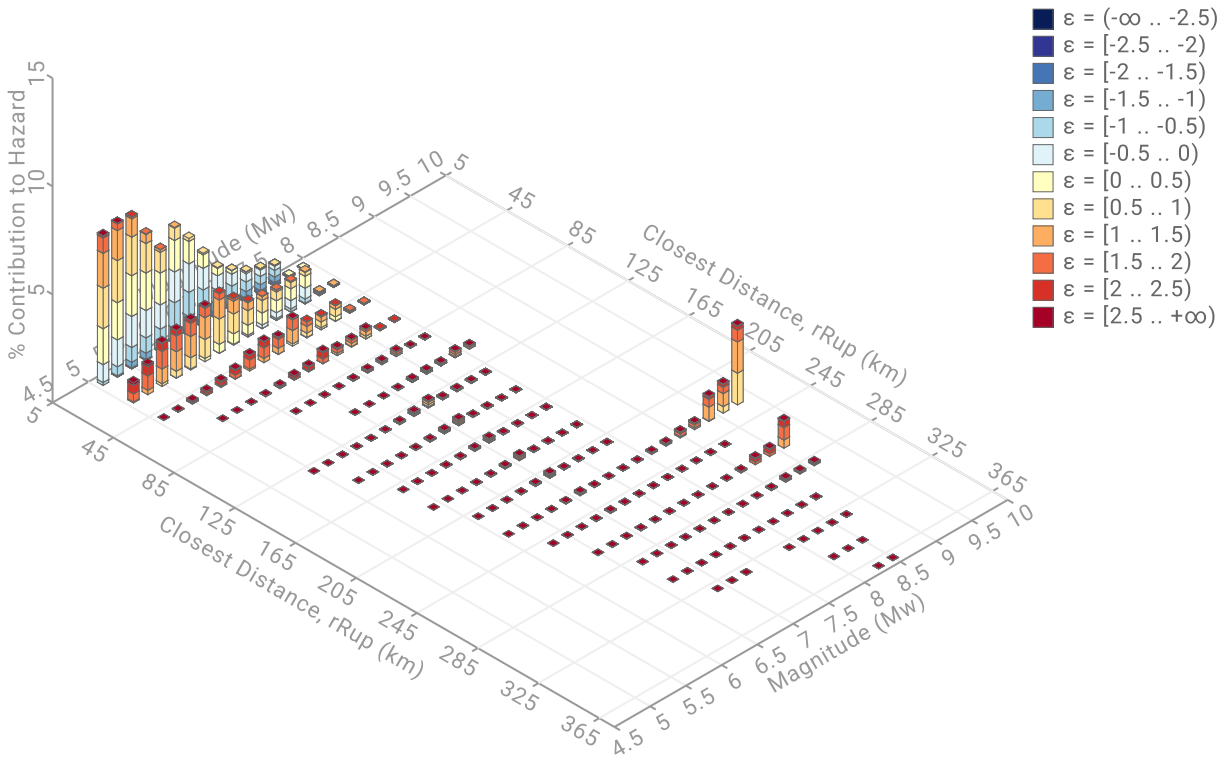
**Repository** : nshmp-lib
**Version**: 1.7.15
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

**Repository** : nshm-conus
**Version**: 6.1.3
**URL**: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus

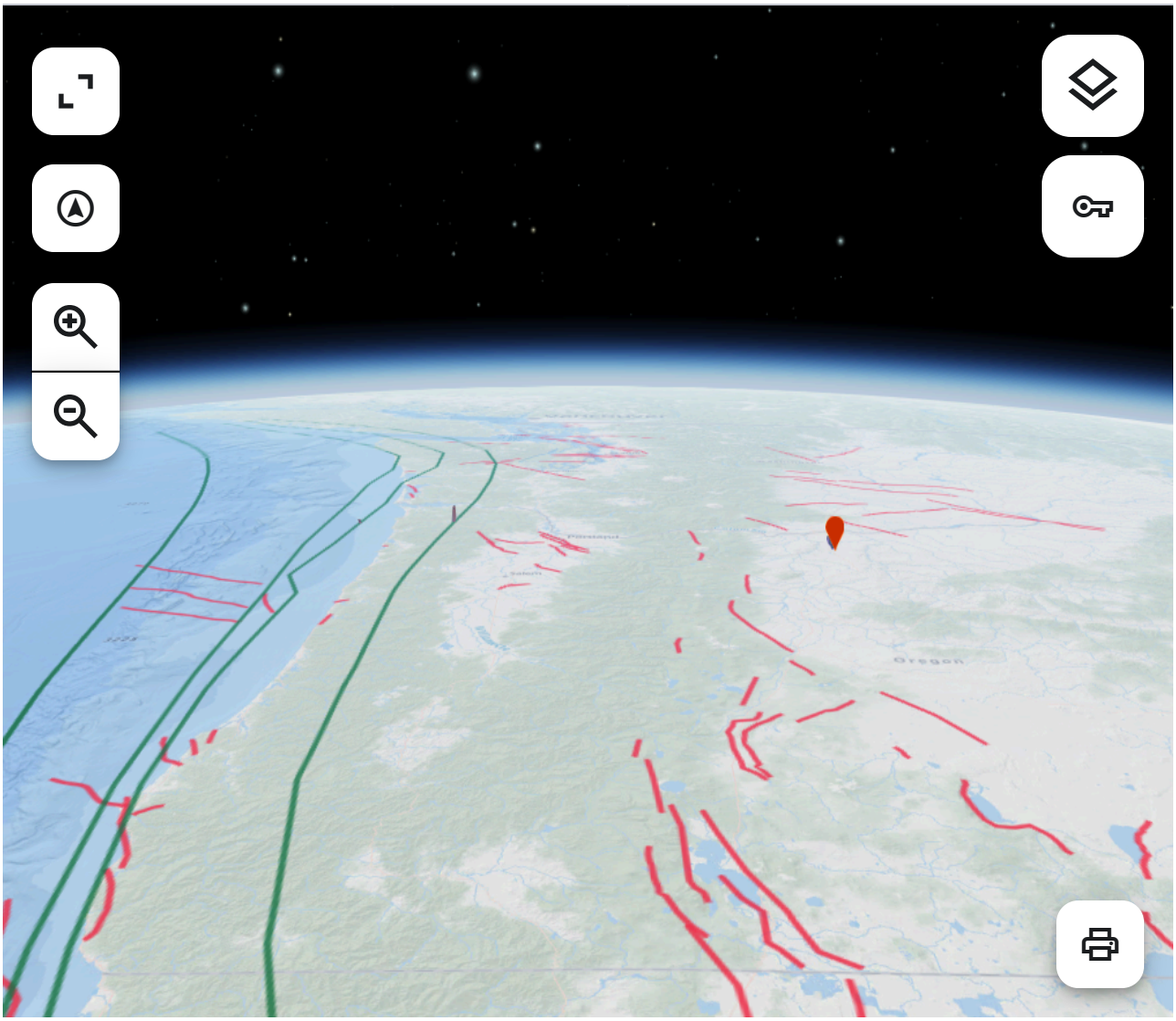
January 05, 2026, 07:13 AM

# Disaggregation Report

## Disaggregation



## Geographical Disaggregation




CHS, Esri, GEBCO, Garmin, NaturalVue | County of Clark, WA, Oregon Metro, Oregon S... Powered by Esri

## Parameter Summary

**Model**: NSHM Conterminous U.S. 2023

**Latitude**: 45.359288 °

**Longitude**: -120.754074 °

**Site Class**: C (Vs30 530)

**Intensity Measure Type**: PGA

**Return Period**: 2475 (2% in 50)

**Component**: Total

# Disaggregation Summary: Total

## Disaggregation targets

**Return period** : 2475 yrs

**Exceedance rate** : 4.040e-4 $yr^{-1}$

**PGA ground motion** : 1.857e-1 g

## Recovered targets

**Return period** : 2459.8125 yrs

**Exceedance rate** : 4.065e-4 $yr^{-1}$

## Totals

**Binned** : 100 %

**Residual** : 0 %

**Trace** : 1.14 %

## Mean (over all sources)

**m** : 6.43

**r** : 46.98 km

**$\varepsilon_0$** : 0.6 σ

## Mode (largest m-r bin)

**m** : 5.3

**r** : 11.07 km

**$\varepsilon_0$** : 0.5 σ

**Contribution** : 7.1 %

## Mode (largest m-r-$\varepsilon_0$ bin)

**m** : 5.3

**r** : 12.17 km

**$\varepsilon_0$** : 0.75 σ

**Contribution** : 1.95 %

## Discretization

**r** : min = 0.0, max = 1000.0, Δ = 20.0 km

**m** : min = 4.4, max = 9.4, Δ = 0.2

**ε** : min = -3.0, max = 3.0, Δ = 0.5 σ

## Epsilon keys

**ε0** : [-∞ .. -2.5)

**ε1** : [-2.5 .. -2.0)

**ε2** : [-2.0 .. -1.5)

**ε3** : [-1.5 .. -1.0)

**ε4** : [-1.0 .. -0.5)

**ε5** : [-0.5 .. 0.0)

**ε6** : [0.0 .. 0.5)

**ε7** : [0.5 .. 1.0)

**ε8** : [1.0 .. 1.5)

**ε9** : [1.5 .. 2.0)

**ε10** : [2.0 .. 2.5)

**ε11** : [2.5 .. +∞]

## Disaggregation Contributions: Total

| Source Set ↳ Source | Type | r | m | $\varepsilon_0$ | lon | lat | az | % |
|---|---|---|---|---|---|---|---|---|
| WUS Branch Average (opt) | Grid | | | | | | | 84.31 |
| PointSourceFinite: -120.754, 45.463 | | 11.24 | 5.80 | 0.11 | 120.754°W | 45.463°N | 0.00 | 1.75 |
| PointSourceFinite: -120.754, 45.436 | | 9.00 | 5.71 | -0.16 | 120.754°W | 45.436°N | 0.00 | 1.68 |
| PointSourceFinite: -120.754, 45.418 | | 7.58 | 5.67 | -0.33 | 120.754°W | 45.418°N | 0.00 | 1.66 |
| PointSourceFinite: -120.754, 45.454 | | 10.48 | 5.77 | 0.04 | 120.754°W | 45.454°N | 0.00 | 1.65 |
| PointSourceFinite: -120.754, 45.445 | | 9.75 | 5.74 | -0.08 | 120.754°W | 45.445°N | 0.00 | 1.64 |
| PointSourceFinite: -120.754, 45.463 | | 12.31 | 5.82 | 0.17 | 120.754°W | 45.463°N | 0.00 | 1.61 |
| PointSourceFinite: -120.754, 45.436 | | 10.04 | 5.73 | -0.09 | 120.754°W | 45.436°N | 0.00 | 1.56 |
| PointSourceFinite: -120.754, 45.427 | | 8.28 | 5.69 | -0.24 | 120.754°W | 45.427°N | 0.00 | 1.55 |
| PointSourceFinite: -120.754, 45.418 | | 8.59 | 5.68 | -0.26 | 120.754°W | 45.418°N | 0.00 | 1.55 |
| PointSourceFinite: -120.754, 45.445 | | 10.79 | 5.75 | -0.02 | 120.754°W | 45.445°N | 0.00 | 1.52 |
| PointSourceFinite: -120.754, 45.454 | | 11.54 | 5.79 | 0.10 | 120.754°W | 45.454°N | 0.00 | 1.52 |
| PointSourceFinite: -120.754, 45.481 | | 12.77 | 5.86 | 0.24 | 120.754°W | 45.481°N | 0.00 | 1.48 |
| PointSourceFinite: -120.754, 45.427 | | 9.31 | 5.70 | -0.18 | 120.754°W | 45.427°N | 0.00 | 1.44 |
| PointSourceFinite: -120.754, 45.499 | | 14.32 | 5.92 | 0.36 | 120.754°W | 45.499°N | 0.00 | 1.43 |
| PointSourceFinite: -120.754, 45.490 | | 13.55 | 5.89 | 0.30 | 120.754°W | 45.490°N | 0.00 | 1.4 |
| PointSourceFinite: -120.754, 45.472 | | 12.01 | 5.83 | 0.18 | 120.754°W | 45.472°N | 0.00 | 1.38 |
| PointSourceFinite: -120.754, 45.481 | | 13.86 | 5.88 | 0.29 | 120.754°W | 45.481°N | 0.00 | 1.36 |
| PointSourceFinite: -120.754, 45.499 | | 15.41 | 5.94 | 0.40 | 120.754°W | 45.499°N | 0.00 | 1.31 |
| PointSourceFinite: -120.754, 45.400 | | 6.31 | 5.63 | -0.51 | 120.754°W | 45.400°N | 0.00 | 1.31 |
| PointSourceFinite: -120.754, 45.508 | | 15.09 | 5.95 | 0.41 | 120.754°W | 45.508°N | 0.00 | 1.31 |
| PointSourceFinite: -120.754, 45.490 | | 14.64 | 5.91 | 0.35 | 120.754°W | 45.490°N | 0.00 | 1.29 |
| PointSourceFinite: -120.754, 45.472 | | 13.08 | 5.85 | 0.23 | 120.754°W | 45.472°N | 0.00 | 1.27 |
| PointSourceFinite: -120.754, 45.517 | | 15.87 | 5.98 | 0.46 | 120.754°W | 45.517°N | 0.00 | 1.26 |
| PointSourceFinite: -120.754, 45.400 | | 7.23 | 5.64 | -0.44 | 120.754°W | 45.400°N | 0.00 | 1.24 |
| PointSourceFinite: -120.754, 45.409 | | 6.92 | 5.64 | -0.42 | 120.754°W | 45.409°N | 0.00 | 1.22 |
| PointSourceFinite: -120.754, 45.508 | | 16.19 | 5.97 | 0.45 | 120.754°W | 45.508°N | 0.00 | 1.2 |
| PointSourceFinite: -120.754, 45.526 | | 16.64 | 6.01 | 0.50 | 120.754°W | 45.526°N | 0.00 | 1.2 |
| PointSourceFinite: -120.754, 45.517 | | 16.97 | 6.00 | 0.50 | 120.754°W | 45.517°N | 0.00 | 1.16 |
| PointSourceFinite: -120.754, 45.409 | | 7.90 | 5.66 | -0.35 | 120.754°W | 45.409°N | 0.00 | 1.14 |
| PointSourceFinite: -120.754, 45.535 | | 17.42 | 6.04 | 0.55 | 120.754°W | 45.535°N | 0.00 | 1.11 |
| PointSourceFinite: -120.754, 45.526 | | 17.74 | 6.03 | 0.54 | 120.754°W | 45.526°N | 0.00 | 1.1 |
| PointSourceFinite: -120.754, 45.544 | | 18.19 | 6.07 | 0.59 | 120.754°W | 45.544°N | 0.00 | 1.07 |
| PointSourceFinite: -120.754, 45.535 | | 18.51 | 6.06 | 0.58 | 120.754°W | 45.535°N | 0.00 | 1.02 |
| Cascadia (full, bottom) | Interface | | | | | | | 5.68 |
| Cascadia (full, bottom) | | 224.87 | 9.16 | 1.28 | 123.515°W | 45.866°N | 285.68 | 5.68 |
| WUS Branch Average | FaultSystem | | | | | | | 3.48 |
| Cascadia (full, middle) | Interface | | | | | | | 1.83 |
| Cascadia (full, middle) | | 278.28 | 8.98 | 1.90 | 124.239°W | 45.871°N | 283.09 | 1.83 |
| OR Intraslab | Slab | | | | | | | 1.24 |
| WA Intraslab | Slab | | | | | | | 1.09 |

## Application Metadata

**Application**: Disaggregation
**URL**: https://earthquake.usgs.gov/nshmp/hazard/disagg

**Repository**: nshmp-apps
**Version**: 21.4.1
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

**Repository** : nshmp-haz
**Version**: 2.8.2
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

**Repository** : nshmp-lib
**Version**: 1.7.15
**URL**: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

**Repository** : nshm-conus
**Version**: 6.1.3
**URL**: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus.git

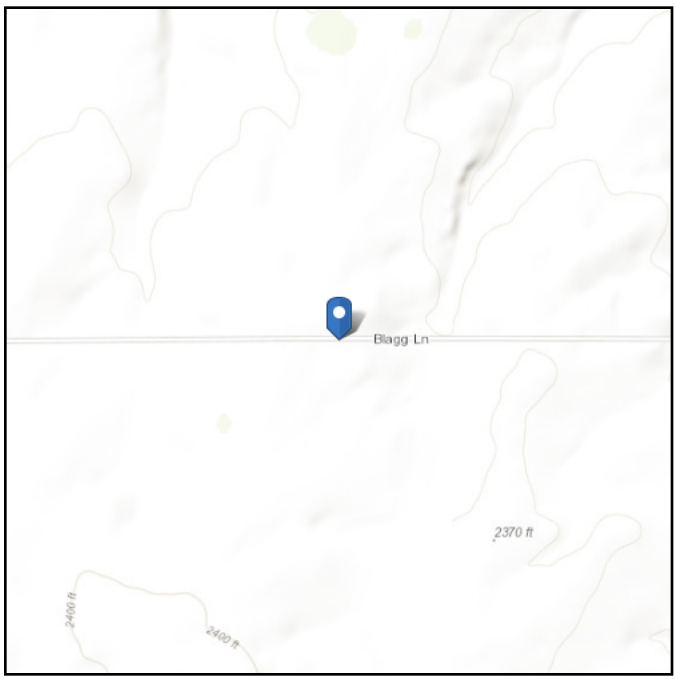
January 23, 2026, 08:24 AM

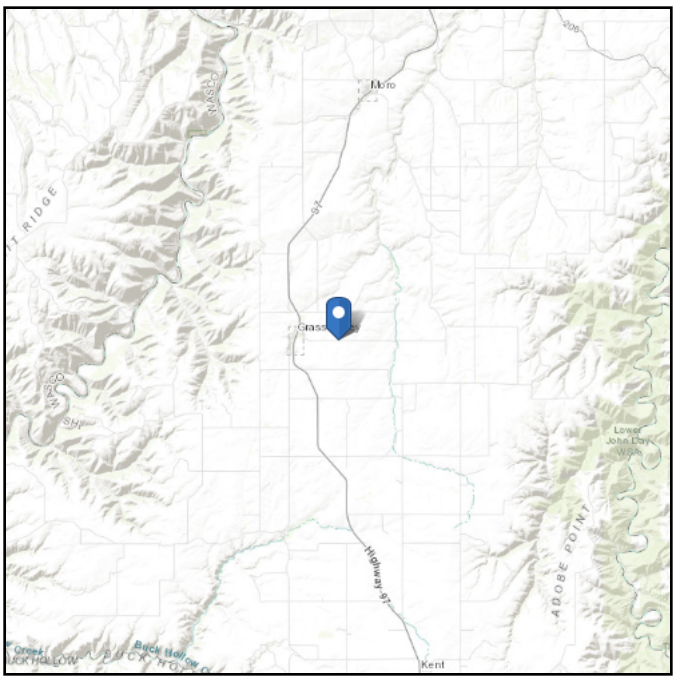
# Attachment B-5. Response Spectrum – Site Class B "Rock"

# ASCE Hazards Report

**Address:**
No Address at This Location

| | | | |
|---|---|---|---|
| **Standard:** | ASCE/SEI 41-23 | **Latitude:** | 45.359288 |
| **Risk Category:** | NaN | **Longitude:** | -120.754074 |
| **Soil Class:** | B - Rock | **Elevation:** | 2361.011931110122 ft (NAVD 88) |



# Seismic

**Site Soil Class:** B - Rock

**Hazard Level BSE-2N:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.32 | $S_{X1}$ : | 0.12 |

**Hazard Level BSE-1N:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.21 | $S_{X1}$ : | 0.083 |

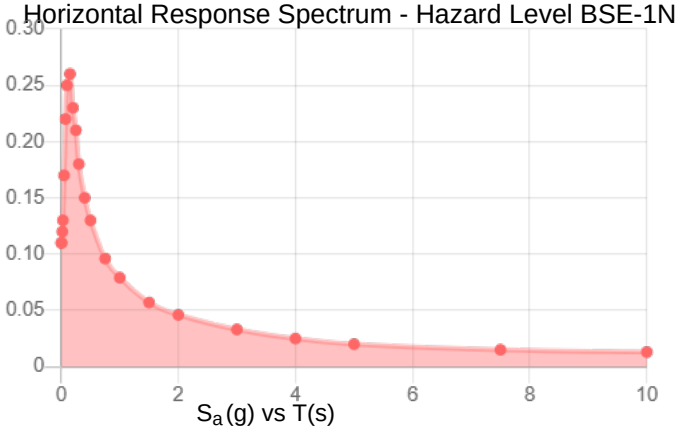
**Hazard Level BSE-2E:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.22 | $S_{X1}$ : | 0.085 |

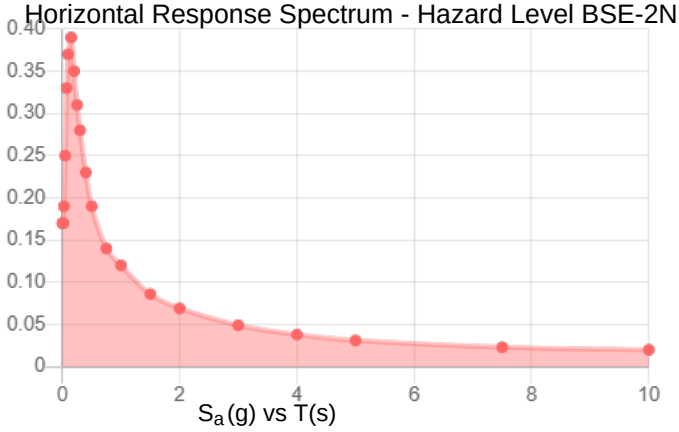
**Hazard Level BSE-1E:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.088 | $S_{X1}$ : | 0.032 |

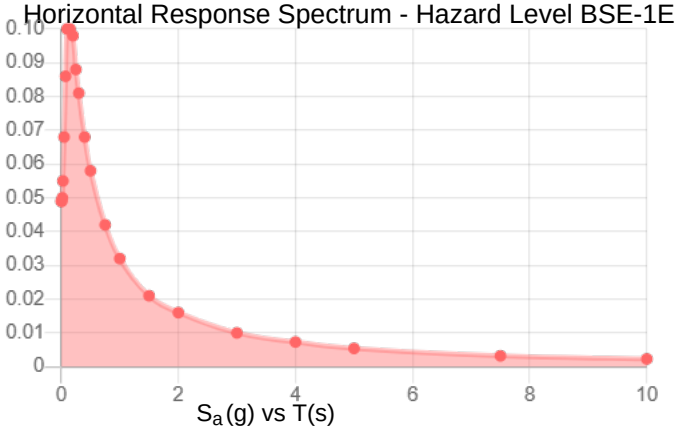
Horizontal Response Spectrum - Hazard Level BSE-1N



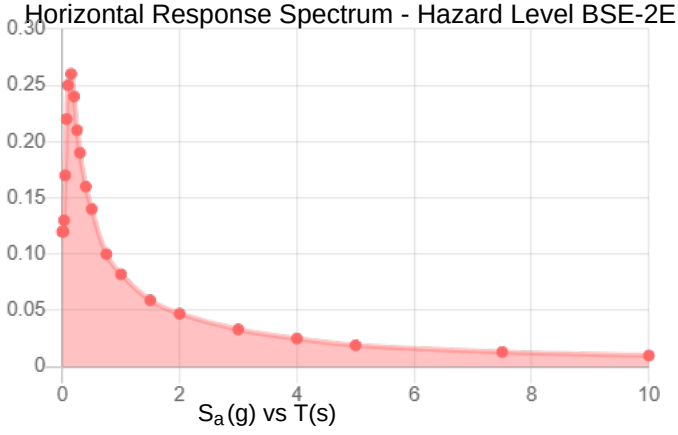

Horizontal Response Spectrum - Hazard Level BSE-2N




Horizontal Response Spectrum - Hazard Level BSE-1E




Horizontal Response Spectrum - Hazard Level BSE-2E




**Data Accessed:** **Mon Jan 05 2026**

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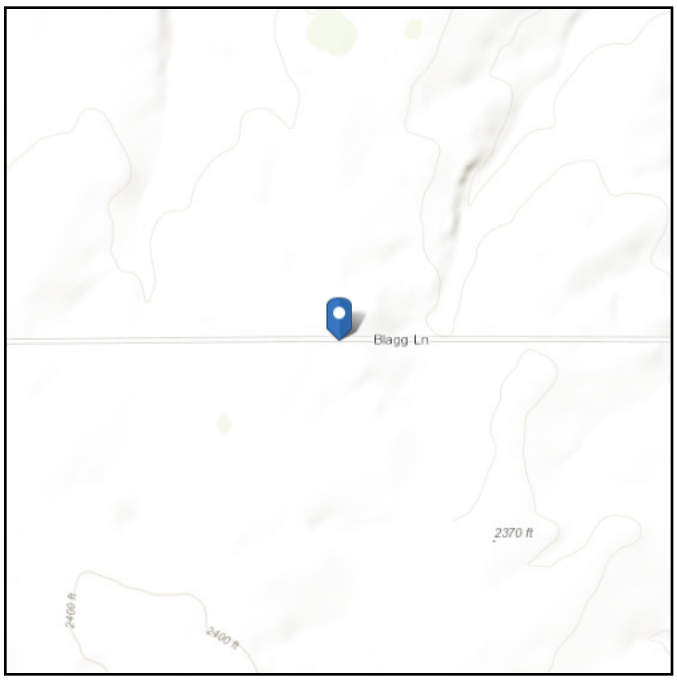
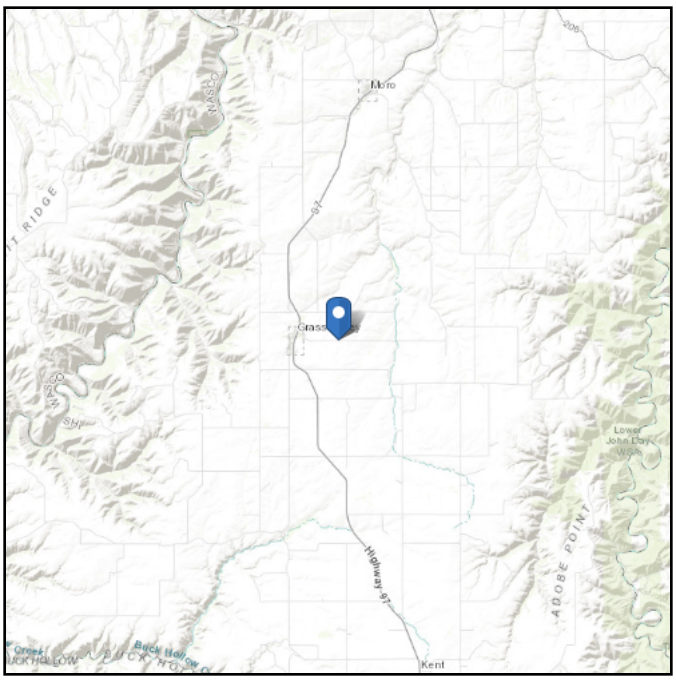
# Attachment B-6. Response Spectrum – Site Class C "Very Dense Soil and Soft Rock"

# ASCE Hazards Report

**Address:**
No Address at This Location

| | | | |
|---|---|---|---|
| **Standard:** | ASCE/SEI 41-23 | **Latitude:** | 45.359288 |
| **Risk Category:** | NaN | **Longitude:** | -120.754074 |
| **Soil Class:** | C - Very Dense Soil and Soft Rock | **Elevation:** | 2361.011931110122 ft (NAVD 88) |



# Seismic

**Site Soil Class:** C - Very Dense Soil and Soft Rock

**Hazard Level BSE-2N:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.48 | $S_{X1}$ : | 0.21 |

**Hazard Level BSE-1N:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.32 | $S_{X1}$ : | 0.14 |

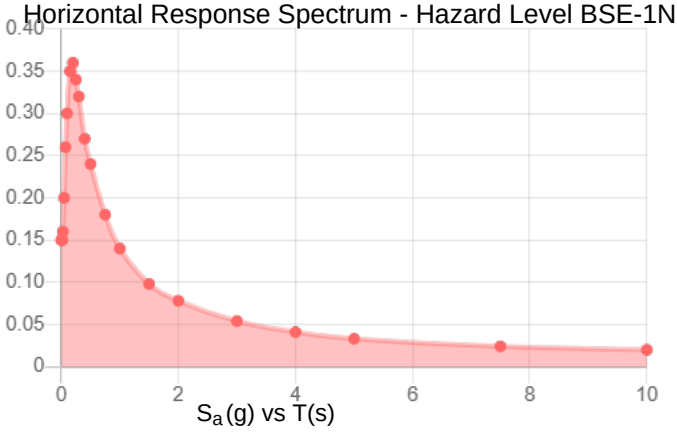
**Hazard Level BSE-2E:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.33 | $S_{X1}$ : | 0.15 |

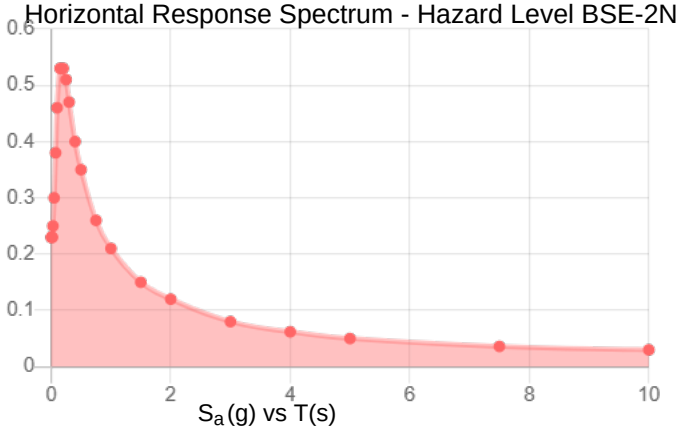
**Hazard Level BSE-1E:**

| | | | |
|---|---|---|---|
| $S_{XS}$ : | 0.14 | $S_{X1}$ : | 0.062 |

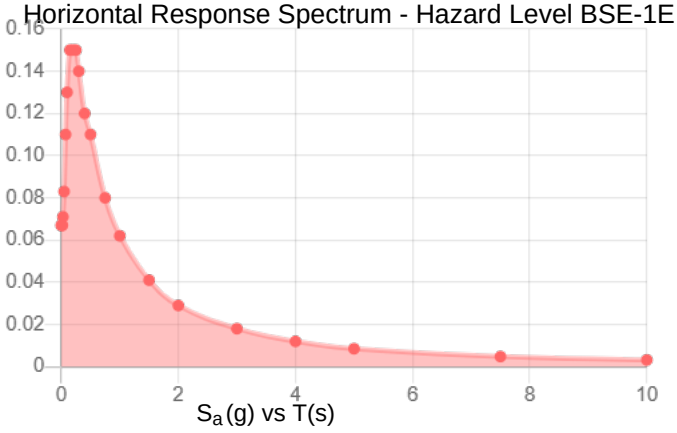
Horizontal Response Spectrum - Hazard Level BSE-1N



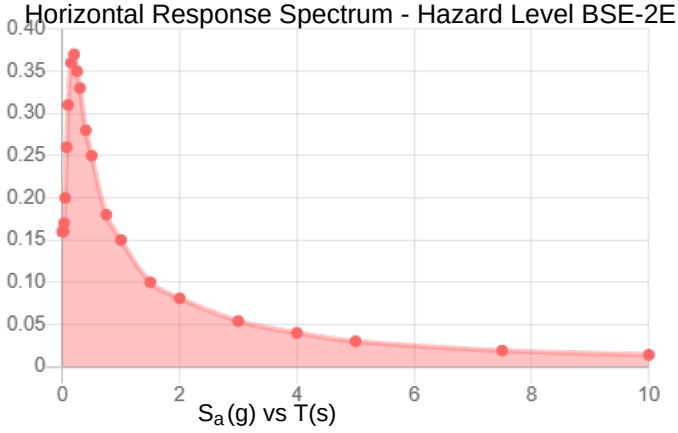

Horizontal Response Spectrum - Hazard Level BSE-2N




Horizontal Response Spectrum - Hazard Level BSE-1E




Horizontal Response Spectrum - Hazard Level BSE-2E




**Data Accessed:** **Fri Jan 23 2026**

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