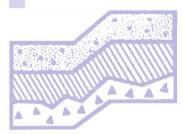


GEOTECHNICAL REPORT

Chehalis Landing 2844 Jackson Highway Lewis County, Washington

Project No. T-8643-1

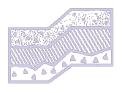


Terra Associates, Inc.

Prepared for:

CRG St. Louis, Missouri

May 3, 2022



TERRA ASSOCIATES, Inc.

Consultants in Geotechnical Engineering, Geology and Environmental Earth Sciences

> May 3, 2022 Project No. T-8643-1



Mr. Ted Knapp CRG 2199 Innerbelt Business Center Drive St. Louis, Missouri 63114

Subject: Geotechnical Report Chehalis Landing 2844 Jackson Highway Lewis County, Washington

Dear Mr. Knapp:

As requested, we have conducted a geotechnical engineering study for the subject project. The attached report presents our findings and recommendations for the geotechnical aspects of project design and construction.

In general, the native soils observed in the site explorations generally consist of one to two feet of loose organic silt with sand overlying one to five feet of soft to medium stiff silt with sand, sandy silt or clayey silt, over medium dense to dense clayey gravelly sand intermixed with silty sand to the termination depth of the test pits. The native silt and clay soils are typically low to medium plastic, although we would note that previous explorations, performed by others, indicated highly plastic clays were observed across the site at varying depths.

Below the clayey silt observed across the site, Test pits TP-20 and TP-24 appeared to be in a relatively obvious bedded formation consisting of previously observed clayey silt at the top and bedded layers of silty sands, clayey gravels and silt. Test pits TP-9, TP-11, TP-12, TP-25, TP-26, TP-104, TP-108, TP-109 and TP-111 terminated in medium stiff to very stiff sandy silt or clay.

The soil conditions observed in our recent test pits are generally consistent with those observed by others.

In our opinion, building support using standard spread footing foundations will be feasible. However, in order to gain suitable support, all foundations will need to bear on a minimum of two feet of granular structural fill following the successful completion of a preload program. We anticipate that the fill used to raise grade will be sufficient for the preload program.

Mr. Ted Knapp May 3, 2022

The attached report presents our recommendations regarding foundation support along with other geotechnical aspects of project design and construction. We trust the information presented in this report is sufficient for your current needs. If you have any questions or require additional information, please call.

Sincerely yours, **TERRA ASSOCIATES, INC.**

Stephanie L. King, E.I.T. Staff Engineer



Carolyn S. Decker, P.E. President

TABLE OF CONTENTS

1.0	Projec	ct Description	1
2.0	•	e of Work	
3.0		Conditions	
	3.1	Surface	
	3.2	Soils	
	3.3	Groundwater	
	3.4	Geologic Hazards	
	-	3.4.1 Erosion Hazard Areas	
		3.4.2 Steep Slope and Landslide Hazard Areas	4
		3.4.3 Seismic Hazard Areas	
		3.4.4 Volcanic Hazard Areas	
		3.4.5 Mine Hazard Areas	
	3.5	Seismic Design Parameters	6
4.0	Discu	ssion and Recommendations	
	4.1	General	7
	4.2	Site Preparation and Grading	7
	4.3	Excavations	9
	4.4	Foundations	10
	4.5	Slab-on-Grade Floors	11
	4.6	Lateral Earth Pressures for Wall Design	11
	4.7	Stormwater Detention Ponds	
	4.8	Infiltration Feasibility	12
	4.9	Drainage	
	4.10	Utilities	13
	4.11	Pavements	13
5.0	Addit	ional Services	14
6.0	Limit	ations	14

<u>Figures</u>

Vicinity Map	Figure	1
Exploration Location Plan		
Typical Settlement Marker Detail		
Typical Wall Drainage Detail		

<u>Appendix</u>

Field Exploration and Laboratory T	Festing	. Appendix A
Subsurface Explorations by Others		. Appendix B

Page

Geotechnical Report Chehalis Landing 2844 Jackson Highway Chehalis, Washington

1.0 PROJECT DESCRIPTION

The proposed project consists of constructing an industrial complex and associated parking and infrastructure improvements. The development and grading plans were not available at the time of this report. Based on a previous site plan, the site stormwater will be collected and directed to a stormwater pond in the southern portion of the site.

We expect the building or buildings will be constructed using precast concrete tilt-up perimeter wall panels with interior isolated columns supporting roof framing. Structural loading is expected to be relatively light with isolated columns carrying loads of 75 to 150 kips, and bearing walls carrying 4 to 8 kips per foot. We expect that product loading on the slab-on-grade floor would be in the range of 350 pounds per square foot (psf).

The recommendations in the following sections of this report are based on our understanding of the design features outlined above. We should review design drawings as they become available to verify that our recommendations have been properly interpreted and to supplement them, if required.

2.0 SCOPE OF WORK

Our work was completed in accordance with our authorized proposal dated November 10, 2021. Accordingly on December 2 and 3 of 2021, we supplemented existing subsurface information at the site by observing soil and groundwater conditions in 30 test pits excavated to maximum depths of about 8 to 10 feet with a mini track-mounted excavator. On March 14 of 2022, we supplemented this data by excavating an additional 15 test pits 8 to 10 feet below current site grades. Using the results of our field study and laboratory testing along with existing subsurface data, analyses were undertaken to develop geotechnical recommendations for project design and construction. Specifically, this report addresses the following:

- Soil and groundwater conditions.
- Geologic hazards per Lewis County Code. (LCC)
- Seismic design parameters per the current International Building Code. (IBC)
- Site preparation and grading.
- Foundations.

- Floor slabs.
- Stormwater facilities.
- Infiltration feasibility.
- Drainage.
- Utilities.
- Pavements.

It should be noted that the recommendations outlined in this report regarding drainage are associated with soil strength, design earth pressures, erosion, and stability. Design and performance issues with respect to moisture as it relates to the structural environment is beyond Terra Associates' purview. A building envelope specialist or contractor should be consulted to address these issues, as needed.

3.0 SITE CONDITIONS

3.1 Surface

The site is an irregular shaped, approximately 69-acre property located at 2844 Jackson Highway in Chehalis, Washington. The approximate location of the site is shown on Figure 1.

Jackson Highway runs from northwest to southeast along the eastern property border, Rush Road runs north to south along the western border of the property and Berwick Creek is to the south of the property. The site contains several shallow ditches for stormwater management. A single-family home with related outbuildings and access occupies the northeast center of the site.

Existing surface gradients are relatively flat, sloping gently from east to west, with an overall relief of approximately 20 feet. Site vegetation consists predominantly of field grasses with lesser of tall grass and weeds.

3.2 Soils

The native soils observed in the site explorations generally consist of one to two feet of loose organic silt with sand overlying one to five feet of soft to medium stiff silt with sand, sandy silt or clayey silt, over medium dense to dense clayey gravelly sand intermixed with silty sand to the termination depth of the test pits. The native silt and clay soils are typically low to medium plastic, although we would note that previous explorations, performed by others, indicated highly plastic clays were observed across the site at varying depths.

Below the clayey silt observed across the site, Test pits TP-20 and TP-24 appeared to be in a relatively obvious bedded formation consisting of previously observed clayey silt at the top and bedded layers of silty sands, clayey gravels and silt. Test pits TP-9, TP-11, TP-12, TP-25, TP-26, TP-104, TP-108, TP-109 and TP-111 terminated in medium stiff to very stiff sandy silt or clay.

The soil conditions observed in our recent test pits are generally consistent with those observed by others.

The *Geologic Map of the Centralia 7.5 minute Quadrangle, Washington* by Andrew J. Sadowski, William E. Keller, Michael Polenz, Todd R. Lou, Recep Cakir, Elizabeth Nesbitt, Jeffrey H. Tepper, S. Andrew DuFrane, and Gabriel Legorreta Paulín (2018) shows the site soils mapped as Alluvium (Qo and Qoa). The soils we observed in our subsurface explorations are generally consistent with the descriptions of these geologic map units.

Detailed descriptions of the subsurface conditions we observed in our site explorations are presented on the Test Pit Logs in Appendix A. The explorations completed by others are in Appendix B. The approximate test pit locations are shown on Figure 2.

3.3 Groundwater

We observed light to heavy groundwater seepage between depths of approximately 1.5 to 4 feet in the 45 test pits. We would also note that the groundwater levels observed in early December 2021 were averaging about 1-foot deeper than the observations noted during our recent exploration in March 2022. We expect that groundwater levels at the site will fluctuate seasonally with highest levels occurring during the wet winter and spring months, as observed in our recent explorations.

Our recent work did not include monitoring of groundwater levels. Terracon had previously completed a study at the site that included installing four groundwater monitoring wells and observing the groundwater levels. The groundwater observations were noted during drilling on January 6 and 7, 2021 and were periodically checked manually on February 8, 2021, May 21, 2021, and July 28, 2021. Depths during drilling were inferred based on moisture difference between samples and were noted between 9.5 and 25 feet. February 2021 had water level indications of 0.75-feet to 5 feet, May 2021 water levels indicated levels between 3 and 5.25 feet, and by July 2021, two of the wells were decommissioned and water levels were recorded between 6 and 6.25 feet. The groundwater levels recorded by the manual measurements are presented as depths below grade referenced to the ground surface at the time of exploration.

3.4 Geologic Hazards

The Lewis County Code (LCC) does not specifically define geologically hazardous areas; however, we evaluated site conditions for the presence of erosion, steep slopes/landslide, seismic, volcanic, and mine hazard areas as specified in Section 17.38 of the LCC. Discussions related to erosion, landslide, and seismic hazards are given below.

3.4.1 Erosion Hazard Areas

The LCC categorizes erosion hazard areas as either severe or moderate. Chapter 17.38.640 of the LCC defines severe erosion hazard areas as "...those areas that have severe or very severe erosion potential as detailed in the soil descriptions contained in the Web Soil Survey for Lewis County, Washington, Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture."

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) maps the majority of the site soils as *Lacamas silt loam*, 0 to 3 percent slopes with a portion classified as *Reed silty clay loam* (running northwest to southeast, along Jackson Highway) and lesser of *Galvin silt loam*, 0 to 8 percent slopes (surrounding the building located at the project site address). These soils are described by the NRCS as having a slight erosion hazard, with only the portion surrounding the existing house as moderate erosion hazard. Based on the soils and relatively flat project site, the site does not meet the above criteria defining moderate or severe erosion hazard areas.

The site soils will be susceptible to erosion when exposed during construction. In our opinion, proper implementation and maintenance of Best Management Practices (BMPs) for erosion prevention and sedimentation control will adequately mitigate the erosion potential in the planned development area. Erosion protection measures as required by the Lewis County will need to be in place prior to and during grading activity on the site.

3.4.2 Steep Slope and Landslide Hazard Areas

Section 17.38.650 of the LCC defines steep slope and landslide hazard areas as:

- "(1) Classification of Steep Slope Hazard Areas. Steep slope hazard areas are areas where there is not a mapped or designated landslide hazard, but where there are steep slopes equal to or greater than a 35 percent slope with a vertical relief of 10 or more feet. Steep slopes which are less than 10 feet in vertical height and are not part of a larger steep slope system, and steep slopes created through previous legal grading activity, are not regulated steep slope hazard areas. Presence of a steep slope suggests potential slope stability problems.
- (2) Classification of Landslide Hazard Areas. Landslide hazard areas are those areas meeting any of the following criteria:
 - (a) Areas subject to previous slope failures, including areas of unstable old or recent landslides;
 - (b) Areas with all of the following characteristics:
 - (i) A slope greater than 15 percent;
 - (ii) Hillsides intersecting geologic contacts with a relatively permeable sediment overlying a relatively impermeable sediment or bedrock; and
 - (iii) Springs or ground water seepage;
 - (c) Slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials;
 - (d) Slopes having gradients greater than 80 percent subject to rockfall during seismic shaking;

- (e) Areas potentially unstable as a result of rapid stream incision and streambank erosion or undercutting;
- (f) Areas located in a canyon, on an alluvial fan, or presently or potentially subject to inundation by debris flows or catastrophic flooding.
- (3) Mapped Landslide Hazard Areas. Landslide hazard areas include the following mapped sources:
 - (a) Areas mapped as "unstable," "landslides," and "old landslides" in the Slope Stability Study of the Centralia-Chehalis Area, Lewis County, Washington, by Allen J. Fiksdal, Department of Natural Resources, Division of Geology and Earth Resources, 1978.
 - (b) Areas included in the Landslides and Landforms maps available from the Washington Department of Natural Resources Division of Geology and Earth Resources, dated July 2016 or as amended."

Based on a review of the DNR, there are documented landslides that are located northeast of the site; however, the site is relatively flat with no signs of sloughed material observed on-site, and therefore the site does not meet any criteria listed in the LCC for landslide or steep slope hazard areas.

3.4.3 Seismic Hazard Areas

Chapter 17.38.660 of the LCC defines seismic hazard areas as:

- "(1) Classification of Seismic Hazard Areas. Seismic hazard areas are locations subject to severe risk of damage as a result of earthquake-induced soil liquefaction, ground shaking amplification, slope failure, settlement, or surface faulting.
 - (a) All structures that require a building permit within Lewis County are required to be consistent with the D1 seismic zone (as specified in the International Building Code).
 - (b) Active faults or trenches are considered seismic hazards.
 - (c) Areas of known faults and soil liquefaction hazards are depicted in Ground Response Geographic Information System data dated June 2010 and Seismogenic Features data dated April 2016 and retrieved from the Washington Department of Natural Resources Division of Geology and Earth Resources."

Liquefaction is a phenomenon where there is a reduction or complete loss of soil strength due to an increase in water pressure induced by vibrations. Liquefaction mainly affects geologically recent deposits of loose, finegrained sands underlying the groundwater table. Soils of this nature derive their strength from intergranular friction. The generated water pressure or pore pressure essentially separates the soil grains and eliminates this intergranular friction; thus, eliminating the soil's strength. Due to the predominantly medium dense to dense consistency of the alluvial deposits underlying the site and relatively high percentages of soil fines, which give the soils cohesive strength, it is our opinion that the potential for site damage due to soil liquefaction is low. Based on our study, it is our opinion that the risk for damage resulting from earthquake-induced slope failure, settlement, lateral spreading, or surface faulting is negligible. Therefore, in our opinion, unusual seismic hazard areas do not exist at the site, and design in accordance with local building codes for determining seismic forces would adequately mitigate project impacts associated with ground shaking.

3.4.4 Volcanic Hazard Areas

Chapter 17.38.670 of the LCC defines volcanic hazard areas as:

- "(1) Classification of Volcanic Hazard Areas. Volcanic hazard areas are locations where the risk to life and property by a large volcanic event is high. For the purpose of these regulations, damage from lahars and near volcano hazards constitute the primary volcanic hazards. Volcanic tephra (ash), while disruptive and potentially dangerous, is not considered a volcanic hazard that is subject to these regulations.
 - (a) Volcanic hazard areas are shown on maps available from the United States Geological Service (USGS) Volcano Hazards Program."

Based on available information, no volcanic hazards are within the project site, and therefore the site does not meet any criteria listed in the LCC for volcanic hazard areas.

3.4.5 Mine Hazard Areas

Chapter 17.38.680 of the LCC defines mine hazard areas as:

"(1) Classification of Mine Hazard Areas. Mine hazard areas are those areas within 100 horizontal feet of a mine opening at the surface or which are underlain at a depth of 300 feet or less by mine workings. Known locations of historic mines are identified in the Washington State Department of Natural Resources, Division of Geology and Earth Resources, Open File Report 94-7; The Washington State Coal Mines Map Collection: A Catalog, Index, and User's Guide, by H.W. Schaase, M. Lorraine Koler, Nancy A. Eberle, and Rebecca A. Christie, 1994, 107 pages; Open File Report 84-6, Inventory of Abandoned Coal Mines in the State of Washington, by F.V. LaSalata, M.C. Meard, T.J. Walsh, and H.W. Schaase, 1985, 42 pages; and specific maps and surveys of mine workings on file with the Division of Geology and Earth Resources."

Based on a review of the DNR, no known mining operations are within 300 feet of the project site, and therefore the site does not meet any criteria listed in the LCC for mine hazard areas.

3.5 Seismic Design Parameters

Based on soil conditions observed in the subsurface explorations, and our knowledge of the area geology, per the current Seattle Building Code, site class "D" should be used in structural design.

4.0 DISCUSSION AND RECOMMENDATIONS

4.1 General

Based on our study, the primary geotechnical concerns at the site are the shallow groundwater table and compressible upper silts and clays. The soft, fine grained native soil layers observed at the site will consolidate under static dead loads imposed by the structure or structures and by product loading on structure floor slabs. To mitigate the potential for post-construction settlement due to this consolidation, we recommend preloading the building locations. Preloading will involve placing structural fill and allowing settlements to occur under this load before building construction is initiated.

After completing the preload, building construction can begin. The buildings can be supported on conventional spread footings bearing on a minimum of two feet of compacted structural fill.

The proximity of the water table to existing grade that will make it difficult to perform typical cut and fill operations for expected building and dock high construction. During the wet winter months, excavations depths of two feet or more below existing surface grades should be expected to encounter groundwater seepage. In our opinion, site grades should be raised using compacted structural fill such that dock high loading areas do not require cuts into native soils below the water table. If the site is not raised enough for clearance of groundwater, then over-excavation and replacement of some native soils will need to occur.

The site soils contain a significant amount of fines (silt- and clay-sized particles) such that they will be extremely difficult to compact as structural fill when too wet. Accordingly, the ability to use the soils from site excavations as structural fill will depend on their moisture content and the prevailing weather conditions at the time of construction. If grading activities will take place during the winter season, the owner should be prepared to import free-draining granular material for use as structural fill and backfill.

Detailed recommendations regarding these issues and other geotechnical design considerations are provided in the following sections of this report. These recommendations should be incorporated into the final design drawings and construction specifications.

4.2 Site Preparation and Grading

To prepare the site for construction, all vegetation, organic surface soils, and demolition debris should be stripped and removed from the site. Demolition of existing structures should include removal of existing foundations and abandonment of underground septic systems and other buried utilities. Abandoned utility pipes that fall outside of new building areas can be left in place provided they are sealed to prevent intrusion of groundwater seepage and soil. Based on our test pits, surface stripping depths ranging 12 to 24 inches should be expected to remove organic topsoil. Organic topsoil will not be suitable for use as structural fill, but may be used for limited depths in nonstructural areas or for landscaping purposes. Localized areas, such as soils observed near along the southwestern border had organic inclusions to a depth of about three feet (Test Pits TP-21) will not be suitable for support of new fill or building elements. Excavation and replacement of these soils with new structural fill is recommended. Once clearing and grubbing operations are complete, grading to establish desired building grades can be initiated. In order to achieve proper compaction of the building fill, the native subgrade must be in a relatively stable condition. If excessively soft and yielding subgrade is observed and it cannot be stabilized in place by aeration and compaction, stabilizing by the use of an additive such as cement or lime will need to be considered. Alternatively, the unstable soils can be excavated and replaced with clean granular structural fill. If the depth of excavation to remove unstable soils is excessive, use of geotextile fabric such as Mirafi 500X or equivalent in conjunction with clean granular structural fill can be considered in order to limit the depth of removal. In general, our experience has shown that a minimum of 18 inches of clean, granular structural fill over the geotextile fabric should establish a stable bearing surface.

As noted, we recommend raising existing grade across the site due to the shallow water table. We recommend spread footing foundations obtain support on a minimum of two feet of compacted granular structural fill. By raising the finish floor grade, with the exception of perimeter footings in the loading dock areas, there should be a sufficient thickness of structural fill within the building limits to provide this support. In the dock-high loading areas, overexcavation of the native soils and replacement with granular structural fill may be required. The structural fill should extend laterally from the edges of the footings a minimum distance of one-foot. The structural fill used for this purpose should consist of wet weather structural fill, as outlined later in this section, or equivalent granular material.

Our study indicates that the native soils contain a high percentage of fines (silt and clay size particles). These soils will be extremely difficult to compact as structural fill when too wet or too dry. Accordingly, the ability to use native soils from site excavations as structural fill will depend on their moisture content and the prevailing weather conditions at the time site grading activities take place. Laboratory testing indicates that at the time of our study, in general, the soil's moisture content was above optimum for compaction. In order to use these materials for structural fill, the owner should consider drying by aeration during dry weather conditions or using an additive such as cement or lime to stabilize the soil.

If grading activities are planned during the wet winter months, and the on-site soils become too wet to achieve adequate compaction, the owner or contractor should be prepared to treat soils with lime or cement, or import wet weather structural fill. For wet weather structural fill, we recommend importing a granular soil that meets the following grading requirements:

U.S. Sieve Size	Percent Passing
6 inches	100
No. 4	75 maximum
No. 200	5 maximum*

*Based on the ³/₄-inch fraction.

Prior to use, Terra Associates, Inc. should examine and test all materials to be imported to the site for use as structural fill. If the building subgrade is constructed using native soils and will be exposed during wet weather, it would be advisable to place 12 inches of this granular structural fill on the building pad to prevent deterioration of the floor subgrade.

Structural fill should be placed in uniform loose layers not exceeding 12 inches and compacted to a minimum of 95 percent of the soil's maximum dry density, as determined by American Society for Testing and Materials (ASTM) Test Designation D-1557 (Modified Proctor). The moisture content of the soil at the time of compaction should be within two percent of its optimum, as determined by this ASTM standard. The native silt and clay soils should be placed in uniform loose layers not exceeding 6 inches and compacted to the above standards using sheeps foot equipment. In nonstructural areas, the degree of compaction can be reduced to 90 percent.

Preload Program

The native fine grained low to medium plasticity clayey silt was noted to be soft and based on previous laboratory test results, normally consolidated. As it is anticipated to raise the site grade to avoid over excavation and replacement of such soils, we believe the fill required to raise grade would serve as a preload prior to establishing grade. At minimum any fill material placed to establish building grades should be allowed to settle out prior to building construction. Assuming a two-foot fill depth we estimate the amount of consolidation settlement could be around one to two inches occurring over a nine-week period.

To verify the amount of settlement and the rate of movement, the preload program should be monitored by installing settlement markers. A typical settlement marker installation is shown on Figure 3. The settlement markers should be installed on the existing grade prior to placing any building fills. Once installed, elevations of both the fill height and marker should be taken daily until the full height of the building fill is in place. Once final grades are achieved, readings should continue weekly until the anticipated settlements have occurred.

It is critical that the grading contractor recognize the importance of the settlement marker installations. All efforts must be made to protect the markers from damage during fill placement. It will be nearly impossible to evaluate the progress of the surcharge program if the markers are damaged or destroyed by construction equipment. As a result, it may be necessary to install new markers and extend the surcharging period in order to ensure that settlements have ceased and building construction can begin.

4.3 Excavations

All excavations at the site associated with confined spaces, such as utility trenches, must be completed in accordance with local, state, and federal requirements. Based on regulations outlined in the Washington Industrial Safety and Health Act (WISHA), the soils would be classified as Type C soils.

For properly dewatered excavations more than 4 feet, but less than 20 feet deep, the side slopes should be laid back at a slope inclination of 1.5:1 (Horizontal:Vertical) or flatter. If there is insufficient room to complete the excavations in this manner, or if excavations greater than 20 feet in depth are planned, temporary shoring to support the excavations may be required. Properly designed and installed shoring trench boxes can be used to support utility trench excavations where required.

Groundwater seepage should be anticipated within excavations extending below depths of about one and one-half to four feet particularly during the wet winter season. Based on our study, we expect that the volume of water and rate of seepage into the excavation is expected to be moderate which would likely impact the stability of excavations that are sloped as described above. Therefore, the contractor should anticipate the use of shoring boxes in excavations deeper than about four feet. We expect that excavations that extend no more than about two to three feet below the groundwater table can be dewatered using conventional sump-pumping procedures along with a system of collection trenches. Deeper excavations may require more significant dewatering efforts.

The above information is provided solely for the benefit of the owner and other design consultants, and should not be construed to imply that Terra Associates, Inc. assumes responsibility for job site safety. It is understood that job site safety is the sole responsibility of the project contractor.

4.4 Foundations

Provided the site grade is raised to accommodate the proposed construction, the building may be supported on conventional spread footing foundations bearing on a minimum of two feet of structural fill following the completion of the preload program. Perimeter foundations exposed to the weather should be at a minimum depth of 1.5 feet below final exterior grades.

We recommend designing foundations for a net allowable bearing capacity of 2,500 psf. For short-term loads such as wind and seismic, a one-third increase in this allowable capacity can be used. With the anticipated structural loading and this bearing stress applied, estimated total settlement of one-inch may be expected with differential settlement between columns and perimeter bearing walls of about one-half inch.

With tilt up wall panel construction, the continuous strip footings are not initially uniformly loaded but rather, are subject to isolated point loading from shimming of the wall panel. This point loading causes excessive bending in the footing that can cause the footing to break or fracture. In particular, if cuts near or at the water table are required, it may be necessary to evaluate the footing as a beam on an elastic foundation subject to point loading that will be imposed by the wall panels. With support obtained on a minimum of two feet of granular structural fill, a subgrade modulus (k_s) of 110 pounds per cubic inch (pci) can be used for this analysis. If excessive bending that could cause fracturing is indicated, the footing should be stiffened to resist this bending.

For designing foundations to resist lateral loads, a base friction coefficient of 0.35 can be used. Passive earth pressures acting on the side of the footing and buried portion of the foundation stem wall can also be considered. We recommend calculating this lateral resistance using an equivalent fluid weight of 350 pcf. We recommend not including the upper 12 inches of soil in this computation because they can be affected by weather or disturbed by future grading activity. This value assumes the foundation will be constructed neat against competent fill soil or backfilled with structural fill as described in Section 4.2. The recommended value includes a safety factor of 1.5.

4.5 Slab-on-Grade Floors

Slab-on-grade floors may be supported on a subgrade prepared as recommended in Section 4.2 of this report. Immediately below the floor slab, we recommend placing a four-inch thick capillary break layer composed of clean, coarse sand or fine gravel that has less than five percent passing the No. 200 sieve. This material will reduce the potential for upward capillary movement of water through the underlying soil and subsequent wetting of the floor slab.

The capillary break layer will not prevent moisture intrusion through the slab caused by water vapor transmission. Where moisture by vapor transmission is undesirable, such as covered floor areas, a common practice is to place a durable plastic membrane on the capillary break layer and then cover the membrane with a layer of clean sand or fine gravel to protect it from damage during construction, and aid in uniform curing of the concrete slab. It should be noted that if the sand or gravel layer overlying the membrane is saturated prior to pouring the slab, it will be ineffective in assisting uniform curing of the slab and can actually serve as a water supply for moisture seeping through the slab and affecting floor coverings. Therefore, in our opinion, covering the membrane with a layer of sand or gravel should be avoided if floor slab construction occurs during the wet winter months and the layer cannot be effectively drained.

A subgrade modulus (k_s) of 110 pounds per cubic inch (pci) can be used for floor slab design in support of rack and lift vehicle loading.

4.6 Lateral Earth Pressures for Wall Design

The magnitude of earth pressure development on below-grade walls will partly depend on the quality of the wall backfill. We recommend placing and compacting wall backfill as structural fill as described in Section 4.2 of this report. To guard against hydrostatic pressure development, wall drainage must also be installed. A typical recommended wall drainage detail is shown on Figure 4.

With wall backfill placed and compacted as recommended, and drainage properly installed, we recommend designing unrestrained walls for an active earth pressure equivalent to a fluid weighing 35 pounds per cubic foot (pcf). For restrained walls, an additional uniform load of 100 psf should be added to the 35 pcf. To account for typical traffic surcharge loading, the walls can be designed for an additional imaginary height of two feet (two-foot soil surcharge). For evaluation of wall performance under seismic loading, a uniform pressure equivalent to 8H psf, where H is the height of the below-grade portion of the wall should be applied in addition to the static lateral earth pressure. These values assume a horizontal backfill condition and that no other surcharge loading, sloping embankments, or adjacent buildings will act on the wall. If such conditions exist, then the imposed loading must be included in the wall design. Friction at the base of foundations and passive earth pressure will provide resistance to these lateral loads. Values for these parameters are provided in Section 4.2.

4.7 Stormwater Detention Pond

As discussed, development stormwater will likely be routed to a stormwater pond located in the southern portion of the site. We expect that the pond would be constructed predominantly of cuts into native soil. Based on the recent groundwater monitoring data provided by Terracon and our recent explorations observed in both December 2021 and March 2022, the functional depths of the pond during the wintertime would be limited to about two to four feet below existing ground surface.

Detention Pond

If fill berms are constructed, the berm locations should be stripped of topsoil, duff, and soils containing organic material prior to the placement of fill. The fill berms should be constructed by placing structural fill in accordance with recommendations outlined in Section 4.2 of this report. Material used to construct pond berms should consist of predominately granular soils with a maximum size of three inches and a minimum of 20 percent fines. The results of laboratory testing indicate that soils meeting this gradational requirement exist on-site. Terra Associates, Inc. should examine and test all on-site or imported materials proposed for use as berm fill prior to their use.

Because of exposure to fluctuating stored water levels, soils exposed on the interior pond slopes may be subject to some risk of periodic shallow instability or sloughing. Establishing interior slopes at a gradient of 3:1 (Horizontal: Vertical) will significantly reduce or eliminate this potential. Exterior berm slopes and interior slopes above the maximum water surface should be graded to a finished inclination no steeper than 2:1 (Horizontal: Vertical). Finished slope faces should be thoroughly compacted and vegetated to guard against erosion.

We should review the stormwater plans when they are completed and revise our recommendations, if required.

4.8 Infiltration Feasibility

Although portions of the native sand and gravel soils would generally be favorable for infiltration, there is insufficient separation between the top of the sand and gravel formation and the seasonal high groundwater table to allow for infiltration facilities. The upper silty sand and silty gravel soils have a high soil fines content and degree of consolidation such that these soils exhibit relatively low permeability. This coupled with groundwater seepage conditions observed in the test pits would preclude the use of infiltration facilities for discharge of development stormwater by infiltration, in our opinion.

4.9 Drainage

Surface

Final exterior grades should promote free and positive drainage away from the building at all times. Water must not be allowed to pond or collect adjacent to foundations, or within the immediate building area. If a positive drainage gradient cannot be provided, surface water should be collected adjacent to the structure for discharge into the site stormwater system.

Subsurface

We recommend installing perimeter foundation drains adjacent to shallow foundations where paved surfaces do not extend to building perimeter and positive drainage away from the structure is not provided. The drains can be laid to grade at an invert elevation equivalent to the bottom of footing grade. The drains can consist of four-inch diameter perforated PVC pipe that is enveloped in washed pea gravel-sized drainage aggregate. The aggregate should extend six inches above and to the sides of the pipe. Roof and foundation drains should be tightlined separately to the storm drains. All drains should be provided with cleanouts at easily accessible locations.

4.10 Utilities

Utility pipes should be bedded and backfilled in accordance with American Public Works Association (APWA) or local jurisdictional requirements. At minimum, trench backfill should be placed and compacted as structural fill, as described in Section 4.2. As noted, the native soils are extremely moisture sensitive and will require careful control of moisture to facilitate proper compaction. If utility construction takes place during the winter or if it is not feasible to properly moisture condition the excavated soil at the time of construction, it may be necessary to import suitable wet weather fill for utility trench backfilling.

4.11 Pavements

Pavement subgrades should be prepared as described in Section 4.2 of this report. Regardless of the degree of relative compaction achieved, the subgrade must be firm and relatively unyielding before paving. The subgrade should be proofrolled with heavy rubber-tired construction equipment such as a loaded ten yard dump truck to verify this condition.

The pavement design section is dependent upon the supporting capability of the subgrade soils and the traffic conditions to which it will be subjected. We expect traffic at the facility will consist of cars and light trucks, along with heavy traffic in the form of semi-trucks. For design considerations, we have assumed traffic in parking and in car/light truck access pavement areas can be represented by an 18-kip Equivalent Single Axle Loading (ESAL) of 50,000 over a 20-year design life. For heavy traffic pavement areas, we have assumed an ESAL of 300,000 would be representative of the expected loading. These ESALs represent loading approximately equivalent to 3 and 18, loaded (80,000 pound GVW) semi-trucks traversing the pavement daily in each area, respectively.

With a stable subgrade prepared as recommended, we recommend the following pavement sections:

Light Traffic and Parking:

- Two inches of hot mix asphalt (HMA) over six inches of crushed rock base (CRB)
- Full depth HMA 4 inches

Heavy Traffic:

- Three inches of HMA over eight inches of CRB
- Full depth HMA 5.5 inches

For exterior Portland cement concrete (PCC) pavement, we recommend the following:

- 6 inches of PCC over two inches of CRB
 - 28 day compressive strength 4,000 psi
 - Control joints spaced at a maximum of 15 feet

Soil cement stabilization or constructing a soil cement base for support of the pavement section can also be considered as an alternate to the above conventional pavement sections. Assuming a properly constructed soil cement base having a minimum thickness of 12 inches and a minimum 7-day compressive strength of 100 pounds per square inch (psi), a minimum HMA pavement thickness of 3 inches would be required for the heavy traffic areas. The design of the soil cement base should be completed using samples of the subgrade exposed at the time of construction.

The paving materials used should conform to the Washington State Department of Transportation (WSDOT) specifications for half-inch class HMA, PCC, and CRB.

Long-term pavement performance will depend on surface drainage. A poorly-drained pavement section will be subject to premature failure as a result of surface water infiltrating the subgrade soils and reducing their supporting capability. For optimum performance, we recommend surface drainage gradients of at least two percent. Some degree of longitudinal and transverse cracking of the pavement surface should be expected over time. Regular maintenance should be planned to seal cracks as they occur.

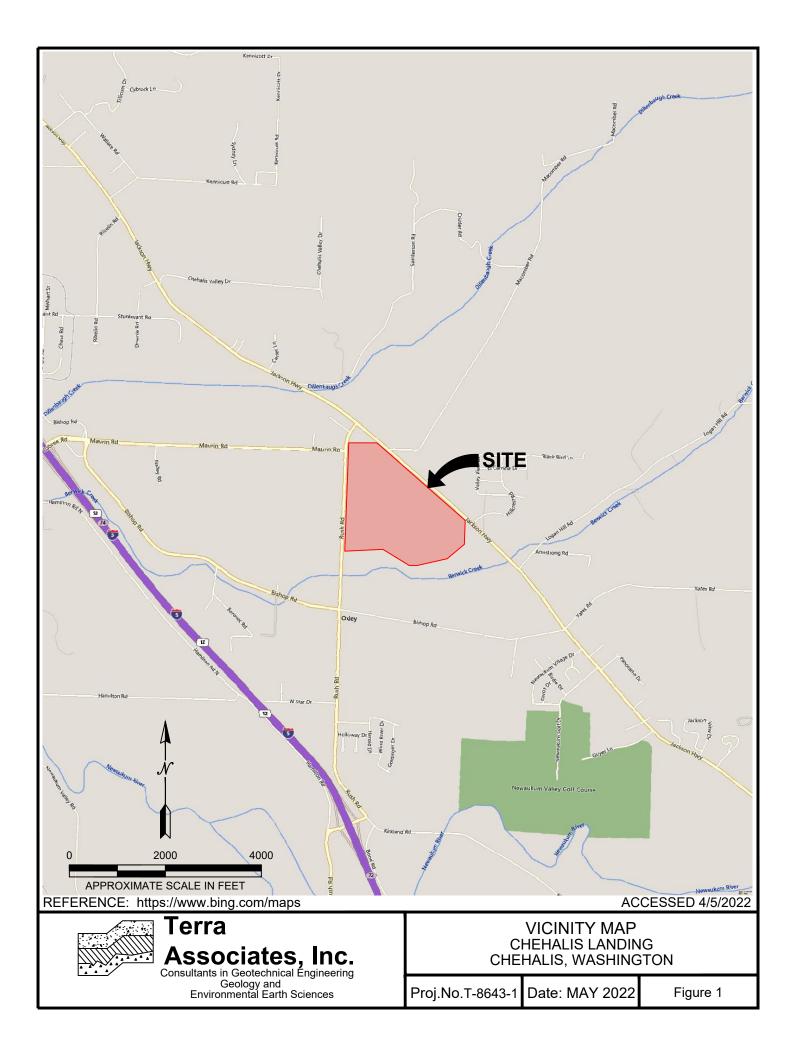
5.0 ADDITIONAL SERVICES

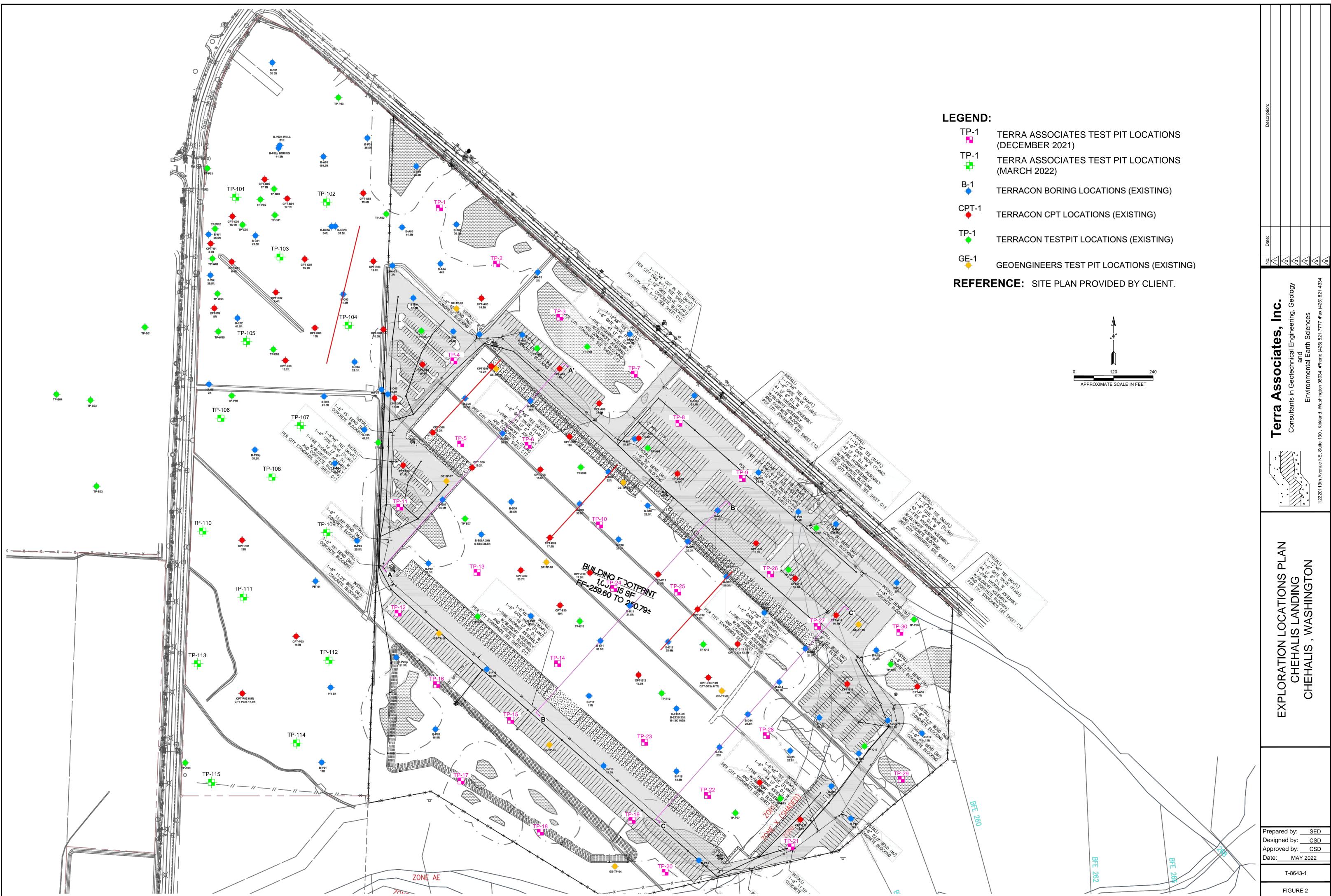
Terra Associates, Inc. should review the final design and specifications in order to verify that earthwork and foundation recommendations have been properly interpreted and incorporated in project design. We should also provide geotechnical services during construction in order to observe compliance with our design concepts, specifications, and recommendations. This will also allow for design changes if subsurface conditions differ from those anticipated prior to the start of construction.

6.0 LIMITATIONS

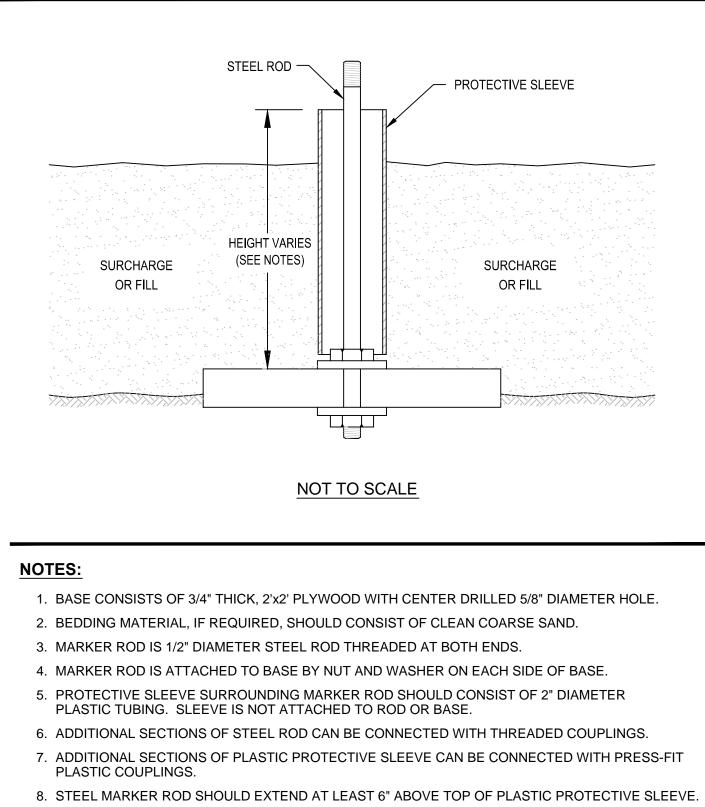
We prepared this report in accordance with generally accepted geotechnical engineering practices. This report is the copyrighted property of Terra Associates, Inc. and is intended for specific application to the Chehalis Landing project in Lewis County, Washington. This report is for the exclusive use of CRG and its authorized representatives. No other warranty, expressed or implied, is made.

The analyses and recommendations presented in this report are based upon data obtained from the subsurface explorations completed onsite. Variations in soil conditions can occur, the nature and extent of which may not become evident until construction. If variations appear evident, Terra Associates, Inc. should be requested to reevaluate the recommendations in this report prior to proceeding with construction.

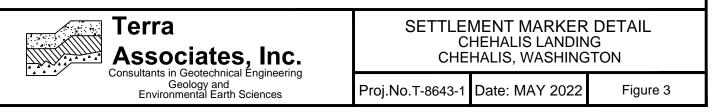


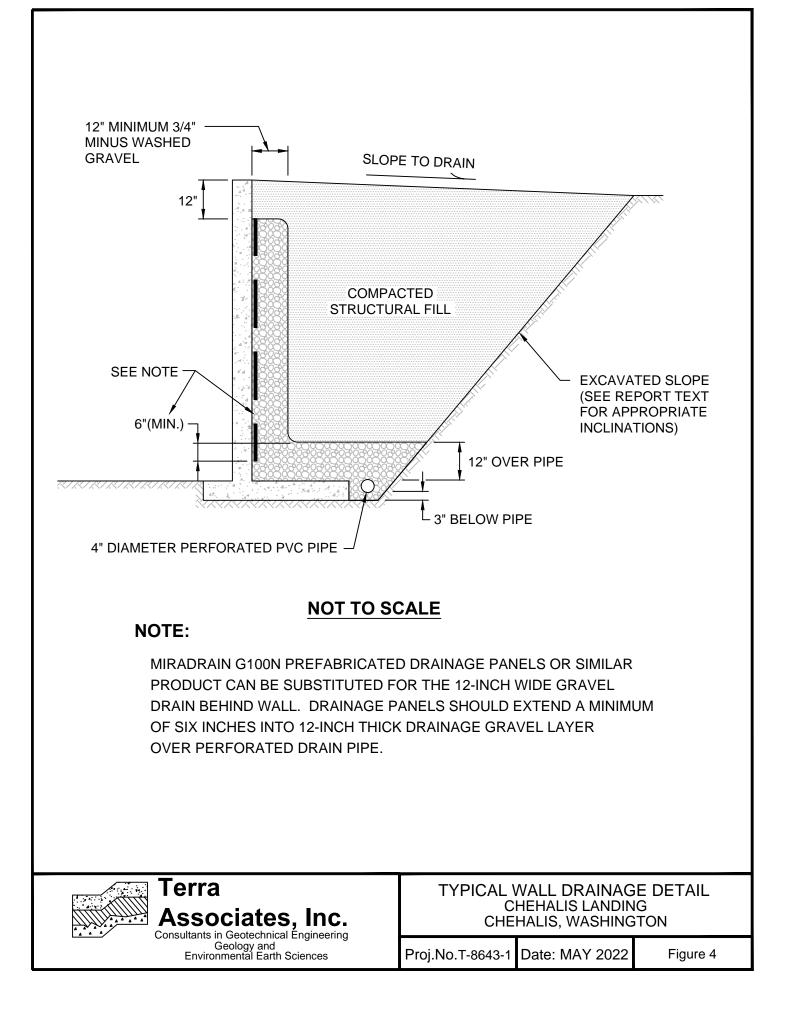


LEGEND:		Description:			
TP-1	TERRA ASSOCIATES TEST PIT LOCATIONS (DECEMBER 2021)				
TP-1	TERRA ASSOCIATES TEST PIT LOCATIONS (MARCH 2022)				
B-1	TERRACON BORING LOCATIONS (EXISTING)				
CPT-1	TERRACON CPT LOCATIONS (EXISTING)				
TP-1	TERRACON TESTPIT LOCATIONS (EXISTING)	Date:			
GE-1	GEOENGINEERS TEST PIT LOCATIONS (EXISTING)	No.	Ę	~~~	14
REFER	ENCE: SITE PLAN PROVIDED BY CLIENT.			ygolc	
			s, Inc.	ineering, Geology	ciences



9. PLASTIC PROTECTIVE SLEEVE SHOULD EXTEND AT LEAST 1" ABOVE TOP OF FILL SURFACE.





APPENDIX A FIELD EXPLORATION AND LABORATORY TESTING Chehalis Landing Lewis County, Washington

On December 2, 2021, and December 3, 2021, we explored subsurface conditions at the site by excavating 30 test pits to depths ranging between about 8 and 10 feet using a mini track-mounted excavator. On March 14, 2022, we supplemented this information by excavating 15 test pits to depths ranging between about 8 and 10 feet using a mini track-mounted excavator. All of the subsurface explorations were approximately determined in the field by measuring, pacing, or sighting from existing surface features or using GPS coordinates obtained with handheld equipment. The approximate test pit locations are shown on Figure 2. The Test Pit Logs are presented on Figures A-2 through A-46.

A geotechnical engineer from our office conducted the field exploration. Our representative classified the soil conditions encountered, maintained a log of each test pit, obtained representative soil samples, and recorded water levels observed during excavation. All soil samples were visually classified in accordance with the Unified Soil Classification System (USCS) described on Figure A-1.

Representative soil samples obtained from the test pits were placed in closed containers and taken to our laboratory for further examination and testing. The moisture content of each sample was measured and is reported on the individual Test Pit Log. Grain size analyses and Atterberg limit tests were performed on select samples. The results of the grain size analyses are shown on Figures A-47 and A-49. The results of the Atterberg limit tests can be found on the individual Test Pit Logs.

		MAJOR DIVISIONS		LETTER SYMBOL	TYPICAL DESCRIPTION
			Clean Gravels (less	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.
oll	rger	GRAVELS More than 50%	than 5% fines)	GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines.
D SOI	More than 50% material larger than No. 200 sieve size	of coarse fraction is larger than No. 4 sieve	Gravels with	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
AINE	b mate	4 51676	fines	GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
E GR	n 50% No. 20	SANDS	Clean Sands (less than	SW	Well-graded sands, sands with gravel, little or no fines.
COARSE GRAINED SOILS	re tha than I	More than 50% of coarse fraction	5% fines)	SP	Poorly-graded sands, sands with gravel, little or no fines.
ö	Mo	is smaller than No. 4 sieve	Sands with	SM	Silty sands, sand-silt mixtures, non-plastic fines.
			fines	SC	Clayey sands, sand-clay mixtures, plastic fines.
(0)	More than 50% material smaller than No. 200 sieve size	SILTS AND		ML	Inorganic silts, rock flour, clayey silts with slight plasticity.
FINE GRAINED SOILS	aterial sma sieve size	Liquid Limit is les		CL	Inorganic clays of low to medium plasticity. (Lean clay)
VED (mate 00 sie			OL	Organic silts and organic clays of low plasticity.
GRAII	150% No. 2(MH	Inorganic silts, elastic.
INE	e than 50% m than No. 200		SILTS AND CLAYS uid Limit is greater than 50%		Inorganic clays of high plasticity. (Fat clay)
ш. 	More			ОН	Organic clays of high plasticity.
		HIGHLY ORC	GANIC SOILS	PT	Peat.
			DEFINITI	ON OF TER	MS AND SYMBOLS
COHESIONLESS	Loos Medi Dens	Loose e ium Dense	Standard Penel Resistance in Blo 0-4 4-10 10-30 30-50 >50		☐ 2" OUTSIDE DIAMETER SPILT SPOON SAMPLER ☐ 2.4" INSIDE DIAMETER RING SAMPLER OR ☐ SHELBY TUBE SAMPLER ✔ WATER LEVEL (Date) Tr TORVANE READINGS, tsf
COHESIVE	Standard PeneConsistancyResistance in BloVery Soft0-2Soft2-4Medium Stiff4-8Stiff8-16Very Stiff16-32Hard>32			 Pp PENETROMETER READING, tsf DD DRY DENSITY, pounds per cubic foot LL LIQUID LIMIT, percent PI PLASTIC INDEX N STANDARD PENETRATION, blows per foot 	
Terra Associates, Inc. Consultants in Geotechnical Engineering Geology and Environmental Earth Sciences			iates, Ir eotechnical Engine logy and ntal Earth Science	IC. eering	UNIFIED SOIL CLASSIFICATION SYSTEM CHEHALIS LANDING CHEHALIS, WASHINGTON Proj.No.T-8643-1 Date: MAY 2022 Figure A-1

	LOG OF TEST PIT NO. TP-1 FIGURE A-2							
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGG	ED BY: <u>SLK</u>					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAN	/ING: <u>N/A</u>					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M				
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)						
1—			Loose					
2— 3—		Gray clayey SILT, moist to wet, mottled, some sand. (ML) LL 30 PL 23 PI 7	Medium Stiff	33.8				
¥ 4— 5—		Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (GC/SM)	Medium Dense	12.6				
6—		Red/brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist. (SP-SM)						
7—			Dense					
8— 9—		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 3.5 feet. No caving observed.		11.7				
10 —								





a b 0 Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL) Loose 1- Gray gravelly SILT with clay, fine gravel, moist to wet, some sand. (GM) Itermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium Medium Dense to Dense 3- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium Medium Dense to Dense 16.4 4- Red/brown CLAY with gravel, fine gravel, moist. (GC/SM) Medium Stiff 27.4 6- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. C.1 8- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. Dense		LOG OF TEST PIT NO. TP-2 FIGURE A-3						
DATE LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 2.5 feet DEPTH TO CAVING: IV/A 0 Consistency/ Relative Density Consistency/ Relative Density 0/ Relative Density 0 Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL) Loose 1 Gray gravelly SILT with clay, fine gravel, moist to wet, some sand. (GM) Intermixed red/brown clayey GRAVEL and gray sitly SAND with gravel, fine to medium Medium Dense to Dense 16.7 3 Intermixed red/brown clayey GRAVEL and gray sitly SAND with gravel, fine to medium Medium Stiff 16.7 4 Red/brown CLAY with gravel, fine gravel, moist. (CC/SM) Medium Stiff 27.1 5 Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. Dense 27.1 6 Test Pit terminated at approximately 9 feet. Heavy groundwater seegage observed at approximately 2.5 feet. 18.1 18.1		PRO	JECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>				
ging Description Consistency/ Relative Density Consistency/ Relative Density 0 Dark brown SiLT with sand, moist, scattered roots and organic inclusions. (ML/OL) Loose 1- Gray gravelly SiLT with clay, fine gravel, moist to wet, some sand. (GM) Isometry 2- Gray gravelly SiLT with clay, fine gravel, moist to wet, some sand. (GM) Medium Dense to Dense 18.4 3- Intermixed red/brown clayey GRAVEL and gray silly SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (GC/SM) Medium Stiff 18.4 4- Red/brown CLAY with gravel, fine gravel, moist. (CH) Medium Stiff 27.4 5- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. Dense 27.4 8- Ped/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. Dense 18.4 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No coving observed. 18.4		LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A						
0 Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL) Loose 1- Gray gravelly SILT with clay, fine gravel, moist to wet, some sand. (GM) Loose 2- Gray gravelly SILT with clay, fine gravel, moist to wet, some sand. (GM) Medium Dense to Dense 3- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (GC/SM) Medium Dense 4- Red/brown CLAY with gravel, fine gravel, moist. (CH) Medium Stiff 5- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. (SC) Dense 8- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed. 18.4		DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 2.5 feet DEPTH TO CAV	/ING: <u>N/A</u>				
1- Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL) Loose 1- Gray gravelly SILT with clay, fine gravel, moist to wet, some sand. (GM) 18.0 2- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (GC/SM) 18.1 4- Red/brown CLAY with gravel, fine gravel, moist. (CH) Medium Stiff 5- Medium Stiff 27.1 6- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. (SC) Dense 8- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.4	Depth (ft)	Sample No.	Description	-	(%) M			
1- Loose 2- Gray gravelly SiLT with clay, fine gravel, moist to wet, some sand. (GM) 18.4 3- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium Medium Dense to Dense 3- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium Medium Dense 4- Red/brown CLAY with gravel, fine gravel, moist. (GC/SM) Medium Stiff 5 Medium Stiff 27.4 6 Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. (SC) Dense 8- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.4	0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/QL)					
2- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (GC/SM) Medium Dense to Dense 16.3 4- Red/brown CLAY with gravel, fine gravel, moist. (CH) Medium Stiff 27.3 5- Medium Stiff 27.4 6- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. (SC) Dense 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.4	1—		g(,	Loose				
3- Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium bornse to Dense Medium Dense to Dense 16.3 4- Red/brown CLAY with gravel, fine gravel, moist. (GC/SM) Medium Stiff 16.3 5- Red/brown CLAY with gravel, fine gravel, moist. (CH) Medium Stiff 6- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. (SC) 27.4 8- Dense Dense 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.4			Gray gravelly SILT with clay, fine gravel, moist to wet, some sand. (GM)		18.8			
S- Red/brown CLAY with gravel, fine gravel, moist. (CH) Medium Stiff S- Medium Stiff 27.4 G- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. (SC) Dense 8- Dense 18.4 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.4			Intermixed red/brown clayey GRAVEL and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (GC/SM)		16.2			
6- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. 27.4 7- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. Dense 8- Dense 18.4 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.4	4—		Red/brown CLAY with gravel, fine gravel, moist. (CH)					
7- Red/brown clayey, gravelly, SAND, fine to coarse gravel, fine to medium sand, moist. 8- Dense 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed.	5—			Medium Stiff				
7- (SC) 8- Dense 9- Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed. 18.6	6—				27.8			
8- 9- Image: separation of the separation	7—							
Test Pit terminated at approximately 9 feet. Heavy groundwater seepage observed at approximately 2.5 feet. No caving observed.	8—			Dense				
	9—		Heavy groundwater seepage observed at approximately 2.5 feet.		18.6			
	10 —				I			



		LOG OF TEST PIT NO. TP-3	FIGURE	A-4
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGG	ED BY: <u>SLK</u>	
	LOC	ATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPRO	DX. ELEV : <u>N/A</u>	
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAV	/ING: <u>N/A</u>	
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose	
1-		Gray clayey SILT, moist. (ML)		38.3
2— 3—	-		Soft to Medium Stiff	
¥				20.6
4—	-	Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC)	Medium Dense	
5—	-	Intermixed red/brown clayey gravelly SAND and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC/SM)		
6—				14.7
7—	-		Medium Dense to Dense	
8—				
9— 10 —		Test Pit terminated at approximately 9 feet. Light groundwater seepage observed at approximately 3.5 feet. No caving observed.		14.8
		Terra		



		LOG OF TEST PIT NO. TP-4	FIGURE	A-5				
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CAV	/ING: <u>N/A</u>					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M				
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)						
1—	-		Loose					
2—		Gray clayey SILT, moist, some mottling. (ML)						
3—	-	Red/brown gravelly SILT with clay and sand, fine to medium sand, fine to coarse gravel, moist, medium plasticity. (ML)	Soft to Medium Stiff	11				
¥ 4— 5—	-	LL 48 PL 34 PI 14	Medium Stiff	36.2				
6— 7—	-	Red/brown SAND with silt and gravel, fine to medium sand, fine to coarse gravel, moist, some mottled gray clay. (SP-SM)						
8—			Medium Dense to Dense					
9— 10 —		Test Pit terminated at approximately 9 feet. Moderate groundwater seepage observed at approximately 4 feet. No caving observed.		12.9				
		_						



Terra Associates, Inc. Consultants in Geotechnical Engineering Geology and Environmental Earth Sciences

		LOG OF TEST PIT NO. TP-5	FIGURE	A-6			
	PRC	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>				
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A						
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3 feet DEPTH TO CAV	/ING : <u>N/A</u>				
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M			
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)					
1—			Loose				
2-		Gray clayey SILT, moist, mottled, some sand. (ML)	Soft to Medium Stiff	31.7			
▼ 3		Bedded layers of red/brown gravelly CLAY with sand and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (CH/SM)					
4— 5—			Medium Dense	20.3			
6—		Intermixed red/brown clayey gravelly SAND and gray silty SAND, fine to medium sand,					
7—		fine to coarse gravel, moist. (SC/SM)	Medium Dense to Dense				
8—		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 3 feet. No caving observed.		25.4			
9— 10 —							





	LOG OF TEST PIT NO. TP-6 FIGURE A-7						
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>				
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A						
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CAV	/ING : <u>N/A</u>				
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M			
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)					
1—			Loose				
0		Gray clayey SILT with sand, fine sand, moist, mottled. (ML)		07.4			
2— 3—			Soft to Medium Stiff	37.4			
▼ 4		Bedded layers of red/brown clayey SAND with gravel and gray silty SAND, fine to medium sand, fine to coarse gravel, moist. (SC/SM)					
5—			Medium Dense to Dense	11.7			
6—							
7—		Intermixed red/brown clayey gravelly SAND and gray sandy SILT, fine to medium sand, fine to coarse gravel, moist, some mottling. (SC/ML)	Medium Dense to Dense	19.4			
8—		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 4 feet. No caving observed.		32.2			
9—							
10 —							





		LOG OF TEST PIT NO. TP-7	FIGURE	A-8
PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK				
LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPRO			DX. ELEV : <u>N/A</u>	
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CAV	/ING: <u>N/A</u>	
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose	
1— 2— 3—		Gray clayey SILT with sand, fine sand, moist, mottled. (ML)	Soft to Medium Stiff	36.8
▼ 4-		*6-inch layer of gravel observed at 3 feet. Bedded layers of red/brown clayey SAND with gravel and gray sandy SILT with clay, fine to medium sand, fine to coarse gravel, moist to wet, some mottling. (SC/ML)		
5—			Medium Dense	24.2
6— 7—		*6-inch layer of gravel observed at 6 feet.		
8—		Test Pit terminated at approximately 8 feet.		19.9
9—		Heavy groundwater seepage observed at approximately 4 feet. Pooled about 2 inches in bottom of test pit. No caving observed.		
10 —				





		LOG OF TEST PIT NO. TP-8	FIGURE	A-9	
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK				
LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPRO					
	DATE LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 1.5 feet DEPTH TO CAVING: N/A				
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M	
0-		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)			
1—		Dark brown Siel with Sand, moist, scattered roots and organic inclusions. (ME/OE)	Loose		
▼ 2−		Gray clayey SILT with sand, fine sand, moist, some mottling. (ML)	Soft to Medium Stiff	32.4	
3—		*6-inch layer of gravel observed at 3 feet.			
4—	-	Bedded layers of red/brown clayey SAND with gravel and gray clayey SILT, fine to medium sand, fine to coarse gravel, moist, some mottling. (SC/ML)		27.6	
5—	-		Medium Dense	27.0	
6—		*6-inch layer of gravel observed at 6 feet.	to Dense	9.4	
7—	-				
8-	-			23.3	
9—		Test Pit terminated at approximately 8 feet. Heavy groundwater seepage observed at approximately 1.5 feet. Pooled about 2 inches in bottom of test pit. No caving observed.			
10 —			<u> </u>		





		LOG OF TEST PIT NO. TP-9	FIGURE	A-10	
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK				
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A				
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 1.5 feet DEPTH TO CAV	/ING: <u>1.5 feet</u>		
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M	
0-		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)			
1-			Loose	30	
¥		Gray sandy SILT with clay, fine sand, wet, some black coal bits. (ML)			
2-			Soft	19.4	
3–		Red/brown sandy SILT, fine sand, moist, some gray clay intermixed, trace gravel. (ML)			
4-	-				
5	-		Medium Stiff		
6-	-			18.3	
7-					
8-		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 1.5 feet.		19.8	
9–		Slight caving observed from about 1.5 feet to 3 feet.			
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NOT	ть:		alataa la	-	





LOG OF TEST PIT NO. TP-10 FIGURE A-1					
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK				
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A				
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CAV	/ING: <u>N/A</u>		
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M	
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose		
1		Gray clayey SILT with sand, fine sand, moist, some mottling. (ML)			
2—			Medium Stiff	29.2	
3—		Bedded layers of red/brown clayey SAND with gravel and gray silty SAND, fine to medium sand, fine to coarse gravel, moist, some mottling. (SC/SM)			
▼ 4 5 6		*6-inch layer of gravel observed at 5 feet.	Medium Dense to Dense	29.4	
7—		*6-inch layer of gravel observed at 7 feet.			
8— 9—		Test Pit terminated at approximately 8 feet. Very light groundwater seepage observed at approximately 4 feet. No caving observed.		22.8	
10 —					





	LOG OF TEST PIT NO. TP-11 FIGURE A-12				
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK				
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A DATE LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 2.5 feet DEPTH TO CAVING: N/A				
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)	
0		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose		
2- ▼ 3- 4-		Gray sandy SILT with clay, fine sand, moist, some to trace mottling. (ML)	Medium Stiff	25	
5— 6—		Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC)	Medium Dense to Dense	19.1	
7— 8— 9—		Gray SILT with clay, moist, trace mottling. (ML) LL 30 PL 25 PI 5 Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 2.5 feet. No caving observed.	Medium Stiff to Stiff	- 27.5	
10		Terra			





		LOG OF TEST PIT NO. TP-12	FIGURE	A-13
	PRC	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGG	ED BY: <u>SLK</u>	
	LOC	ATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPR	OX. ELEV: <u>N/A</u>	
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CA	VING: <u>N/A</u>	
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose	
1—		Gray sandy SILT with clay, fine sand, moist, some mottling. (ML)		-
2–			Soft to Medium Stiff	23.7
3—				
▼ 4-				-
5—			Medium Stiff	
6—				21.3
7—		Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC)	Dense	-
8— 9—		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 4 feet. No caving observed.		37.7
10 —	1		1	J
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		LOG OF TEST PIT NO. TP-	-13	FIGURE	A-14
	PRO	DJECT NAME: Chehalis Landing PROJ. N	IO: <u>T-8643-1</u> LOGG	ED BY: <u>SLK</u>	
	LOC	ATION: Chehalis, Washington SURFACE CONDITIONS: Thick Gras		OX. ELEV: <u>N/A</u>	
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 2 feet	DEPTH TO CA	VING: <u>N/A</u>	
Depth (ft)	Sample No.	Description		Consistency/ Relative Density	(%) M
0—		Dark brown SILT with sand, moist, scattered roots and organic inclu	isions. (ML/OL)		
1—				Loose	
▼ 2-		Gray sandy SILT with clay, fine sand, moist, mottled. (ML)		Soft to Medium Stiff	21.9
3—		Red/brown clayey SAND, fine to medium sand, moist. (SC)			
4—					12.5
5—		Intermixed red/brown clayey gravelly SAND and gray silty SAND, fir fine to coarse gravel, moist. (SC/SM)	ne to medium sand,	Medium Dense to Dense	
6—					
7—					
8—		Test Pit terminated at approximately 8 feet. Heavy groundwater seepage observed at approximately 2 feet.			18.4
9—		No caving observed.			
10 —					
			/ Terra	1	





		LOG OF TEST PIT NO. TP-14	FIGURE	A-15		
	PRC	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	D BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3 feet DEPTH TO CAV	ING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)				
1—			Loose			
2—	-	Gray clayey SILT with sand, fine sand, wet, mottled. (ML)	Soft	33.7		
¥ 3−		Bedded layers of red/brown clayey gravelly SAND and gray silty SAND, fine to medium sand, fine to coarse gravel, moist. (SC/SM)				
4—						
5—			Medium Dense to Dense	10.4		
6—	-					
7—	-	Gray silty gravelly SAND with clay, coarse gravel, wet, mottled, some sand. (SM)		26.9		
8—	-	Test Pit terminated at approximately 8 feet.		20.9		
9—		Heavy groundwater seepage observed at approximately 3 feet. Pooled bottom 3 inches of test pit. No caving observed.				
10 —						
_	_					





		LOG OF TEST PIT NO. TP-15	FIGURE	A-16			
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	D BY: <u>SLK</u>				
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A						
	DATE LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAVING: N/A						
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M			
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)					
1—		Dark brown ole i with sand, moist, southered roots and organic moldsions. (ME/OE)	Loose				
2—		Gray clayey SILT with sand, fine sand, moist to wet, mottled. (ML)					
3—			Soft	33.6			
*				00.0			
4—		Gray silty SAND with clay, fine sand, moist, mottled. (SM)					
5—				25.2			
6			Medium Dense to Dense				
6—		Intermixed red/brown clayey gravelly SAND and gray silty SAND, fine to medium sand, fine to coarse gravel, moist. (SC/SM)					
7—							
8—		Test Pit terminated at approximately 8 feet.		17.5			
9—		Heavy groundwater seepage observed at approximately 3.5 feet. Pooled bottom 3 inches of test pit. No caving observed.					
10 —							





	LOG OF TEST PIT NO. TP-16 FIGURE A-17					
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3 feet DEPTH TO CAV	/ING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1—		Gray clayey SILT with sand, fine sand, moist, mottled. (ML)				
2—			Medium Stiff	32.5		
▼ 3—		Gray silty SAND with clay, fine sand, moist, mottled. (SM)				
4—						
5—				21.3		
6—			Medium Dense to Dense			
		Intermixed red/brown clayey gravelly SAND and gray silty SAND, fine to medium sand, fine to coarse gravel, moist. (SC/SM)				
7—				18.6		
8—		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 3 feet.				
9—		No caving observed.				
10 —						
		Torro				





		LOG OF TEST PIT NO. TP-17	FIGURE	A-18		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGG	ED BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAN	/ING: N/A			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1—		Gray clayey SILT with sand, fine sand, moist. (ML)				
2—			Soft			
3- ≖						
4—		Gray silty SAND with clay, fine sand, moist, mottled. (SM)	Dense	22.1		
5—		Red/brown silty SAND with clay and gravel, fine to medium sand, fine to coarse gravel, moist, scattered cobbles. (SM)				
6—				16.3		
7—		Red/brown clayey SAND with gravel, fine to coarse sand, fine gravel, moist, some gray mottled sandy clay, scattered cobbles. (SC)	Medium Dense to Dense	14.9		
8—						
9— 10 —		Test Pit terminated at approximately 9 feet. Moderate groundwater seepage observed at approximately 3.5 feet. No caving observed.		22.7		
10-						



		LOG OF TEST PIT NO. TP-18	FIGURE	A-19		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGG	ED BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CA	VING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1		Gray clayey SILT with sand, fine sand, moist, some mottling. (ML)		-		
2— 3—			Soft	29.1		
¥				27		
4—	-	Gray silty SAND with clay and gravel, fine sand, fine gravel, moist, some mottling. (SM)		-		
5—			Medium Dense	18.1		
6—	-					
7—	-	Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist scattered cobbles. (SC)	Medium Dense			
8—	-		to Dense			
9—		Test Pit terminated at approximately 8.5 feet. Moderate groundwater seepage observed at approximately 3.5 feet. No caving observed.		26.7		
10						
		-				



		LOG OF TEST PIT NO. TP-19	FIGURE	A-20		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAV	/ING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1—		Gray clayey SILT with sand, fine sand, moist. (ML)				
2— 3—			Soft	33.9		
¥						
4—		Gray silty SAND with clay and gravel, fine to medium sand, fine to coarse gravel, moist. (SM)				
5—				24.2		
6—		Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC)	Medium Dense to Dense			
7—				18.5		
8—		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 3.5 feet.				
9—		No caving observed.				
10 —						





		LOG OF TEST PIT NO. TP-20	FIGURE	A-21		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGO	ED BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CA	VING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1—		Gray sandy SILT with clay, fine sand, moist, mottled. (ML)		-		
2—			Medium Stiff			
3—				25.1		
¥ 4—		Gray silty SAND with clay, fine sand, moist, mottled. (SM)		-		
·			Madiana Danaa			
5—			Medium Dense	25.8		
6—		Gray sandy SILT, fine to medium sand, moist, mottled, some gravel. (ML)		23		
7—		LL 34 PL 25 PI 9	Medium Stiff	22.9		
8—		Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC)	Dense	24.1		
9—		Test Pit terminated at approximately 9 feet. Light groundwater seepage observed at approximately 3.5 feet. No caving observed.				
10 —	1			1		



LOG OF TEST PIT NO. TP-21 FIGURE A-2				A-22		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOC	GED BY:SLK			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: <u>3 feet</u> DEPTH TO C	AVING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		(6 inches organic TOPSOIL)				
1—		Dark brown sandy SILT, moist, scattered roots. (ML)	Loose			
2—		Dark gray CLAY with sand, fine sand, moist, some mottling and organics. (CH)	Soft to Medium stiff	46.8		
¥ 3—		Gray silty gravelly SAND with clay, fine to coarse sand, fine to coarse gravel, wet to saturated, scattered cobbles, some mottled gray clay. (SM)		30		
4—			Medium Dense			
5—				25.9		
6—			Medium Dense to Dense			
7—		Gray/brown sandy gravelly SAND with silt, fine to coarse gravel, fine to coarse sand, saturated, cobbles. (SP-SM)		16.3		
8—		Test Pit terminated at approximately 8 feet. Very heavy groundwater seepage observed at approximately 3 feet. Pooled bottom 2.5 feet of test pit.		12.4		
9—		No caving observed.				
10 —						





		LOG OF TEST PIT NO. TP-22	FIGURE	A-23		
	PRO	JECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	D BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAV	/ING : <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1—		Gray clayey SILT with sand, fine sand, moist. (ML)				
2—			Soft			
3 ≖		*increasing gravel content				
4—			Medium Stiff to Stiff	32.3		
5—		Gray silty SAND with clay and gravel, fine to medium sand, fine to coarse gravel, saturated. (SM)				
6—				24.4		
7—		Red/brown SAND with gravel and silt, fine to coarse gravel, fine to coarse sand, saturated, cobbles, some silt. (SP-SM)	Medium Dense to Dense			
8—				12.3		
9—		Test Pit terminated at approximately 8 feet. Heavy groundwater seepage observed at approximately 3.5 feet. Pooled bottom 3 inches of test pit. No caving observed.				
10 —						





		LOG OF	TEST PIT NO. TP-23		FIGURE	A-24
	PRO	DJECT NAME: Chehalis Landing	PROJ. NO: <u>T-86</u>	<u>643-1</u> LOGG	ED BY: <u>SLK</u>	
	LOC	CATION: Chehalis, Washington SURFAC	E CONDITIONS: Thick Grass		DX. ELEV: <u>N/A</u>	
	DAT	E LOGGED: <u>December 3, 2021</u> DEPTH TO	GROUNDWATER: <u>3.5 feet</u>	_ DEPTH TO CA\	/ING: <u>N/A</u>	
Depth (ft)	Sample No.	De	scription		Consistency/ Relative Density	(%) M
0		Dark brown SILT with sand, moist, scatter	ed roots and organic inclusions.	(ML/OL)		
1—				(Loose	
2—		Gray clayey SILT with sand, fine sand, mo	ist, some mottling. (ML)			
3 ▼					Soft	
4—		Gray silty SAND with clay and gravel, fine (SM)	to medium sand, fine to coarse (gravel, moist.		32.4
5—	-					
6—	-	Bedded layers of red/brown clayey gravell sand, fine to coarse gravel, wet, cobbles.		e to medium	Medium Dense	11.0
7	-				to Dense	23.8
						28.9
8—						
9—		Test Pit terminated at approximately 9 fee Heavy groundwater seepage observed at				19.4
10 —		No caving observed.	··· •			
				Terra		



		LOG OF TEST PIT NO. TP-24	FIGURE	A-25
	PRO	DJECT NAME: Chehalis Landing LOGG	ED BY: <u>SLK</u>	
	LOC	ATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPRO	DX. ELEV: <u>N/A</u>	
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAN	/ING: <u>N/A</u>	
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M
0-		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)		
			Loose	
1–		Gray sandy SILT with clay, fine sand, moist. (ML)	Medium Stiff	
2—		Intermixed red/brown clayey gravelly SAND and gray silty SAND, fine to medium sand, fine to coarse gravel, moist. (SC/SM)		21
3- ¥			Medium Dense to Dense	
4				11.9
5		Gray clayey SILT with sand, fine sand, moist, some mottling. (ML)		
U			Soft	
6—	-	Red/brown clayey SAND with gravel, fine to medium sand, fine gravel, moist. (SC)		27.2
7—			Medium Dense to Dense	
8-		Test Pit terminated at approximately 8 feet.		21.2
9—		Light groundwater seepage observed at approximately 3.5 feet. No caving observed.		
10 —				
		Torra		



		LOG OF TEST PIT NO. TP-25	FIGURE	A-26		
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 2, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CAV	/ING : <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)	Loose			
1—		Gray clayey SILT with sand, fine sand, wet, some mottling. (ML)				
2—			Soft			
3—		Red/brown gravelly SAND with silt, fine to coarse sand, fine gravel, wet, cobbles, some		11.7		
▼ 4−		gray clayey SILT. (SP-SM)	Medium Dense			
5—		Gray clayey SILT with sand, fine sand, wet, mottled. (ML)		24.6		
6-		Gray Grayey GIET with Sand, The Sand, wet, mottled. (ME)				
7—			Medium Stiff			
8—		Test Pit terminated at approximately 8 feet.		27.9		
9—		Heavy groundwater seepage observed at approximately 3.5 feet. Pooled bottom 3 inches of test pit. No caving observed.				
10 —						
		_				





	LOG OF TEST PIT NO. TP-27 FIGURE A-28					
	PROJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGGED BY: <u>SLK</u>					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	TE LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO G	CAVING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0-		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)				
		Dark brown Siel i with sand, moist, scattered roots and organic inclusions. (ivie/OE)	Loose			
1–	-	Gray clayey SILT withsand, fine sand, moist to wet, some mottling. (ML)				
2—	-		Soft			
3—	-			36.4		
▼ 4-	-	Gray silty SAND/sandy SILT with clay, fine sand, moist, mottled, some gravel and black staining. (SM/ML)		-		
5—	-		Stiff to Very Stiff			
6—	-			22.7		
7—		Red/brown clayey SAND with gravel, fine to medium sand, fine to coarse gravel, moist. (SC)	Medium Dense to Dense			
8—		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 3.5 feet.		- 19		
9—						
10 —						
	-	Light groundwater seepage observed at approximately 3.5 feet. No caving observed.		-		





LOG OF TEST PIT NO. TP-28 FIGURE A-						
	PROJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGGED BY: <u>SLK</u>					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CA	VING: <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)				
1—	-		Loose			
2—	-	Gray clayey SILT with sand and gravel, fine sand, fine gravel, moist to wet, mottled. (ML)		32.2		
3—	-		Soft to Medium Stiff			
¥ 4—	-			29.6		
5		Intermixed gray/brown silty SAND with gravel and red/brown clayey gravelly SAND, fine to medium sand, fine to coarse gravel, wet, cobbles. (SM/SC)				
U						
6—	-		Medium Dense to Dense	24.5		
7—	-					
8—	-	Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 4 feet.		20.5		
9—		No caving observed.				
10 —						





		LOG OF TEST PIT NO. TP-29	FIGURE	A-30		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGG	ED BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 3.5 feet DEPTH TO CA	VING : <u>N/A</u>			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)				
1—	-		Loose			
2—	_	Cray clayov SILT with cand find cand moist motified (ML)		37.3		
3—	-	Gray clayey SILT with sand, fine sand, moist, mottled. (ML)	Soft			
¥ 4−	-	Red/brown gravelly SAND with silt, fine to medium sand, fine to coarse gravel, moist, some mottled gray clay. (SP-SM)		16.8		
5—	-					
6—	-		Medium Dense to Dense			
7—		*6-inch gravel layer at 7 feet.		14.7		
8—						
9— 10 —		Test Pit terminated at approximately 9 feet. Moderate groundwater seepage observed at approximately 3.5 feet. No caving observed.		17.3		
10 -						
NOTE	. Th:-		l Sistes In	_		



	LOG OF TEST PIT NO. TP-30 FIGURE A-31					
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DATE LOGGED: December 3, 2021 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CAVING: N/A					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0—		Dark brown SILT with sand, moist, scattered roots and organic inclusions. (ML/OL)				
1—			Loose			
2—		Gray clayey SILT wiith sand, fine sand, moist, mottled. (ML)		-		
3—			Medium Stiff	27.7		
▼ 4-				-		
5—			Very Stiff	24.3		
Ũ						
7—		Intermixed red/brown clayey gravelly SAND and gray silty SAND, fine to medium sand, fine to coarse gravel, moist, cobbles, some mottling. (SC/SM)		-		
8—				12.8		
9—			Dense			
10 —		Test Pit terminated at approximately 10 feet.		- 26.3		
11 —		Light groundwater seepage observed at approximately 4 feet. No caving observed.				
12 —						
_						





		LOG OF TEST	PIT NO. TP-101		FIGURE	A-32
	PRC	OJECT NAME: Chehalis Landing	PROJ. NO: <u>T-8</u>	<u>643-1</u> LOGGI	ED BY: <u>SLK</u>	
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	TE LOGGED: March 14, 2022 DEPTH TO GROUN	IDWATER: 2 feet	_ DEPTH TO CAV	/ING : <u>N/A</u>	
Depth (ft)	Sample No.	Description	1		Consistency/ Relative Density	(%) M
0-		Dark brown SILT with some sand, moist, scattere (ML/OL, Topsoil)	d roots and organic inclu	sions.		
1-	-				Soft	
≖ 2-		Gray clayey SILT wiith sand, fine sand, wet to mo	bist, faintly mottled. (ML)			
3-	-				Medium Stiff	24.0
4-	_					
5-						18.5
C		Red/orange SAND with silt and gravel, fine to me to wet. (SP-SM)	dium sand, fine to coarse	e gravel, moist		
6-	-				Medium Dense	
7-	-				to Dense	
8-						12.8
U		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at app No caving observed.	roximately 2 feet.			12.0
9-						
			I THE A	🔍 Terra		



		LOG OF TEST PIT NO. TP-102	FIGURE	A-33	
	PRO	DJECT NAME: Chehalis Landing LOGO	GED BY: <u>SLK</u>		
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A				
	DAT	TE LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 4 feet DEPTH TO CA	VING:4 to 6 feet		
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M	
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions. (ML/OL, Topsoil)			
1—	-				
2—	-	Gray sandy SILT, fine to medium sand, moist, faintly mottled. (ML)	- Soft		
3—	-			24.8	
▼ 4—	-	Red/orange silty SAND, fine to medium sand, moist, some gravel, trace gray clay. (SM)			
5—			Medium Dense	20.6	
6—	-	Intermixed red/brown and orange/gray silty SAND and SAND with silt and gravel, fine to coarse sand, fine to coasre gravel, moist, scattered cobbles, trace coal bits. (SM/SP-SM)			
7—	-		Medium Dense to Dense		
8—		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 4 feet. Light caving observed from 4 to 6 feet.		11.9	
9—					



		LOG OF TEST PIT NO. TP-103	FIGURE	A-34	
	PRC	DJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LO	DGGED BY: <u>SLK</u>		
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A				
	DAT	TE LOGGED: <u>March 14, 2022 DEPTH TO GROUNDWATER: 2 feet DEPTH TO</u>	CAVING: <u>N/A</u>		
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	W (%)	
0-		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.			
		(ML/OL) (Topsoil)			
1—	-		Soft to Medium		
		Gray sandy SILT, fine to medium sand, moist, mottled. (ML)			
¥ 2−		Intermixed red/brown and orange/gray silty SAND and SAND with silt and gravel, fine coarse sand, fine to coasre gravel, moist, scattered cobbles, trace coal bits. (SM/SP-SM)	to	22.6	
3—					
4—	-			18.3	
5—	-				
0			Medium Dense		
6—					
7—	-	Light Brown/gray silty SAND, fine to medium sand, moist, some coarse sand and grav (SM)	 el.	23.4	
8—	-	Red/orange silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, scattered cobbles. (SM)			
9—				16.9	
		Test Pit terminated at approximately 9 feet. Light groundwater seepage observed at approximately 2 feet. No caving observed.			
10 —	I			1	
			rra		



	LOG OF TEST PIT NO. TP-104 FIGURE A-35				
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>		
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A				
	DAT	E LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 16 inches DEPTH TO CAV	/ING : <u>N/A</u>		
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M	
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions. (ML/OL, Topsoil)			
1- ▼ 2-		Gray SILT with sand, fine to medium sand, moist, faintly mottled. (ML)	Soft	33.4	
3-					
4—		Red/orange silty SAND with gravel, fine to medium sand, fine to coarse gravel, moist, scattered cobbles, mottled. (SM)			
5—			Medium Dense	13.8	
		*Approximate 3-inch layer of heavily mottled soil observed at 5 feet and 6 feet.			
6—		Red/orange sandy CLAY with silt, fine to medium sand, moist, some gravel, mottled, medium plastic. (CL/CH)			
7—			Stiff to Very Stiff		
8—					
9— 10 —		Test Pit terminated at approximately 9 feet. Light to moderate groundwater seepage observed at approximately 16 inches. No caving observed.		46.5	
10					





		LOG OF TEST PIT NO. TP-105	FIGURE	A-36
	PRC	DJECT NAME: Chehalis Landing LOGG	ED BY: <u>SLK</u>	
	LOC	CATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPRO	DX. ELEV: <u>N/A</u>	
	DAT	E LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 2 feet DEPTH TO CAN	/ING: <u>N/A</u>	
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions. (ML/OL, Topsoil)		
1- ▼ 2- 3-	-	Gray SILT with sand, fine to medium sand, wet, mottled. (ML) LL 35 PL 26 PI 9	Soft	36.7
4—	-	Intermixed red/orange sandy CLAY, silty SAND and clayey SAND with gravel and silt, fine to coarse sand, fine to coarse gravel, moist, scattered cobbles. (CL/GM/SC)	Medium Dense	
5—	-	*Heavy mottling and higher gravel content observed from 4 to 5 feet.		23.9
6—	-		Dense	
7—	-			
8—	-	Test Pit terminated at approximately 8 feet. Heavy groundwater seepage observed at approximately 2 feet.		37.9
9—	-	No caving observed.		
10				
			l	





		LOG OF TEST PIT NO. TP-106	FIGURE	A-37		
	PRO	DJECT NAME: Chehalis Landing LOGGE	D BY: <u>SLK</u>			
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A					
	DAT	E LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 2 feet DEPTH TO CAV	ING: <u>0-3 feet, 5.5-7</u>	<u>fee</u> t		
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0-						
1—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions. (ML/OL) (Topsoil)				
¥ 2-		Gray SILT with sand, fine to medium sand, wet, faintly mottled. (ML)	Very Soft	30.2		
- 2-				50.2		
3—		Gray and red silty SAND with gravel, fine to coarse sand, fine to coarse gravel, moist, scattered cobbles, mottled. (SM)				
4-						
5—			Medium Dense			
6—				21.8		
7—		Gray/blue gravelly silty SAND, fine to coarse sand, fine to coarse gravel, moist. (SM)				
8—		Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 2 feet.		20.6		
9—		Moderate caving observed from 0 to 3 feet, light caving observed from 5.5 to 7 feet.				
10 —						
		_				





		LOG OF TEST PIT NO. TP-107		FIGURE	A-38		
	PROJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGGED BY: <u>SLK</u>						
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELE						
	DAT	TE LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 2.5 feet DEPTH		/ING: <u>N/A</u>			
Depth (ft)	Sample No.	Description		Consistency/ Relative Density	(%) M		
0		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.					
		(ML/OL, Topsoil)					
1				Soft			
2	-	Gray SILT with sand, fine to medium sand, wet, faintly mottled. (ML)			27.5		
¥							
3—		Gray/brown silty SAND with gravel, fine to medium sand, fine to coarse gravel, mois (SM)	st.				
4—	-				23.7		
5—	-						
6				Medium Dense			
0		Red/orange gravelly silty SAND, fine to medium sand, fine to coarse gravel, moist, s clay, scattered cobbles. (SM)	some				
7					16.1		
8							
9—		Test Pit terminated at approximately 9 feet. Moderate groundwater seepage observed at approximately 2.5 feet.			19.2		
10 —		No caving observed.					
		T					





		LOG OF TEST PIT NO. TP-108	FIGURE	A-39				
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	ED BY: <u>SLK</u>					
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	E LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 2 feet DEPTH TO CAV	/ING: <u>N/A</u>					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M				
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions. (ML/OL) (Topsoil)						
1— ▼ 2-		Gray SILT with sand, fine to medium sand, wet, faintly mottled. (ML)	Soft	36.8				
3— 4—		Red/orange silty SAND with gravel, fine to coarse sand, fine to coarse gravel, moist, scattered cobbles, mottled. (SM)	Medium Dense	20.3				
5—	-	Gray sandy SILT, fine to medium sand, moist, some gravel, mottled. (ML)						
6—	-	LL 42 PL 26 PI 16	Medium Stiff	26.9				
7—	-	Gray/blue sandy SILT with gravel and clay, fine to medium sand, fine to coarse gravel, moist. (ML)						
8-		Test Pit terminated at approximately 8 feet. Light to moderate groundwater seepage observed at approximately 2 feet. No caving observed.		28.1				
9—								
10 —								





		LOG OF TEST PIT NO. TP-109	FIGURE	A-40				
	PROJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGGED BY: <u>SLK</u>							
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	TE LOGGED: <u>March 14, 2022</u> DEPTH TO GROUNDWATER: <u>2 feet</u> DEPTH TO	CAVING: <u>N/A</u>					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M				
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.						
1		(ML/OL) (Topsoil)	Soft					
1		Gray SILT with sand, fine to medium sand, wet, faintly mottled. (ML)						
¥ 2−			Soft to Medium Stiff	29.6				
3—								
4—		Red/orange silty SAND, fine to coarse sand, moist, some gravel, scattered cobbles, mottled, weakly cemented. (SM)	Medium Dense to Dense	26.8				
5—		Red/orange sandy CLAY with silt and gravel, fine to medium sand, fine to coarse grave	 el,	19.6				
6—		moist, medium plastic. (CL/CH)	Stiff					
7—								
8—		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 2 feet.		51.3				
9—		No caving observed.						
10 —								
			ro					



		L	OG OF TEST	PIT NO. TR	P-110		FIGURE	A-41
	PROJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGGED BY: <u>SLK</u>							
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DATE LOGGED: <u>Marc</u>	n 14, 2022	_DEPTH TO GROU	NDWATER: <u>16 inc</u>	ches DEPTI	H TO CA	/ING : <u>N/A</u>	
Depth (ft)	Sample No.		Descriptio	n			Consistency/ Relative Density	(%) M
0-	Dark brown SII	T with some s	and, moist, scattere	ed roots and org	anic inclusions			
	(ML/OL) (Topso	oil)						
1 ▼								
×	Gray SILT with	sand, fine to r	nedium sand, wet.				Soft	
2—								
								25.9
3—	Grav sandy SII	T fine to med	ium sand, moist, m	ottled some clay	/ trace grading to	some		
	gravel. (ML)	,			, iaco graanig ie	, come		
4—								
5—							Medium Stiff to Stiff	
6—								33.4
7—	Grav silty SAN	D with gravel <i>f</i>	fine to medium san	d fine to coarse	aravel moist col			
	(SM)	5 with graver, i			gravel, moist, cor	55103.	Medium Dense to Dense	
8—	Test Pit termina	ated at approvi	mately 8 feet					17.9
		ndwater seepa	ge observed at app	proximately 16 in	ches.			
9—								
10 —								





		LOG OF TEST PIT NO. TP-111	FIGURE	A-42				
	PROJECT NAME: Chehalis Landing PROJ. NO: <u>T-8643-1</u> LOGGED BY: <u>SLK</u>							
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	E LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 2 feet DEPTH TO CAV	/ING: N/A					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M				
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.						
4		(ML/OL) (Topsoil)						
1—		Gray SILT with sand, fine to medium sand, wet. (ML)	Soft					
▼ 2								
3				29.1				
		Gray sandy SILT, fine to medium sand, moist, some clay, trace gravel, faintly mottled. (ML)						
4—			Medium Stiff					
5								
		Red/orange silty SAND with gravel, fine to coarse sand, fine to coarse gravel, moist, some clay. (SM)						
6—			Medium Dense	31.6				
7								
7		Gray sandy CLAY with silt, fine to medium sand, moist. (CL)	Medium Stiff					
8-				36.1				
		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 2 feet. No caving observed.						
9—		-						
10 —								



		LOG OF TEST PIT NO. TP-112	FIGURE	A-43		
	PRO	DJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGE	D BY: <u>SLK</u>			
LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N						
	DAT	E LOGGED: <u>March 14, 2022</u> DEPTH TO GROUNDWATER: <u>2 feet</u> DEPTH TO CAV	ING:0 to 3 feet			
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M		
0-		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.				
		(ML/OL) (Topsoil)				
1–		Gray sandy SILT, fine to medium sand, moist to wet. (ML)	Soft			
≭ 2-				22.8		
3-						
-		Gray sandy SILT, fine to medium sand, moist, trace gravel, faintly mottled. (ML)				
4-						
5-	-		Medium Stiff			
6-						
7-	-					
		Red/orange and gray silty SAND with gravel to SAND with silt and gravel, fine to coarse sand, fine to coarse gravel, moist, mottled. (SM/SP-SM)	Medium Dense to Dense			
8-		Test Pit terminated at approximately 8 feet. Heavy groundwater seepage observed at approximately 2 feet.		15.2		
9—		Moderate caving observed from 0 to 3 feet.				
10 —	1			I		





		LOG OF TEST PIT NO. TP-113	FIGURE	A-44			
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK						
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A						
	DAT	TE LOGGED:March 14, 2022 DEPTH TO GROUNDWATER: 2 feet DEPTH TO C	CAVING: <u>N/A</u>				
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M			
0-		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.					
		(ML/OL) (Topsoil)					
1	-		Soft				
		Gray SILT with sand, fine to medium sand, wet. (ML)					
≭ 2—		Gray sandy SILT, fine to medium sand, moist, trace gravel, faintly mottled. (ML)					
-				24.1			
3—			Medium Stiff				
4—							
4							
5		Red/orange and gray silty SAND with gravel, fine to medium sand, fine to coarse gravel moist, some clay, scattered cobbles. (SM)	,	21.1			
			Medium Dense				
6—							
		Gray gravelly silty SAND, fine to coarse sand, fine to coarse gravel, moist, scattered cobbles. (SM)					
7—	-						
			Medium Dense to Dense				
8-	-						
9—	-	Test Pit terminated at approximately 9 feet.		18.9			
		Light groundwater seepage observed at approximately 2 feet. No caving observed.					
10 —		I		I			



		LOG OF TEST PIT NO. TP-114		FIGURE	A-45			
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK							
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	TE LOGGED: March 14, 2022 DEPTH TO GROUNDWATER: 2.5 feet		/ING: N/A				
Depth (ft)	Sample No.	Description		Consistency/ Relative Density	(%) M			
0—		Dark brown SILT with some sand, moist, scattered roots and organic inclus	ions.					
		(ML/OL) (Topsoil)						
1	-	Gray SILT with sand, fine to medium sand, wet. (ML)		Soft				
2	-							
¥					25.8			
3—	-	Gray sandy SILT, fine to medium sand, moist, trace gravel, mottled. (ML)						
4—	-			Medium Stiff	34.0			
5—	-	Red/orange and gray silty SAND with gravel, fine to medium sand, fine to c moist, some clay, mottled. (SM)	oarse gravel,					
6	-							
				Medium Dense to Dense	24.1			
7	-							
8—								
8		Test Pit terminated at approximately 8 feet. Moderate groundwater seepage observed at approximately 2.5 feet.						
9—	-	No caving observed.						
10 —					<u> </u>			
			Terra					

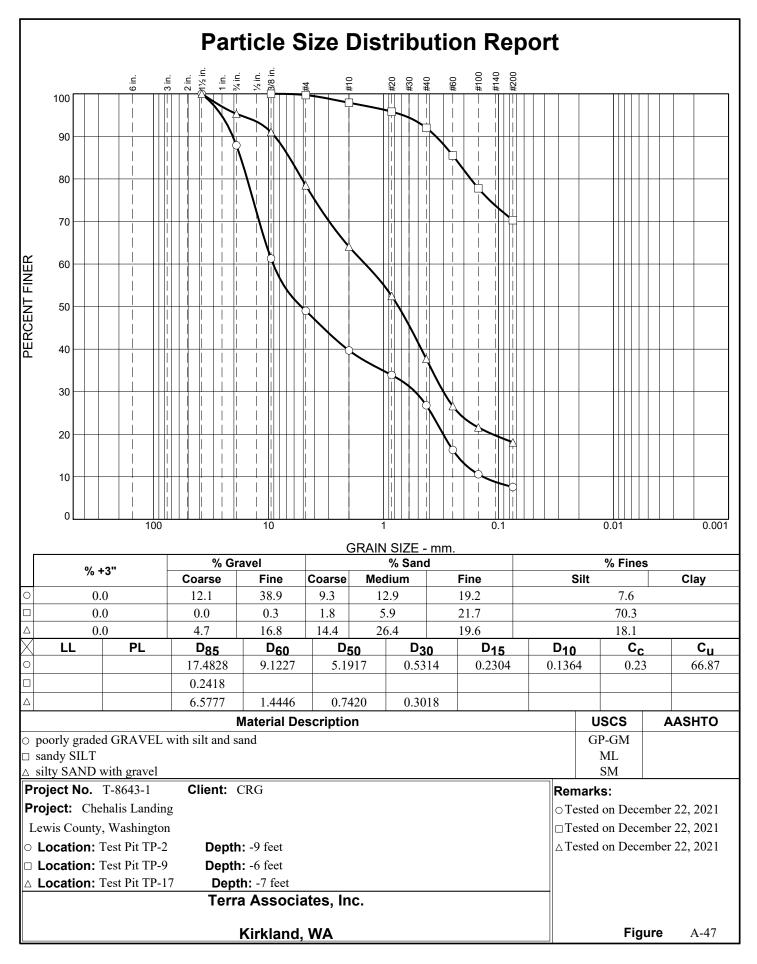


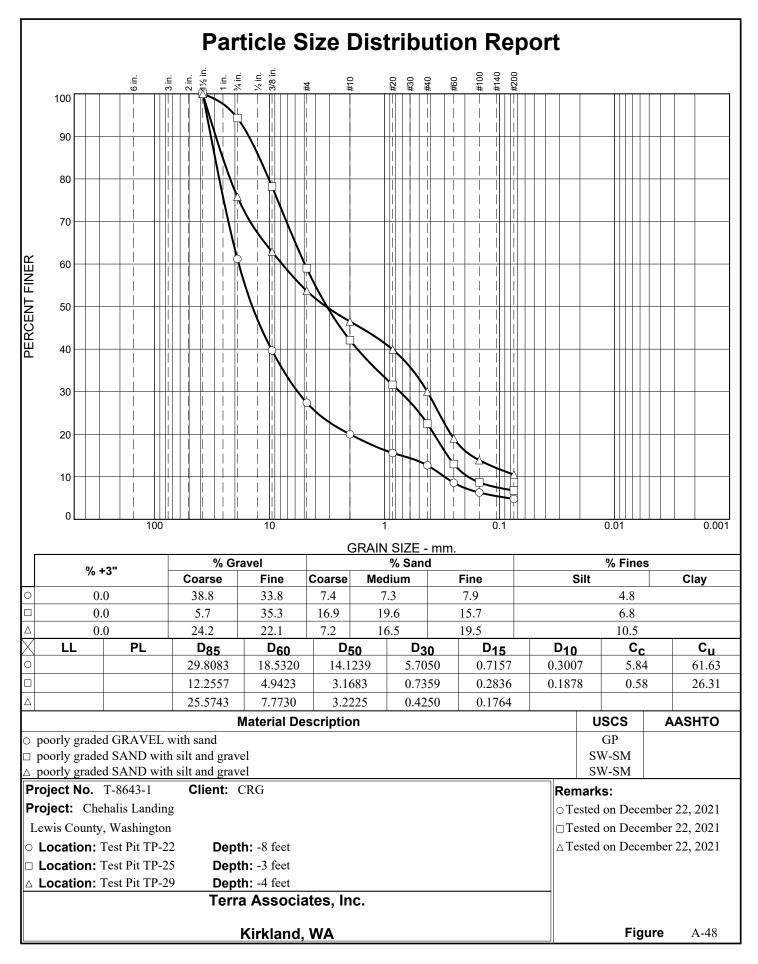


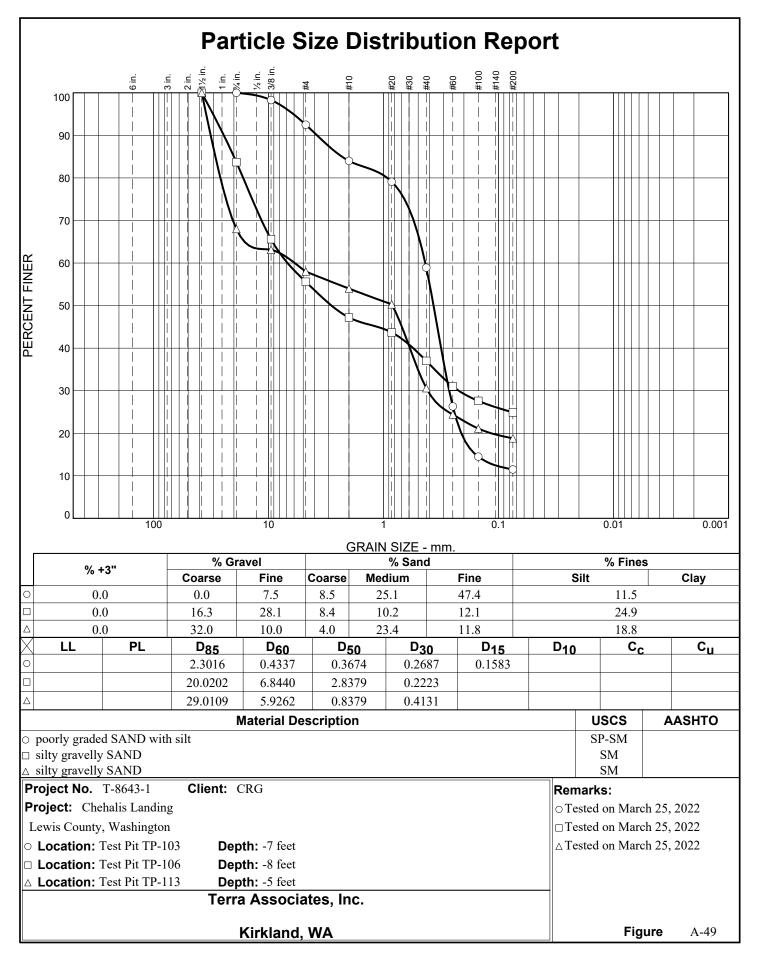
	LOG OF TEST PIT NO. TP-115 FIGURE A-46							
	PROJECT NAME: Chehalis Landing PROJ. NO: T-8643-1 LOGGED BY: SLK							
	LOCATION: Chehalis, Washington SURFACE CONDITIONS: Thick Grass APPROX. ELEV: N/A							
	DAT	TE LOGGED: <u>March 14, 2022</u> DEPTH TO GROUNDWATER: <u>2 feet</u> DEPTH TO C	AVING: <u>N/A</u>					
Depth (ft)	Sample No.	Description	Consistency/ Relative Density	(%) M				
0-		Dark brown SILT with some sand, moist, scattered roots and organic inclusions.						
		(ML/OL) (Topsoil)						
1-			Soft					
•		Gray SILT with sand, fine to medium sand, wet. (ML)						
▼ 2-				29.6				
3-	_	Gray sandy SILT, fine to medium sand, moist, some gravel, mottled. (ML)		29.0				
4-	-		Medium Dense/Stiff					
5-				25.2				
Ū								
6-	-	Intermixed gray gravelly SILT with sand and silty gravelly, SAND, fine to medium sand, fine to coarse gravel, moist, heavily mottled. (ML/GM)						
7-	-		Medium Dense					
8-	-	Test Pit terminated at approximately 8 feet. Light groundwater seepage observed at approximately 2 feet.		23.2				
9-	-	No caving observed.						
40								
10 -		Torr						











APPENDIX B

SUBSURFACE EXPLORATIONS BY OTHERS

		В	ORING LOG	.OG NO. B-A03 Page								2
F	PROJ	ECT: Proposed Industrial Park - Cr Site	ehalis PWI C	LIENT	: Pi Bo	uge othe	t We ell, V	stern Inc VA			-	
્	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6264° Longitude: -122.9054° Approxim	hate Surface Elev.: 247 (Ft.) +/- ELEVATION (Ft.)		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1			, very soft246.5+		-	X	12	0-0-0-1 N=0	S-1			
		2.9 hard, transitions to olive gray silty clay at 2.3 CLAYEY SAND WITH GRAVEL (SC), trace		/ <u>-</u>	-	\square	18	5-18-24 N=42	S-2	_		
	20	brown to dark brown, moist, dense, stratifie medium dense, interbedded with silty clay	d	5-		\square	15	18-15-11 N=26	S-3			
	36		-		\square	9	8-13-11 N=24	S-4				
2					-	X	16	8-11-16 N=27	S-5	20.4		16
	20	dense, interbedded with clay		-	-	X	16	12-20-16 N=36	S-6	_		
		interbedded with 5-inches reddish brown cla 13.5	ayey sang with slit 233.5+	-10 - - /-	-	X	15	6-15-22 N=37	S-7	-		
		POORLY GRADED SAND WITH CLAY AN (SP-SC), trace gravel, bluish gray, wet, very	ID GRAVEL	- 15- -	-	X	3	4-0-0 N=0	S-8	-		
3		dark bluish gray, very dense, interbedded w with sand	ith soft clayey silt	-	-	X	16	17-37-48 N=85	S-9	-		
				20-	-	X	9	36-50/6"	S-10	-		
		hard drilling		-	-							
F	Str	atification lines are approximate. In-situ, the transition may be	e gradual.	25-	1		Han	nmer Type: Automatic				
	/anceme lollow St	Procedures tory proce	s for a dures ι	ised	Note	s:						
	andonment Method: Boring backfilled with bentonite chips upon completion. Elevations were interpolate					c site						
—	WATER LEVEL OBSERVATIONS						Boring	Started: 01-08-2021	Bori	ng Comp	oleted: 01-08-20	021
Z Z	7	Inferred from change in sample moisture Measured with water level indicator			J	1	Drill R	ig: D-70	Drill	er: Holoc	ene	
		21905 64ti			5 64th Ave W, Ste 100 Intlake Terrace, WA Project No.: 81215062							

		BORING L	OG	NO	B	-A	03				Page 2 of 2	2
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	C	LIENT	: Pi Bo	uge othe	t We ell, V	stern Inc VA			-	
5	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6264° Longitude: -122.9054° Approximate Surface Elev.: 247		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
	0	DEPTH ELEVAT POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), trace gravel, bluish gray, wet, very loose (continued)	i <u>on (Ft.)</u>	-	-	X	12	19-33-31 N=64	S-11	11.9		13
AIE.GUI 8/23/21		very dense 28.5 FAT CLAY (CH), bluish gray, wet, very stiff	_218.5+/-	- - - 30-	-			5-8-11				
U IEKKACON_DAIAIEMPL.				-	-		18	5-8-11 N=19	S-12			
		trace silt, light bluish gray		35			18	9-9-15 N=24	S-13	34.9	71-26-45	
		41.5 Boying Torrelated at 41 5 Foot	205.5+/-	_	-	X	18	18-13-15 N=28	S-14			
		Boring Terminated at 41.5 Feet										
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Han	nmer Type: Automatic	;			
	Hollow St	nt Method: tem Auger See Exploration and description of field an and additional data (II See Supporting Inforr symbols and abbrevia ackfilled with bentonite chips upon completion. Elevations were interr	d laborate any). nation for ations.	ory proce • explanat	dures u		Note	S:				
								Started: 01-08-2021	Ro	ring Comr	leted: 01-08-20	721
	7	ferred from change in sample moisture	61	CC				ig: D-70		Iler: Holoc		521
	<u> </u>	Measured with water level indicator 21905 64t			05 64th Ave W, Ste 100 ountlake Terrace, WA Project No.: 81215062							

		BORING LOC	g n	10.	B	-A	04			F	Page 1 of 2	2
Ρ	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLI	ENT	: Ρι Βα	ige othe	t We ell, M	stern Inc /A				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6261° Longitude: -122.9048° Approximate Surface Elev.: 247 (Ft.) +		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1	<u>xi 7</u> . V	FAT CLAY WITH SAND (CH), with organics, dark brown with orangish brown, moist, very soft, with silt	5+/-		-	X	15.6	0-0-0-2 N=0	S-1			
		245 gray with orangish brown245 CLAYEY SAND (SC), fine to medium grained, gray to reddish brown, moist, medium dense fine grained	<u>-,,,</u>	_	-		18	5-8-10 N=18	S-2			
		with gravel, reddish brown with brownish gray		- 5			18	7-11-14 N=25	S-3	-		
		with gravel, interbedded with clay layer at 5.2 ft and 5.5 ft with gravel, reddish brown and brownish gray, dense		-	-	X	18	7-12-17 N=29	S-4	_		
2		with gravel, redustriblown and blownish gray, dense		_	-	K	18	8-17-18 N=35	S-5			
2		reddish brown, wet, very dense		- 10-	∇	$\left \right\rangle$	18	15-17-15 N=32 20-23-34	S-6	13.8		14
		<u>13.5 233.5</u> FAT CLAY WITH SAND (CH), dark brown, wet, very soft,	<u>5+/-</u>	-	-		13	N=57	S-7			
		with wood debris 15.8 231 16.5 FAT CLAY (CH), trace silt and sand, dark grayish brown, wet, very soft, with wood debris 230.5		15 - -		X	18	0-0-0 N=0	S-8	123.1	90-60-30	
		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), medium to coarse grained, dark bluish gray, wet, very dense		_	-	X	18	20-27-27 N=54	S-9	11.9		11
3		dense		20— _ _	-	X	11	14-10-21 N=31	S-10	-		
				- - 25-	-							
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Ham	imer Type: Automatio	2			
	ancement Method: See Exploration and Testii ollow Stem Auger description of field and lat and additional data (If any				for a dures ι	ised	Note	5:				
Abar	ndonme		for ex	xplanati	on of							

andonment Method:	
Boring backfilled with bentonite chips upon completic	'n

		plan
	WATER LEVEL OBSERVATIONS	
$\overline{\mathbf{\nabla}}$	Inferred from change in sample moisture	
\mathbf{V}	Measured with water level indicator	

Boring Started: 01-08-2021

Project No.: 81215062

Drill Rig: D-70

Boring Completed: 01-08-2021

Driller: Holocene

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		BOF	RING LOO	g NO	. B-	-A(04				Page 2 of	2
F	ROJ	ECT: Proposed Industrial Park - Cheha Site	alis PWI	CLIENT	: Pu Bo	iget othe	t We ell, W	stern Inc /A				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6261° Longitude: -122.9048° Approximate S	Surface Elev.: 247 (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		DEPTH POORLY GRADED SAND WITH CLAY AND G (SP-SC), medium to coarse grained, dark bluish very dense (continued) very dense, no sample recovery	ELEVATION () i RAVEL 1 gray, wet,	<u>Ft.)</u>	- 0 - V	0		50/3"	S-11			
3		dense, no sample recovery medium dense		-			0	24-21-23	S-12	_		
		medium dense		30-		X	18	11-10-13 N=23	S-13	_		
		32.5 <u>FAT CLAY (CH)</u> , dark bluish gray, wet, very stif		<u>.5+/-</u>								
				35-	-	X	18	10-11-15 N=26	S-14	_		
4				-	-							
		hard, no sample recovery		40-		\times	0	50/6"	S-15	-		
		44.0	20			X	18	12-14-19 N=33	S-16	-		
		Boring Terminated at 44 Feet										
	Str	atification lines are approximate. In-situ, the transition may be grad	lual.				Ham	mer Type: Automatic				
		em Auger desc and	Exploration and Testin ription of field and lab additional data (If any)	oratory proce).	dures u	sed	Notes	3:				
		nt Method: syml ckfilled with bentonite chips upon completion. Elev plan	Supporting Information bols and abbreviations rations were interpolate	S.		c site			,			
	' Int	WATER LEVEL OBSERVATIONS		JCC			Boring	Started: 01-08-2021	Bori	ng Comp	bleted: 01-08-2	021
$\overline{\mathbf{v}}$	7	easured with water level indicator					Drill Ri	g: D-70	Drill	ler: Holoc	cene	
				54th Ave W, Ste 100 tlake Terrace, WA Project No.: 81215062								

		BORIN	IG LO	g no	. В	- A	06			I	Page 1 of :	2
F	PROJ	ECT: Proposed Industrial Park - Chehalis Site	PWI	CLIENT			t We ell, V	stern Inc			_	
5	SITE:	2800 Jackson Highway Chehalis, WA			D	Jun	JII, V					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6255° Longitude: -122.9037° Approximate Surface	Elev.: 248 (Ft.) +/- DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1	<u></u>	DEPTH <u>0.5</u> TOPSOIL, with organics, dark brown, moist to wet, ver soft	ELEVATION Pry <u>247</u>	(Ft.) 7.5+/- –	> 0	s.	20	0-1-2-3	S-0			B
		SANDY FAT CLAY (CH), trace gravel, yellowish brow gray with orange mottling, moist, soft, with organics trace organics, medium stiff	vn to	-	-	$\left \right\rangle$	9	N=3 1-2-5	S-1	-		
DT 8/23/21		very stiff 4.5	_243	3.5+/-	-	$\left \right\rangle$	15	N=7 2-4-12 N=16	S-2	-		
MPLATE.G	30	<u>CLAYEY SAND WITH GRAVEL (SC)</u> , orangish brow brown, moist, very stiff, with silt and sand lenses rock fragements in sampler, blow counts might be over		5-		$\left \right\rangle$	13	3-8-11 N=19	S-3	19.2		35
DATATE	100	reddish brown, wet, hard, increase in gravel content, i fragements in sampler, blow counts might be overstat		-		$\left \right\rangle$	12	6-26-18 N=44	S-4			
2 STACON	30			-			10	15-45-32 N=77	S-5			
STRI.GPJ	36	very stiff, decrease in gravel content, sand content increasing with depth, transitions to gray sand with sil 11.0 LEAN CLAY (CL), dark gray, wet, very stiff to mediur	2	<u>37+/-</u>		X	15	4-8-15 N=23	S-6			
WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/2		17.0	2	- - 15 - - 31+/-	-	X	10	4-3-3 N=6	S-7	35.3	49-25-24	
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO		WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GM), dark gray, wet, very dense only rock fragments recovered, blow counts might be			-		3	25-50/3"	S-8	_		
VAL REPORT.		overstated	2		-			20 00/0				
		POORLY GRADED SAND WITH CLAY AND GRAVE (SP-SC), medium to coarse grained, dark grayish blue dark gray, wet, dense	<u>=</u>	25-	-							
PARATE	Str	atification lines are approximate. In-situ, the transition may be gradual.			1		Har	nmer Type: Automatic		-		I
VALID IF SE		em Auger description and addition	ation and Testi of field and lat nal data (If any ting Informatic	ooratory proce /).	dures ι	used	Note	s:				
		nt Method: symbols an ckfilled with bentonite chips upon completion.	ting Information d abbreviation were interpolat	S.		c site						
	7	WATER LEVEL OBSERVATIONS					Boring	Started: 01-07-2021	Во	ring Comp	oleted: 01-07-20	021
	7	erred from change in sample moisture	911	JCC	J		Drill R	ig: D-50	Dri	ller: Holoc	ene	
				5 64th Ave W, Ste 100 untlake Terrace, WA Project No.: 81215062								

		В	ORING LO	G١	NO	. B	-A	06				Page 2 of	2
Р	ROJ	ECT: Proposed Industrial Park - Cr Site	nehalis PWI	CL	IENT	: Pi	ige	t We	estern Inc VA			0	
S	ITE:	2800 Jackson Highway Chehalis, WA				D	June	-II, v					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6255° Longitude: -122.9037° Approxim	nate Surface Elev.: 248 (Ft. ELEVATION		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		POORLY GRADED SAND WITH CLAY AN (SP-SC), medium to coarse grained, dark g dark gray, wet, dense (continued)	ID GRAVEL	(1 1 2 /	_		X	6	8-14-23 N=37	S-9	15.4		11
3		boring determinated due to the obstruction	2	18+/-	-	-							
	Auger Refusal at 30 Feet				30-								
	Stratification lines are approximate. In-situ, the transition may be gradual.							Ha	mmer Type: Automatic				
H Aba	ollow St	nt Method: em Auger nt Method: ckfilled with bentonite chips upon completion.	See Exploration and Testi description of field and lat and additional data (If any See Supporting Informatic symbols and abbreviations Elevations were interpolat plan	ooraton /). on for e s.	y procee explanat	dures u		Note	əs:				
		WATER LEVEL OBSERVATIONS		Boring Started: 01-07-2021							ring Comp	bleted: 01-07-2	021
∇		erred from change in sample moisture	lierra				1	Drill F	Rig: D-50	Dr	iller: Holoc	ene	
<u> </u>	Measured with water level indicator 21905			Composition Drill Rig: D-50 Driller: Holocene 64th Ave W, Ste 100 Project No.: 81215062 Project No.: 81215062									

		BORING LOG	NO	. B	-A	09			F	Page 1 of 3	3
PF	soj	ECT: Proposed Industrial Park - Chehalis PWI CL Site	.IENT			t We ell, V	estern Inc VA				
Sľ	TE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6246° Longitude: -122.9022° Approximate Surface Elev.: 252 (Ft.) +/- DEPTH ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1		0.5 TOPSOIL , with organics, dark brown, moist, very soft 251.5+/- SANDY FAT CLAY (CH), trace organics, gray and orange, moist, soft	-		X	13	0-1-1-2 N=2	S-0			
		2.5 249.5+/- SILTY CLAY (CL-ML), low to medium plasticity, olive gray, moist, medium stiff, sand content increasing with depth 4.0 possibly perched groundwater248+/-	_			9	1-2-2 N=4	S-1			
	3	SANDY FAT CLAY WITH GRAVEL (CH), orangish brown, moist, very stiff	- 5			12	4-13-11 N=24	S-2		-	
2	0.	stiff grayish brown to gray, decrease in gravel content	_	-	X	11	5-7-7 N=14	S-3	19.0	-	43
					X	6	3-4-8 N=12	S-4			
	very stiff, increase in gravel content, rock fragements in sampler, blow counts might be overstated increase in gravel content, blow count might be over stated			-	X	11	4-8-11 N=19	S-5			
0		due to rock fragments <u>10.5</u> <u>241.5+/-</u> <u>WELL GRADED GRAVEL WITH CLAY AND SAND</u> (GW-GC), orangish brown to gravish brown, wet, very	10- -		X	6	4-10-21 N=31	S-6			
4		dense	- - 15- - - - 20-	-		6	10-25-33 N=58	S-7			
		only rock fragments recovered, blow counts might be overstated			X	6	24-31-36 N=67	S-8	12.5	-	8
	24.0			-							
	Stratification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
Hol Abano	icemei Iow St	nt Method: em Auger Muger Method: ckfilled with bentonite chips upon completion. Elevations were interpolated from Elevations were interpolated from E	explanat	dures u		Note					

	Elevations were interpolated from a topographic site		
WATER LEVEL OBSERVATIONS		Boring Started: 01-04-2021	Boring Completed: 01-04-2021
Z Inferred from change in sample moisture	llerraron		
Z Measured with water level indicator		Drill Rig: D-50	Driller: Holocene
	21905 64th Ave W, Ste 100 Mountlake Terrace, WA	Project No.: 81215062	

	B	ORING LO	g no	. B	- A	09				Page 2 of	3
PROJI	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIENT	Γ: Ρι Βα	ige othe	t We ell, V	stern Inc VA				
SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYE GRAPHIC LO		ate Surface Elev.: 252 (Ft.)		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
3	DEPTH POORLY GRADED SAND WITH CLAY AN (SP-SC), medium grained, dark blue to dark 26.5 medium dense (continued)	gray, wet,	Ft.) 	-	X	12	10-8-11 N=19	S-9			
	FAT CLAY (CH), medium plasticity, dark gr hard			-		18	9-12-19 N=31	S-10	30.7	58-19-39	-
4	very stiff			-	X	14	8-11-13 N=24	S-11	-		
			40-	-	X	18	8-11-15 N=26	S-12	39.9	80-28-52	-
	medium plasticity, dark gray to dark grayish	blue	- 45- - -	-	X	18	7-8-11 N=19	S-13	_		
Stra	atification lines are approximate. In-situ, the transition may be	gradual.	50-			Han	nmer Type: Automatic				
-	em Auger nt Method: ckfilled with bentonite chips upon completion.	See Exploration and Testir description of field and lab and additional data (If any) See Supporting Informatio symbols and abbreviations Elevations were interpolate plan	oratory proce n for explanat	dures u tion of		Note	S:				
Infe	WATER LEVEL OBSERVATIONS ierred from change in sample moisture easured with water level indicator	21905 64th Av Mountlake T		זכ		Drill R	started: 01-04-2021 ig: D-50 t No.: 81215062		ing Comp ler: Holoc	oleted: 01-04-20 cene	021

	BORING LOG NO. B-A09 Page 3 of 3												
Р	ROJ	ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CL	IENT	: Ρι Βα	uge othe	t We ell, V	estern Inc			0	
S	ITE:	2800 Jackson Highway Chehalis, WA						, .					
MODEL LAYER	GRAPHIC LOG		nate Surface Elev.: 252 (Ft.)		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
4		DEPTH FAT CLAY (CH), medium plasticity, dark gr hard (continued) 51.5		(Ft.)).5+/-			X	18	8-11-13 N=24	S-14	39.2	109-29-80	
		Boring Terminated at 51.5 Feet	200								1		
	Str	atification lines are approximate. In-situ, the transition may be	e gradual.			-	-	Har	mmer Type: Automatic				
H Aba	dvancement Method: Hollow Stem Auger bandonment Method: Boring backfilled with bentonite chips upon completion.				explanat	dures u		Note	95: 				
		WATER LEVEL OBSERVATIONS						Boring	g Started: 01-04-2021	Bori	ng Comp	leted: 01-04-20)21
$\overline{\nabla}$	7	erred from change in sample moisture	lierra		CC			Drill F	Rig: D-50	Drill	er: Holoc	ene	
	_ <i>M</i> e	Measured with water level indicator 21905 6			64th Ave W, Ste 100 Itlake Terrace, WA Project No.: 81215062								

F		BORING LO ECT: Proposed Industrial Park - Chehalis PWI					stern Inc			Page 1 of	1
Г	NUJ	Site	CLIEN	B	oth	ell, M	/A				
S	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6239° Longitude: -122.9011° Approximate Surface Elev.: 256 (Ft.	,+(-/- DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1	<u></u>	very soft	(Ft.) 5.5+/-	- C		₩ 16	0-1-2-4	S-0			
		SILTY CLAY (CL-ML), with organics, gray and orange, moist, soft trace organics		-		2	N=3	S-1			
						4	N=4 1-1-2 N=3	S-2			
2		5.5 250 <u>SANDY FAT CLAY WITH GRAVEL (CH)</u> , orangish brown, moist, stiff, gravel content increasing with depth, rock	_{0.5+/-} 5	_		8	1-4-10 N=14	S-3	;		
-		fragments, blow counts might be over stated very stiff, interbedded with gray and orange clay		_		8	5-10-12 N=22	S-4			
		CLAYEY SAND (SC), low to no plasticity, yellowish brown	47+/-		13 11-12-15 S-5		;				
		to grayish brown with orange mottling, moist, medium dense, sand content increasing with depth	10	-		14	3-5-7 N=12				44
		12.0 2 WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), orangish brown, moist to wet, very dense	44+/-	_							
3		wet, only rock fragments recovered, blow counts might be overstated	15	- - -	×	4	14-50/6"	S-7	,		
		only rock fragments recovered, blow counts might be overstated 21.5 234	1.5+/-	- - - -		9	7-24-29 N=53	S-8	3		
		Boring Terminated at 21.5 Feet									
	Str	atification lines are approximate. In-situ, the transition may be gradual.				Ham	nmer Type: Automatio				
		nt Method: See Exploration and Testi tem Auger description of field and lat and additional data (If any	poratory pro		used	Note	5:				
		ent Method: ackfilled with bentonite chips upon completion.	S.		nic site	9					
		WATER LEVEL OBSERVATIONS				-	Started: 01-04-2021		Boring Com	bleted: 01-04-2	021
∇	Int	Ferred from change in sample moisture	DC					-			<u></u>
\mathbf{V}	Z Me	easured with water level indicator 21905 64th Av					g: D-50	['	Driller: Holoo	cene	
		Mountlake T				Project	t No.: 81215062	- 1			

		BORIN	IG LOG	NO	. B	- A '	15				Page 1 of	1
Р	ROJ	ECT: Proposed Industrial Park - Chehalis Site	PWI C	LIENT	: Pi Bo	ige	t We ell, V	estern Inc				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6227° Longitude: -122.8990°		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	ERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
	-	Approximate Surface	ELEVATION (Ft.)	,	WATER	SAMPI	RECOVERY	FIELC	SAMP	CONTI	LL-PL-PI	PERCEI
1		0.5 <u>TOPSOIL</u> , with organics, brown to dark brown, moist, soft to medium stiff <u>FAT CLAY WITH SAND (CH)</u> , trace gravel, grayish b with orange mottling, moist, medium stiff, sand conterport.	/	<u>/-</u> –	-	X	13	0-2-3-3 N=5	S-0			
		increasing with depth	a IL	-	-		7	1-2-2 N=4	S-1			
		very stiff		5-	-	\mid	14	2-6-11 N=17	S-2	26.1	63-21-42	
		trace coarse grained sand reddish brown, interbedded with sand at 6 ft and gray 7.0 orange silty clay at 6.5 ft	/ and 255+	-		X	13	2-7-13 N=20	S-3			
	0	<u>CLAYEY SAND WITH GRAVEL (SC)</u> , orangish brow moist, very stiff				X	12	3-7-15 N=22	S-4			
	0	decreasing in gravel content, increasing in sand conte	ent	10-		$\left \right\rangle$	11	3-7-15 N=22	S-5			
2	0			-	-	Å	13	7-11-12 N=23	S-6	; 		
		hard, rock fragments in sampler, blow content might l overstated, silty clay at the bottom of the sample	be	- - 15- -	-	X	15	10-18-14 N=32	S-7	. 18.4		38
		rock fragments in sampler, blow content might be ove	erstated 240.5+	- - 20- <u>/-</u> -		X	6	6-35-50/4"	S-8			
		Boring Terminated at 21.3 Feet										
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
		em Auger description	ation and Testing F of field and labora nal data (If any).			ised	Note	es:				
		nt Method: symbols ar ckfilled with bentonite chips upon completion.	orting Information fo nd abbreviations. were interpolated f			c site						
		WATER LEVEL OBSERVATIONS					Boring	g Started: 01-06-2021	ſ	Boring Comp	bleted: 01-06-20)21
		popured with water level indicator	erra		זנ		Drill R	ig: D-50		Driller: Holoo	ene	
	_ <i>M</i> e	easured with water level indicator	21905 64th Ave W Mountlake Terra			_		et No.: 81215062				

							-				Г	aye i ui a	٤
		ECT: Proposed Industrial Park - Chel Site	halis PWI (CLIENT	: Pı Bo	iget othe	t We ell, V	stern Inc VA					
S		2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6258° Longitude: -122.9052° Approximate DEPTH	: Surface Elev.: 247 (Ft.) + ELEVATION (Ft		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER	CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1		0.5 <u>TOPSOIL</u> , with organics, dark brown, moist, ve <u>FAT CLAY (CH)</u> , with organics, brownish gray brown, moist, very soft	ery soft <u>246.5</u>			X	18	0-0-0-2 N=0	S-′	1			
		trace organics, olive brownish gray with brown with gravel 3.5	, very stiff, _243.5	5+/- —	-	\square	18	3-8-14 N=22	S-2	2			
		CLAYEY SAND WITH GRAVEL (SC), trace g brown to dark brown, moist, medium dense, ye patches	ravel, reddish ellow sand	5-		X	17	4-9-8 N=17	S-C	3			
		with gravel		-	-	\square	14	6-6-8 N=14	S-4	4 20).0		16
		with gravel, dark reddish brown with brown		_		X	14	1-4-15 N=19	S-{	5			
2		very dense dense		-	-	X	8	15-25-28 N=53	S-6	6			
	10 10 10	uunse		10		X	14	21-25-19 N=44	S-7	7			
		<u>13.5</u> SANDY FAT CLAY (CH), bluish gray, moist, n	233.5 nedium stiff	-	-								
		18.5	228.5	15- - - 5+/-	-	X	18	2-2-4 N=6	S-{	8 35	5.5		50
3		POORLY GRADED SAND WITH CLAY AND (SP-SC), dark gray, wet, very dense	GRAVEL	20-		\times	6	24-50/4"	S-{	9			
	Str	atification lines are approximate. In-situ, the transition may be gra	adual.	25-	-		Har	nmer Type: Automatic					
H	ollow St	em Auger de an Se	e Exploration and Testing scription of field and labor d additional data (If any). e Supporting Information	ratory proced	dures u	ised	Note	s:					
	oring ba	ckfilled with bentonite chips upon completion.	mbols and abbreviations. evations were interpolated	d from a topo	ographi	c site							
<u> </u>		WATER LEVEL OBSERVATIONS					Boring	Started: 01-04-2021		Boring C	ompl	leted: 01-04-20)21
	_ Inf	erred from change in sample moisture	lierra				Drill R	ig: D-70		Driller: H	oloce	ene	
			21905 64th Ave Mountlake Ter			-		t No.: 81215062					

THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI. GPJ TERRACON_DATATEMPLATE. GDT 8/23/21

Page 1 of 2

		BORING LO	G N	0.	B	-B(04				Page 2 of	2	
P	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIE	NT	: Pi Bo	uge othe	t We ell, V	estern Inc VA			-		
S	SITE:	2800 Jackson Highway Chehalis, WA	_										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6258° Longitude: -122.9052° Approximate Surface Elev.: 247 (Ft.	<i>'</i>	UEPIN (FL.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES	
		DEPTH ELEVATION POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), dark gray, wet, very dense (continued)	<u>(Ft.)</u>	_		X	12	37-42-42 N=84	S-10				
3		no sample recovery, gravel stuck in shoe, blowcounts may be overstated	3	 			_0_	50/4"	<u>S-11</u>				
		<u>35.5</u> medium dense21 [.] FAT CLAY (CH), bluish gray, wet, very stiff	_{1.5+/-} 3			X	18	18-10-12 N=22	S-12	_			
4			4 5.5+/-	 0		X	18	5-5-7 N=12	S-13	_			
	Str	Boring Terminated at 41.5 Feet					Har	nmer Type: Automatic					
		nt Method: See Exploration and Testi tem Auger description of field and lat				ised	Note	es:					
		and additional data (If any See Supporting Informatic symbols and abbreviation ckfilled with bentonite chips upon completion. Elevations were interpolat plan	y). on for expl ns.	anati	on of								
$\overline{\nabla}$	7 Int	WATER LEVEL OBSERVATIONS					Boring	g Started: 01-04-2021	В	oring Com	pleted: 01-04-2	021	
F	_ ""		90				Drill F	lig: D-70	D	Driller: Holocene			
	21905 64th A Mountlake						Projec	ct No.: 81215062					

	В	ORING LOO	g no	. B	-B	05			ļ	Page 1 of 2	2
PROJE	CT: Proposed Industrial Park - Ch Site	nehalis PWI	CLIENT	: Pu Bo	uge	t We ell, V	stern Inc				
SITE:	2800 Jackson Highway			5		U II, U					
	Chehalis, WA			<u> </u>						ATTERBERG	
2 X	OCATION See Exploration Plan atitude: 46.6255° Longitude: -122.9046°		A DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LIMITS	PERCENT FINES
	FPTH	nate Surface Elev.: 248 (Ft.) ELEVATION (F		WA OBS	SAN	REC		/S	S		РЕЯ
	5 TOPSOIL, with organics, dark brown, moist FAT CLAY WITH SAND (CH), with organic orangish brown, moist, very soft 0	s, brown with	<u>5+/-</u> 6+/-	-		21.6	0-0-0-1 N=0	S-1			
2	<u>CLAYEY SAND (SC)</u> , trace gravel, dark brownist, medium dense, stratified <u>FAT CLAY (CH)</u> , olive gray, moist, very stift	own with gray, <u>245.</u>				16	6-14-11 N=25	S-2			
4.	2 trace organics, olive gray with reddish brow CLAYEY SAND WITH GRAVEL (SC), redo moist, medium dense	n, with fine sand 24	4+/ 5			16	4-9-9 N=18	S-3			
6.	5	241.	<u>5+/-</u>		K	17	7-8-11 N=19	S-4	_		
2	brown with reddish brown, moist, stiff	240.9 /	<u>5+/-</u>		\mathbb{X}	18	4-4-6 N=10	S-5			
	CLAYEY GRAVEL WITH SAND (GC), fine grained, reddish brown, moist, dense with gravel, fine to coarse grained, brown to		-	-		18	6-16-24 N=40	S-6			
	moist dark brown with reddish brown		10-		X	14	27-26-24 N=50	S-7	12.3		13
	3.5	234.	- 5+/-	-							
	WELL GRADED GRAVEL WITH CLAY AN (GW-GC), dark gray and bluish gray, wet, v		-								
			15-			10	24-26-30 N=56	S-8			
3			-	-							
	olive gray to dark gray, dense		20-	-	\mathbb{X}	7	1-17-25 N=42	S-9			
			-	-							
			-								
Strati	fication lines are approximate. In-situ, the transition may be	e gradual.	25-	1		Han	nmer Type: Automatic				
Advancement Hollow Sten		See Exploration and Testing description of field and labo and additional data (If any).			used	Note	s:				
Abandonment Boring back	Method: filled with bentonite chips upon completion.	See Supporting Information symbols and abbreviations.			c site						
<u> </u>	ATER LEVEL OBSERVATIONS	plan		3. april	5 5110		Started: 01-04-2021	Ro	ing Comr	leted: 01-04-20)21
	red from change in sample moisture	llerra		זנ	1	<u> </u>	ig: D-70		ller: Holoc		
Mea	sured with water level indicator	21905 64th Ave Mountlake Te			_		t No.: 81215062				

		BORING LO	DG N	10.	B	-B(05				Page 2 of :	2
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLI	ENT	: Pı Bo	uge othe	t We ell, M	stern Inc /A				
5	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6255° Longitude: -122.9046° Approximate Surface Elev.: 248 (DEPTH ELEVATIO	Ý	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), dark gray and bluish gray, wet, very dense (continued)	<u> </u>			X	15	23-37-35 N=72	S-10	14.4		10
3		bluish gray to dark gray 28.5 <u>FAT CLAY (CH)</u> , with silt, bluish gray, wet, very stiff	<u>219.5+/-</u>	_	V							
4				30— _ _		X	12	5-9-10 N=19	S-11	_		
4		stiff		_ 35_			18	2-5-9 N=14	S-12	_		
		36.5 Boring Terminated at 36.5 Feet	<u>211.5+/-</u>									
	Str	atification lines are approximate. In-situ, the transition may be gradual.	I				Ham	nmer Type: Automatic	;		1	
Adv		nt Method: em Auger See Exploration and Te description of field and and additional data (If a	laboratory			ised	Note	S:				
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interporting and abbreviations were interporting and abbreviations were interporting and and abbreviations were interporting and and abbreviations were interporting and abbreviations and abbreviations were interporting and abbreviations were interporting and abbreviations and abbreviations were interporting and abbreviations were interporting and abbreviations and abbreviations and abbreviations are interporting and abbreviations are interporting and abbreviations are interporting and abbreviations are interported	ons.			c site						
	7 .	WATER LEVEL OBSERVATIONS					Boring	Started: 01-04-2021	Во	ring Com	bleted: 01-04-20	021
	7	erred from change in sample moisture	790			1	Drill Ri	g: D-70	Dri	ller: Holoo	cene	
2		21905 64th	Ave W, St e Terrace,				Projec	t No.: 81215062				

STE: 2800 Jackson Highway Chehalis, WA State 2800 Jackson Highway Chehalis, WA State State Exploring from Unitable # 8249F Longtone 122898* Approximate Surface Davis, 122898* State Approximate Surface Davis, 122898* Depth Exploring from Exploring from Unitable # 8249* Control State Control State Control State Control State Control State State State </th <th>S PWI CLIENT: Puget Western Inc Bothell, WA</th> <th></th>	S PWI CLIENT: Puget Western Inc Bothell, WA	
By Torong Building Construction Plane Lander: 46.0249* Language: 46.0249* Lan		
Leve bis Description Description <thdescription< th=""> <thdescription< th=""> <t< th=""><th>TTYPE FEVEL (Ft.) TTYPE TTS TTS TTS TTS TTS TTS TTS TTS</th><th>RBERG MITS</th></t<></thdescription<></thdescription<>	TTYPE FEVEL (Ft.) TTYPE TTS TTS TTS TTS TTS TTS TTS TTS	RBERG MITS
Leve bis Description Description <thdescription< th=""> <thdescription< th=""> <t< td=""><td>22 Elev:: 248 (Ft.) +/-</td><td>PL-PI</td></t<></thdescription<></thdescription<>	22 Elev:: 248 (Ft.) +/-	PL-PI
1 1 22.8 N=0 S-1 reddish brown with olive gray, vary stiff 2454 1 7 S-12.1 cl.AYEY SAND WITH GRAVEL (SC), reddish brown, moist, dense dark brown with reddish brown medium dense light reddish brown, moist dense 1 6-12.21 S-2 dark brown with reddish brown to dark brown medium dense 23.4 1 6-12.21 S-4 1 1 6-12.21 S-4 1 6-12.21 S-4 1 1 6-12.21 S-4 1 1 6-12.21 S-5 1 1 6-12.21 S-4 1 8 4 1 8 4 1 1 6-12.21 S-5 1 1 8 4 1 8 4 1 8 4 1 8 4 1 8 4 1 8 4 1 8 4 1 1 5 6 1 1 5 6 1 1 5 6 1 1 </td <td>ELEVATION (+t.)</td> <td></td>	ELEVATION (+t.)	
12 2451 12 CLAYEY SAND WITH GRAVEL (SC), reddish brown, molst dense dark brown with reddish brown medium dense light reddish brown to dark brown with reddish brown dark brown with reddish brown, moist dense dens		
moist, dense dark brown with reddish brown medium dense light reddish brown dark brown with reddish brown, moist dense 14 6-12-21 N=22 S-3 18.5 10 17 6-12-10 N=22 S-4 16 8-7-12 S-5 10.3 medium dense 207.5r/ moist, very stiff 18 10-19-25 S-6 11 18 5-4-16 N=19 S-5 10 FAT CLAY (CH) bluish gray with trace reddish brown, moist, very stiff 18 5-4-16 S-7 30.7 10 18 5-4-16 S-7 30.7 18 4-6-9 S-8 110 18 15-5 5 18 5-4-16 S-7 30.7 117.0 CORLY GRADED GRAVEL WITH CLAY AND SAND (GP-3C), bluish gray to dark gray, moist, very dense 1 5 50/6" S-10 11 50/6" S-10 5 50/6" S-10 1 S-5 120 5 50/6" S-10 5 50/6" S-10 1 120 5 50/6" S-10 5 50/6" S-10 1 130 GP-30	245+/- $ $ $ $ $ $ $ $ $ $ $N=24$ $ $ $ $ $S-2$ $ $	
a medium dense 54 reddish brown dark brown with reddish brown, moist 17 6-12-10 5.4 dense 10 18 8-7-12 S-6 103 medium dense 207.5Hz 10 18 10-19-26 S-6 103 medium dense 207.5Hz 10 18 10-19-26 S-7 30.7 bluish gray 10 18 4-6-9 S-8 1 18 5-4-16 N=19 30.7 POORL Y GRADED GRAVEL WITH CLAY AND SAND 2014/- 18 4-6-9 S-8 1 50/6" S-10 1 5 50/6" S-10	-	
addit brown with reddish brown, moist dense 16 6-7-12 S-5 10 18 10-19-25 S-6 10.3 medium dense 237.5+/ 18 18 54-16 S-7 30.7 Part CLAY (CH), bluish gray with trace reddish brown, moist, very stiff 18 54-16 S-7 30.7 bluish gray 17.0 231+/ 18 4-6-9 S-8 17.0 POORLY GRADED GRAVEL WITH CLAY AND SAND 231+/ 1 50/6* S-9 10 4 5 50/6* S-10 20 5 50/6* S-10 11 500/6* S-9 20 5 50/6* S-10 20 5 5 5 5		
2 dark brown, moist dense 27.5+/ 10 18 10-19-25 S-6 10.3 medium dense 227.5+/ 10 18 54-16 S-7 30.7 FAT CLAY (CH), bluish gray with trace reddish brown, moist, very stiff bluish gray 15 18 4-6-9 S-8 17.0 231+/ 18 4-6-9 S-8 17.0 231+/ 1 50/6* S-10 dark gray, wet 20 5 50/6* S-10 dark gray, wet 5 50/6* S-10 5 statification lines are approximate, in-situ, the transition may be gradual. Hermer Type. Automatic Hermer Type. Automatic		
10.3 medium dense 237.5+/ 10-// 18 54-16 S-7 30.7 FAT CLAY (CH), bluish gray with trace reddish brown, 10-// 18 N=20 S-7 30.7 bluish gray 118 4-6-9 S-8 15 18 4-6-9 S-8 17.0		
FAT CLAY (CH), bluish gray with trace reddish brown, moist, very stiff N=20 order moist, very stiff 1 1 1 bluish gray 1 1 1 1 bluish gray 1 1 1 1 1 POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), bluish gray to dark gray, moist, very dense 1 50/6" S-9 dark gray, wet 1 5 50/6" S-10 1 Statification lines are approximate. In-situ, the transition may be graduat. Harmer Type: Automatic Harmer Type: Automatic Waracement Method: holow Stem Auger See Exploration and Testing Procedures for a description of field and laboratory procedures used an additional data (fray). Notes: Borng backfilled with benomie chips upon completion. See Supportion for explanation of symbols and abbreviators. Notes:	1018 5-4-16 S-7 30.7	
Julish gray 17.0 POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), bluish gray to dark gray, moist, very dense dark gray, wet dark gray, wet stratification lines are approximate. In-situ, the transition may be gradual. Advancement Method: Holdow Stem Auger See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (f any). See Supporting Information for explanation of symbols and abbreviations.		
POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), bluish gray to dark gray, moist, very dense 1 50/6" S-9 dark gray, wet 20 5 50/6" S-10 dark gray, wet 5 50/6" S-10 Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic See Exploration and Testing Procedures for a description of field and flaboratory procedures used and adbined data (f any). Notes: Vancomment Method: See Supporting Information for explanation of symbols and abbreviations. Notes:		
a dark gray, wet a a b a b a b a c a <tr< td=""><td></td><td></td></tr<>		
3 J		
Advancement Method: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). Notes: Abandonment Method: See Supporting Information for explanation of symbols and abbreviations. Notes:	20 <u>5 50/6" S-10</u>	
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic Advancement Method: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). Notes: Abandonment Method: See Supporting Information for explanation of symbols and abbreviations. Notes:		
Advancement Method: Hollow Stem Auger See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). Notes: Abandonment Method: Boring backfilled with bentonite chips upon completion. See Supporting Information for explanation of symbols and abbreviations. Notes:	25-	
Hollow Stem Auger description and leading the description of field and laboratory procedures used and additional data (If any). Abandonment Method: See Supporting Information for explanation of symbols and abbreviations.	Hammer Type: Automatic	
Abandonment Method: symbols and abbreviations. Boring backfilled with bentonite chips upon completion.	on of field and laboratory procedures used	
I Elovationa wara internalated from a tangaraphia aital	and abbreviations.	
Elevations were interpolated from a topographic site plan WATER LEVEL OBSERVATIONS Boring Started: 01-05-2021 Boring Complete Boring Started: 01-05-2021 Boring Complete Boring Started: 01-05-2021 Boring Complete Boring Started: 01-05-2021 Boring Started: 01-05-202 Boring Started: 01-05-		01_05 202
✓ Inferred from change in sample moisture		01-00-202

		BC	DRING LO	G NO	B	- B (07				Page 2 of	2
F	PROJ	ECT: Proposed Industrial Park - Che Site	ehalis PWI	CLIENT	: Pi Bo	ige othe	t We ell, V	stern Inc VA				
	SITE:	2800 Jackson Highway Chehalis, WA					·					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6249° Longitude: -122.9036°	te Surface Elev.: 248 (Ft.)+(DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
Ŭ		DEPTH	ELEVATION	′	×80 80	SAI				ŏ		PEF
		POORLY GRADED GRAVEL WITH CLAY A (GP-GC), bluish gray to dark gray, moist, ver (continued) no sample recovery		-	-		0	50/0"	S-11			
5		no sample recovery				_	0	50/2"	S-12			
0T 8/23/2				_	-							
ATE.GL		no sample recovery		30-		_	0	50/1"	S-13			
TEMPL												
				-								
RACOL												
		no sample recovery 35.0 Boring Terminated at 35 Feet	2	^{13+/-} 35-			0	50/0"	S-14			
	Str	l atification lines are approximate. In-situ, the transition may be g	jradual.		I		Har	nmer Type: Automatic	1			
VALID IF SE		tem Auger c	See Exploration and Testi lescription of field and lat and additional data (If any	poratory proce).	dures u	ised	Note	s:				
		ent Method: s ackfilled with bentonite chips upon completion. E	See Supporting Informatic symbols and abbreviation Elevations were interpolat	S.		c site						
	7 100	WATER LEVEL OBSERVATIONS					Boring	started: 01-05-2021	Bo	ring Comp	leted: 01-05-20	021
	7	ferred from change in sample moisture easured with water level indicator			J	1	Drill R	ig: D-70	Dri	ller: Holoc	ene	
			21905 64th Av Mountlake T				Projec	t No.: 81215062				

		BORING LO). B	-В	09				Page 1 of	1
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	T: P B	uge oth	t We ell, V	stern Inc VA				
5	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6243° Longitude: -122.9025° Approximate Surface Elev.: 250 (Ft.) DEPTH ELEVATION		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1			9.5+/-	-		17	0-2-2-2 N=4	S-0			
		3.5 246	ò.5+/-	_		8	1-2-3 N=5	S-1			
		SANDY FAT CLAY WITH GRAVEL (CH), orangish brown with gray mottling, moist, hard	Б			8	7-17-14 N=31	S-2			
1		stiff, with interbedded clay	5	_		9	2-4-5 N=9	S-3			
1						6	3-5-9 N=14	S-4			
2		FAT CLAY (CH), light gray, moist, stiff, sand content increasing with depth, transitions to orange brown silty sand	.5+/-	-		8	1-6-11 N=17	S-5			
		gradually low to medium plasticity, olive gray with orange mottling, moist, very stiff	10	_		6	6-9-8 N=17	S-6			
		stiff	15	-		15	3-4-7		34.9	57-24-33	-
		18.0 2:	32+/-	_			N=11			01 24 00	
		WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), orangish brown to grayish brown, wet, very dense	<u>5211-</u>								
3		rock fragments in sampler, blow counts might be overstated	20			8	24-50/5"	S-8			
		22.0 2 Auger Refusal at 22 Feet	<u>28+/-</u>	+							
	Str	atification lines are approximate. In-situ, the transition may be gradual.				Har	nmer Type: Automatic				
Adv		nt Method: em Auger See Exploration and Testi description of field and lat and additional data (If any See Supporting Information	poratory proc ').	edures		Note	s:				
Aba		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpolat	s.		nic site						
	-	WATER LEVEL OBSERVATIONS				Boring	Started: 01-05-2021	в	Boring Comp	oleted: 01-05-2	021
	7	erred from change in sample moisture	DC			Drill R	ig: D-50		Driller: Holod	cene	
	Me	easured with water level indicator 21905 64th Av Mountlake T		0	-		t No.: 81215062	$-\uparrow$			

		BURING LU	GN	ן. E	2-R	10				Page 1 of 2	2
Ρ	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	NT: P E	uge Both	t We ell, V	estern Inc VA				
S		2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6240° Longitude: -122.9020° Approximate Surface Elev.: 251 (Ft DEPTH ELEVATION		WATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1	<u>1 </u>	0.5 <u>TOPSOIL (ML)</u> , with organics, dark brown, moist, very soft <u>25</u> <u>LEAN CLAY (CL)</u> , low to medium plasticity, olive gray with orange mottlling, moist, soft low to medium plasticity, medium stiff	0.5+/-	_		11	0-0-2-3 N=2	S-0			
		low to modulin plasticity, modern dun		_		10	1-2-3 N=5	S-1	41.0	49-26-23	
			^{246+/-} 5	_		9	3-5-10 N=15	S-2			
2	3		<u>4.5+/-</u>	_		11	4-13-4 N=17	S-3			
		FAT CLAY (CH), trace gravels, orangish brown, moist, stiff, gravel content increasing with depth		_		9	2-5-5 N=10	S-4			
		very stiff, rock fragments in sampler, blow counts might be over stated		_		10	3-10-12 N=22	S-5			
	•	10.0 2 POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), orangish brown to grayish brown, moist, very dense	^{241+/-} 1()- -	X	7	7-22-33 N=55	S-6			
3		wet, dense	15	- ¥	7	12	11-19-28 N=47	S-7			
		very dense	20	-	\times	9	28-50/4"	S-8			
	Str	atification lines are approximate. In-situ, the transition may be gradual.	2	רי		Har	mmer Type: Automatic				
⊢ Aba	Iollow Si	nt Method: tem Auger See Exploration and Test description of field and la and additional data (If any See Supporting Informatii symbols and abbreviation Elevations were interpola plan	boratory pro y). on for expla is.	cedures	used	Note	əs:				
<u> </u>	,	WATER LEVEL OBSERVATIONS				Boring	g Started: 01-05-2021	В	Boring Comp	leted: 01-05-20)21
	7		DC			Drill R	lig: D-50		Driller: Holoc	ene	
	_ <i>M</i> e	easured with water level indicator 21905 64th A Mountlake					ct No.: 81215062				

		E	BORING LO	G	NO.	B	-B	10				Page 2 of	2
	PROJ	ECT: Proposed Industrial Park - C Site	hehalis PWI	CL	IENT	: Pı Bo	ige othe	t We ell, V	estern Inc VA				
	SITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG		imate Surface Elev.: 251 (Ft.		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
3			ELEVATION	<u>(Ft.)</u>				10	29-36-50/6"	S-9	14.3		10
	0.10	Auger Refusal at 26.5 Feet	224	4.5+/-		<u> </u>							
T VALID IF	vanceme Hollow S	ratification lines are approximate. In-situ, the transition may l	See Exploration and Test description of field and la and additional data (If any See Supporting Information	borator /). on for e	ry proce	dures u	ssed	Har	nmer Type: Automatic s:				
OG IS NOT		ent Method: ackfilled with bentonite chips upon completion.	 See Supporting Information symbols and abbreviation Elevations were interpola plan 	IS.			c site						
	7 м	WATER LEVEL OBSERVATIONS easured with water level indicator						Boring	Started: 01-05-2021	Bor	ing Comp	leted: 01-05-20	021
IS BOR	-	easured with water level indicator	- 11211 (21905 64th A						ig: D-50	Dril	ler: Holoc	ene	
E			Mountlake					Projec	t No.: 81215062				

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		BURING LC	G N	J. E	3-B	511				Page 1 of	1
Р	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEI	NT: F E	Puge Both	et W Iell, V	estern Inc WA				
S	ITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6236° Longitude: -122.9015° Approximate Surface Elev.: 253 (F DEPTH ELEVATION	<i>,</i>	WATER LEVEL	OBSERVATIONS SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1	<u><u><u></u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u>	0.5 <u>TOPSOIL (ML)</u> , with organics, dark brown, moist, very soft <u>28</u> <u>SANDY FAT CLAY WITH GRAVEL (CH)</u> , low to medium plasticity, orangish brown with gray mottling, moist, medium	52.5+/-	_		19	1-2-3-5 N=5	S-0			
		stiff trace organics, with orange mottling with orange mottling, less fine roots very stiff, rock fragments in sampler, blow counts might be		_		8	2-5-15 N=20	S-1			
		overstated hard, rock fragments in sampler, blow counts might be overstated	5			10	3-12-28 N=40	S-2			
		very stiff		-		9	3-6-12 N=18	S-3			
		stiff, decrease in gravel content hard, only rock fragments recovered, blow counts might be		_		14	3-4-4 N=8	S-4	_		
2		overstated	1	- 0	X	13	4-12-22 N=34	S-5	_		
		possibly perched groundwater			Z						
		wet, transiitons to silty sand with gravel, gravel content increasing with depth 16.5 23	36.5+/-	5		13	12-16-32 N=48	S-6	18.2		12
3		WELL GRADED SAND WITH CLAY AND GRAVEL (SW-SC), orangish brown to grayish brown, wet, very dense 20.3 only rock fragments recovered, blow counts might be overstated, no sample recovery 21	<u>32.5+/-</u> 21	- - 0		0	24-50/-3"	<u>S-7</u>			
	Str	Auger Refusal at 20.3 Feet				Ha	Immer Type: Automatic				
	Advancement Method: See Exploration and Testi Hollow Stem Auger description of field and lat					Not	es:				
Aba	ndonme oring ba	aboratory pro ny). tion for expla ns. ated from a f	nation o	of	e						
		WATER LEVEL OBSERVATIONS				Borir	ig Started: 01-05-2021	в	oring Comp	leted: 01-05-2	021
\square	<u>M</u> e	easured with water level indicator			Π	Drill	Rig: D-50		oriller: Holoc	cene	
		21905 64th / Mountlake	Ave W, Ste 1 Terrace, W.			Proie	ect No.: 81215062				

		BORING LOO	G NC). B	-B	12			I	Page 1 of 2	2
Ρ	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	T: P B	uge othe	t We ell, V	estern Inc VA			-	
S	ITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6233° Longitude: -122.9010° Approximate Surface Elev.: 254 (Ft.) DEPTH ELEVATION (f		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1	<u>, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,</u>	0.5 TOPSOIL, with organics, dark brown, moist, very soft 253. SILTY CLAY (CL-ML), low to medium plasticity, gray and orange, moist, medium stiff		-		19	0-2-3-4 N=5	S-0			
2		transitions to sandy silt, gray with orange mottling		_		8	1-2-4 N=6	S-1			
	0	4.5 249. POORLY GRADED SAND WITH GRAVEL (SP), orangish	<u>.5+/-</u> 5 -	_		10	3-6-10 N=16	S-2			
		brown with gray mottling, moist, dense rock fragments in sampler, blow counts might be overstated		-		9	7-10-24 N=34	S-3			
	0.0	medium dense, with interbedded silt and sand		_		14	8-14-18 N=32	S-4	13.1		
				_	$\left \right\rangle$	13	3-6-8 N=14	S-5			
) o () 0 (with interbedded sand and clay	10	_	X	13	3-5-10 N=15	S-6	_		
3		12.5 241. WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), orangish brown to grayish brown, wet, dense to very dense blow counts might be overstated, no sample recovery	<u>5+/-</u> 15				50/3"	S-7			
			20	-	×	_2_	50/4"	<u>S-8</u>	_		
			25								
	Str	atification lines are approximate. In-situ, the transition may be gradual.				Har	nmer Type: Automatic				
н	ollow St	nt Method: em Auger See Exploration and Testin description of field and labe and additional data (If any). See Supporting Informations are Method:	oratory proc	edures	used	Note	s:				
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpolate plan		oograph	ic site						
		WATER LEVEL OBSERVATIONS				Boring	Started: 01-06-2021	Bor	ing Comp	leted: 01-06-20)21
∇		erred from change in sample moisture easured with water level indicator 21905 64th Ave				Drill R	ig: D-50	Dril	ler: Holoc	ene	
		21905 64th Ave Mountlake Te		U		Projec	t No.: 81215062				

			BORING LO	G N	0. E	3-B	12				Page 2 of	2
F	PROJ	ECT: Proposed Industrial Park - Site	Chehalis PWI	CLIE	NT: F	Puge Both	t We ell, V	estern Inc VA				
5	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG		proximate Surface Elev.: 254 (Ft	<i>′</i>	DEPTH (Ft.) WATER LEVEL	OBSERVATIONS SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
	h VXX	DEPTH 25.3 Boring Terminated at 25.3 Feet	ELEVATION 22	(Ft.) 8.5+/-		- 	2	50/4"	S-9	—		
	/anceme	ratification lines are approximate. In-situ, the transition m	See Exploration and Test				Har	nmer Type: Automatic				
	andonme	ent Method: ackfilled with bentonite chips upon completion.	description of field and la and additional data (If an See Supporting Informati symbols and abbreviation Elevations were interpola	y). on for exp ıs.	lanation o	f	,					
	7	WATER LEVEL OBSERVATIONS	plan					g Started: 01-06-2021	Bori	ing Comp	leted: 01-06-2	021
	7	ferred from change in sample moisture easured with water level indicator	- IIerr	90			Drill F	lig: D-50	Drill	ler: Holoo	ene	
			21905 64th A Mountlake				Projec	ct No.: 81215062				

			BO	RING LO	GNO	. В	- B	13			F	Page 1 of 1	
		EC	Г: Proposed Industrial Park - Cheh Site	alis PWI	CLIEN	Γ: Ρι Βι	uge othe	t We ell, V	stern Inc VA				
S		-	2800 Jackson Highway Chehalis, WA			_					_		
MODEL LAYER	GRAPHIC LOG			Surface Elev.: 256 (Ft.) ELEVATION (WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1	<u>x. x. x</u>	0.5	TOPSOIL, with organics, brown to dark brown, soft SANDY FAT CLAY WITH GRAVEL (CH), trace	moist, very 255	<u>5.5+/-</u> -	-	\mathbb{N}	20	0-1-3-3 N=4	S-0			
		2.0	Iow plasticity, gray and orange, moist, medium strace organics, with orange mottling LEAN CLAY (CL), trace organics, gray and ora	stiff	<u>54+/-</u>		$\left \right\rangle$	10	1-2-3 N=5	S-1	33.5	46-23-23	
		4.5	medium stiff trace organics, low to medium plasticity, olive g orange mottling, very stiff, sand content increase	ray with	.5+/-		$\left \right\rangle$	11	3-4-12 N=16	S-2			
			content decreasing with depth transitions to silty sand with gravel <u>SANDY FAT CLAY WITH GRAVEL (CH)</u> , orar	ngish brown,	5-		$\left \right\rangle$	8	3-13-14 N=27	S-3			
			moist, very stiff rock fragments in sampler, blow counts might b	be overstated	-	-		11	11-13-16 N=29	S-4			
2			with yellowish brown with orange mottling interl	pedded silt	-			9	10-15-7 N=22	S-5			
	No.		wet, hard, no sample recovery, possibly due to	cobbles	10-	 -		0	3-15-17	S-6	_		
		<u>14.0</u> 18.0	FAT CLAY (CH), medium plasticity, yellowish b	prown, wet,	- 4 <u>2+/-</u> 15 ⁻ - 38+/-		X	12	3-4-6 N=10	S-7	-		
	• •	10.0	WELL GRADED GRAVEL WITH CLAY AND S (GW-GC), orangish brown to grayish brown, we	SAND									
3		20.8	dense only rock fragments recovered, blow counts mig overstated	ght be	_{35+/-} 20-	-	X	9	18-50/4"	S-8	_		
	Boring Terminated at 20.8 Feet Stratification lines are approximate. In-situ, the transition may be gradual.							Har	nmer Type: Automatic				
	Ivancement Method: See Exploration Hollow Stem Auger description of fine and retritioned descriptions of the				poratory proce		used	Note	s:				
	andonment Method: symbols an Boring backfilled with bentonite chips upon completion. Elevations v				n for explana		ic site						
WATER LEVEL OBSERVATIONS								Boring	Started: 01-04-2021	Bor	ing Comr	leted: 01-04-20	21
\square	Inferred from change in sample moisture												
\mathbf{V}	Me	easu	red with water level indicator	21905 64th Av Mountlake T	/e W, Ste 100)			ig: D-50 t No.: 81215062	Dril	ler: Holoc	ene	
				woundake I	citace, WA			I Jojec	110.01210002				

		BORING LO	GN	10.	B	-B	14				Page 1 of	1
Γ	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLI	ENT	: Pi Bo	uge othe	t We ell, V	stern Inc VA				
	SITE:	2800 Jackson Highway Chehalis, WA	_		-		, .					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6227° Longitude: -122.8999° Approximate Surface Elev.: 260 (Ft DEPTH ELEVATION		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1	<u>x, x</u> , <u>x</u>	0.5 <u>TOPSOIL</u> , with organics, brown, moist, very soft <u>25</u> <u>SANDY FAT CLAY (CH)</u> , brown, moist, very soft	i9.5+/-				23	1-0-0 N=0	S-1			
/23/21		2.0 <u>CLAYEY SAND (SC)</u> , trace gravel, orange brown, moist, medium dense	258+/-	_			13	7-9-16 N=25	S-2	22.9	42-22-20	38
LATE.GDT 8		with gravel, brown to orange brown, very dense		- 5 -			16	16-22-29-32 N=51	S-3			
DATATEMP		trace gravel, orange brown, dense		_			5.5	4-23-23-16 N=46	S-4	21.5	33-16-17	21
TERRACON		orange to orange gray, medium dense		_			18	4-7-8-21 N=15	S-5	21.9	31-18-13	24
NDUSTRI.GPJ	0000	10.0 increase in gravel content POORLY GRADED SAND WITH GRAVEL (SP), orange to orange gray, moist, medium dense, interbedded with 5-inches of silt	250+/-	10— 			22	12-12-9-9 N=21	S-6	17.8	34-21-13	3
		with gravel, wet, very dense hard drilling at 16 feet		_ 15 _ _	V	X	10	24-34-42 N=76	S-7			
		SANDY FAT CLAY WITH GRAVEL (CH), brown, wet, hard	<u>240+/-</u> 38.5+/-	_ 20— _		X	1.5	15-17-28 N=45	S-8	_		
ARATED FROM ORIGINA	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
Ad BA		nt Method: See Exploration and Test em Auger description of field and la ged additional data (fina	aboratory			ised	Note	s:				
IS NOT VAL		and additional data (If an See Supporting Informati symbols and abbreviation ckfilled with bentonite chips upon completion.	ion for ex ns.			c eite						
Elog		WATER LEVEL OBSERVATIONS		i a topo	arahili	o oite		01-4-4 40.00 000-	_			
RING								Started: 12-28-2020			bleted: 12-28-2	J2U
	Z w	hile drilling 21905 64th A Mountlake			/1			ig: D-70 tt No.: 81215062		riller: Holoc	cene	

											Page 1 of 7	1
		ECT: Proposed Industrial Park - Chehalis PWI Site	C	LIENT	: Pı Bo	uget othe	: We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.8988° Approximate Surface Elev.: 260 DEPTH ELEVATI			WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1		0.5 TOPSOIL , with organics, dark brown, moist, very soft FAT CLAY WITH SAND (CH), low to medium plasticity, yellowish brown with orange mottling, moist, soft, sand	259.5+			X	16	0-1-1-2 N=2	S-0			
		content increasing and clay content decreasing with depth medium stiff, transitions to olive gray to gray, with orange mottling		_			7	1-2-2 N=4	S-1			
		stiff, transitions to sandy silt		 5		\square	14	2-3-7 N=10	S-2	25.5	67-22-45	
2		5.5 SANDY FAT CLAY WITH GRAVEL (CH), orangish brown, moist, very stiff rest for every stiff	254.5+	<u></u>	∇	X	8	2-10-15 N=25	S-3			
2		rock fragments in sampler, blow count might be overstated stiff transitions to olive gray with orange mottling yellowish brown to grayish brown, wet		-		X	8	3-5-7 N=12	S-4			
		sand conent increasing with depth		-		Å	10	3-5-7 N=12	S-5			
				10-		Д	10	3-4-5 N=9	S-6			
		13.0 <u>CLAYEY SAND WITH GRAVEL (SC)</u> , orangish brown, wet, very dense, obstruction	247+	/- - - 15-								
3		gravel content increasing with depth		-		X	8	2-23-36 N=59	S-7	22.3		20
		20.3 no sample recovery, possibly due to cobbles or boulders, blow counts might be overstated Boring Terminated at 20.3 Feet	239.5+	_ _/- 20			0	50/3"	<u>S-8</u>			
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
H Abar	ollow St	nt Method: em Auger See Exploration and T description of field and and additional data (ff See Supporting Inform symbols and abbrevia ckfilled with bentonite chips upon completion.	d labora any). nation fo tions.	atory proced or explanati	dures u on of		Note	S:				
					-		Deri	- Charteril, 04, 00, 00001			lated: 04 00 07	01
∇								Started: 01-06-2021	F	Boring Comp	leted: 01-06-20	J21
∇		easured with water level indicator					Drill R	ig: D-50		Driller: Holoc	ene	
	-	21905 64t Mountial		V, Ste 100 ace, WA			Projec	t No.: 81215062				

										ł	-age 1 of	2
		ECT: Proposed Industrial Park - Ch Site	nehalis PWI C	LIENT	: Pı Bo	iget othe	t We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	I DEPTH	nate Surface Elev.: 248 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1		0.5 <u>TOPSOIL</u> , with organics, dark brown, moist <u>FAT CLAY WITH SAND (CH)</u> , with organic orangish brown, moist, very soft, with silt	t, very soft247.5+/			X	18	0-0-1-2 N=1	S-1			
		reddish brown with brown, very stiff 3.1 with sand	245+/			\square	18	5-7-11 N=18	S-2			
		<u>CLAYEY SAND (SC)</u> , with clay, reddish bro medium dense trace gravel with gravel, reddish brown with brownish gr				\square	17	5-12-17 N=29	S-3			
		<u>FAT CLAY (CH)</u> , light gray with reddish bro	242.5+/	1 _	Ť	\square	18	5-3-5 N=8	S-4			
		<u>CLAYEY SAND (SC)</u> , with gravel, reddish l brownish olive, moist, medium dense 8.0 reddish brown	brown with240+/			X	18	14-10-7 N=17	S-5A	16.8		20
2		FAT CLAY (CH), black, stiff trace silt		_	-	\boxtimes	18	5-6-7 N=13	S-6			
2		with silt, bluish gray		10-		\boxtimes	18	2-4-7 N=11	S-7			
		13.5 <u>CLAYEY SAND WITH GRAVEL (SC)</u> , olive wet, medium dense 15.5	232.5+/	-			- 10	16-12-14				
		FAT CLAY (CH), with silt, bluish gray, wet, 18.5	229.5+/			\bigtriangleup	16	N=26	S-8	_		
	0	POORLY GRADED SAND WITH CLAY AN (SP-SC), bluish gray to dark gray, wet, very	n D GRAVEL / dense	20-								
						X	5	44-50/6"	S-9	_		
3				-		X	13	20-48-48 N=96	S-10	9.4		12
				25-								
	Str	atification lines are approximate. In-situ, the transition may be	e gradual.				Han	nmer Type: Automatic				
H	ollow St	nt Method: em Auger	See Exploration and Testing P description of field and laborat and additional data (If any). See Supporting Information fo	ory proce	dures u	ised	Note	s:				
		nt Method: ckfilled with bentonite chips upon completion.	symbols and abbreviations. Elevations were interpolated fr	rom a topo	ographi	c site			<u>.</u>			
_		WATER LEVEL OBSERVATIONS					Boring	Started: 01-05-2021	в	oring Comp	leted: 01-05-20	021
	_ Inf	erred from change in sample moisture	llerra					ig: D-70		rillor: Usta -		
∇	_ At	9:54 AM after completion of drilling	21905 64th Ave W				DUII K	iy. D-70	L	riller: Holoc	ene	
	At	10:00 AM after completion of drilling	21905 64th Ave W Mountlake Terra				Projec	t No.: 81215062				

		BORI	NG LO	g no.	. В-	C06	;			Page 2 of :	2
P	ROJ	ECT: Proposed Industrial Park - Chehalis Site	s PWI	CLIENT	: Puç Bot	get W thell,	/estern Inc WA				
S	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6249° Longitude: -122.9045°	·	-/- DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
MODE	GRAP	Approximate Surfac	. ,		WATEF	SAMPI	FIELC	SAMP	WA CONTI	LL-PL-PI	PERCEI
		POORLY GRADED SAND WITH CLAY AND GRAV (SP-SC), bluish gray to dark gray, wet, very dense (continued)	ELEVATION (VEL	<u>(ru)</u>		6	50/6"	S-11	_		
				-		7	5-50/5"	S-12			
3	0	no sample recovery		- 30		0	50/4"	S-13			
				-							
		<u>35.5</u> dark gray	212				22-35-41	S-14B	_		
4		FAT CLAY WITH SAND (CH), trace gravel, wet, ha 36.5 Boring Terminated at 36.5 Feet	rd	.5+/-		X 14	N=76	S-14B S-14A			
		atification lines are approximate. In-situ, the transition may be gradual.			1 1		lammer Type: Automatio	0			1
+	lollow St	em Auger descriptio and addit See Supp	oration and Testin on of field and lab ional data (If any porting Informatio and abbreviations	poratory proced). on for explanati	dures use		otes:				
		ckfilled with bentonite chips upon completion.	s were interpolate		ographic	site					
	7	WATER LEVEL OBSERVATIONS				Bor	ing Started: 01-05-2021	Bori	ng Com	oleted: 01-05-20	021
$\overline{\nabla}$	7	erred from change in sample moisture	erra	DCC	חנ	Drill	Rig: D-70	Drill	ler: Holoo	cene	
	- / u	9:54 AM after completion of drilling 10:00 AM after completion of drilling	21905 64th Av Mountlake T			Pro	ect No.: 81215062				

BORING LOG NO. B-C07 Page 1 of 2											
PROJECT: Proposed Industrial Park - C Site	Chehalis PWI CI	LIENT	: Pu Bo	uget othe	t We ell, V	estern Inc VA			_		
SITE: 2800 Jackson Highway Chehalis, WA											
	imate Surface Elev.: 248 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES	
DEPTH 1 这些 30.5 TOPSOIL, with organics, dark brown with moist, very soft FAT CLAY WITH SAND (CH), with organ	ics, olive gravish			\square	19	0-0-0-3 N=0	S-1				
<u>LAYEY SAND (SC)</u> , with clay, brownish	oft246+/-		-	\square	17	8-12-18 N=30	S-2				
3.5 brown, moist, dense, stratified CLAYEY SAND WITH GRAVEL (SC), da to dark brown, moist, dense, stratified		- 5 -	_	\square	16	9-17-13 N=30	S-3	15.6		16	
dense		-			15	6-4-7 N=11	S-4				
CLAYEY SAND (SC), with clay, olive gray	_240.5+/- /, very stiff	-			17	9-21-14 N=35 4-6-10	S-5				
2 P.5 FAT CLAY (CH), with sillt and sand, olive		10-		\bigotimes	18	4-6-10 N=16 5-12-21	S-6	27.5		33	
10.5 brown, moist, hard CLAYEY SAND (SC), with silt, olive gray, 13.5 FAT CLAY WITH SAND (CH), bluish gray		-	-	\square	16	N=33	S-7	_			
13.5 FAT CLAY WITH SAND (CH), bluish gray stratified	234.5+/- y, wet, stiff,	- 15-				2-1-12		_			
		-	-	\land	18	N=13	S-8	-			
CLAYEY GRAVEL WITH SAND (GC), da very dense rock fragements in sampler, blowcounts n		- 20-	-		7	31-50/5"	S-9	_			
		-			/	31-30/3	3-9	_			
Stratification lines are approximate. In-situ, the transition may	be gradual.	25-	-		Har	nmer Type: Automatic					
Advancement Method: Hollow Stem Auger	See Exploration and Testing Pr description of field and laborate and additional data (If any). See Supporting Information for	ory proce	dures u	ised	Note	os:					
Abandonment Method: Boring backfilled with bentonite chips upon completion.	om a topo		c site								
WATER LEVEL OBSERVATIONS Inferred from change in sample moisture Measured with water level indicator	21905 64th Ave W. Mountlake Terrar		זכ	1	Drill R	g Started: 01-05-2021 ig: D-70 xt No.: 81215062		ing Comp Ier: Holoc	leted: 01-05-20 ene	021	

	BORING LOG NO. B-C07 Page 2 of 2											
P	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	С	LIENT	: Pi Bo	uge othe	t We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6246° Longitude: -122.9039°		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
MOD	GRA	Approximate Surface Elev.: 248 (F DEPTH ELEVATIO		DEF	WATE	SAMF	RECO	FIEL	SAM	N.V CON	LL-PL-PI	PERCI
		CLAYEY GRAVEL WITH SAND (GC), dark brown, wet, very dense (continued) bluish gray, coarse gravel, rock fragements in sampler, blowcounts might be overstated	<u> </u>	-	-	\times	6	32-50/5"	S-10	9.4		16
3				- 30-	-	\times	1	50/6"	S-11			
				-	-							
		35.8 2 Boring Terminated at 35.75 Feet	12.5+/	35-		\ge	2	31-50/3"	S-12	-		
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	mmer Type: Automatic				
<u>.</u>												
_ F	lollow St	nt Method: See Exploration and Ter description of field and I and additional data (If a See Supporting Informa	laborat ny). I <mark>tion</mark> foi	ory proce	dures u	ised	Note	35:				
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpol		om a topo	ographi	c site						
	7	WATER LEVEL OBSERVATIONS		_			Boring	g Started: 01-05-2021	Bor	ing Comp	oleted: 01-05-20)21
$\overline{\nabla}$		ierred from change in sample moisture	0	CC	זכ	1	Drill F	Rig: D-70	Dri	ller: Holoc	cene	
<u> </u>	_ <i>M</i> e	easured with water level indicator 21905 64th Mountlake			_	-		ct No.: 81215062				

ULL COLLET CALLE MODEL CALLE CLAPPHIC LO CLAPPHIC LO LATING MODEL	CLAYEY SAND (SC), trace organics, grayish brown with reddish brown, moist, medium dense, with silt trace gravel, reddish brown, moist, medium dense brownish gray with dark reddish brown FAT CLAY (CH), with sillt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained) (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL		(ij) (ij)	Stern Inc VA Issing since 0-0-0-2 0-0-0-2 4-7-10 N=17 5-8-12 N=20 3-5-14 N=29 6-10-10 N=20 3-3-6 N=9	on S-1 S-2 S-3 S-4 S-5 S-6 S-6 S-7	MATER (%)	ATTERBERG LIMITS LL-PL-PI	DERCENT FINES
Lati DEFINITION 1 2 3 3 0.5 2.0 5.0 6.0 9.5 9.5 16.3	titude: 46.6240° Longitude: -122.9029° Approximate Surface Elev: 250 FT ELEVAT TOPSOL, with organics, dark brown, moist, very soft FAT CLAY WITH SAND (CH), with organics, dark brown with orangish brown, moist, very soft olive gray with orangish brown CLAYEY SAND (SC), trace organics, grayish brown with reddish brown, moist, medium dense, with silt trace gravel, reddish brown, moist, medium dense brownish gray with dark reddish brown FAT CLAY (CH), with sillt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff light bluish gray	ION (Ft.) 249.5+/- 248+/- 245+/- 245+/-	5	WATER LEVEL	SAMPLE TYPE	20 17 13 16 13 18	0-0-0-2 N=0 4-7-10 N=17 5-8-12 N=20 3-5-14 N=19 17-13-16 N=29 6-10-10 N=20 3-3-6	S-1 S-2 S-3 S-4 S-5 S-6	-	LIMITS	PERCENT FINES
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Approximate Surface Elev: 250 TOPSOL, with organics, dark brown, moist, very soft FAT CLAY WITH SAND (CH), with organics, dark brown with orangish brown, moist, very soft olive gray with orangish brown CLAYEY SAND (SC), trace organics, grayish brown with reddish brown, moist, medium dense, with silt trace gravel, reddish brown, moist, medium dense brownish gray with dark reddish brown FAT CLAY (CH), with silt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff light bluish gray	ION (Ft.) 249.5+/- 248+/- 245+/- 245+/-	5	WATER	SAMPLE	20 17 13 16 13 18	0-0-0-2 N=0 4-7-10 N=17 5-8-12 N=20 3-5-14 N=19 17-13-16 N=29 6-10-10 N=20 3-3-6	S-1 S-2 S-3 S-4 S-5 S-6	-	LL-PL-PI	
1 20 20 300 400 400 400 400 400 400 400 400 40	 TOPSOIL, with organics, dark brown, moist, very soft FAT CLAY WITH SAND (CH), with organics, dark brown with orangish brown, moist, very soft olive gray with orangish brown CLAYEY SAND (SC), trace organics, grayish brown with reddish brown, moist, medium dense, with silt trace gravel, reddish brown, moist, medium dense brownish gray with dark reddish brown FAT CLAY (CH), with sillt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff Iight bluish gray 	_249.5+/- _248+/- _245+/- _244+/-				17 13 16 13 18	N=0 4-7-10 N=17 5-8-12 N=20 3-5-14 N=19 17-13-16 N=29 6-10-10 N=20 3-3-6	S-2 S-3 S-4 S-5 S-6	14.9		
2 5.0 6.0 9.5 9.5 16.3	Olive gray with orangish brown CLAYEY SAND (SC), trace organics, grayish brown with reddish brown, moist, medium dense, with silt trace gravel, reddish brown, moist, medium dense brownish gray with dark reddish brown FAT CLAY (CH), with silt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff Ight bluish gray	245+/- 244+/-	5-			13 16 13 18	N=17 5-8-12 N=20 3-5-14 N=19 17-13-16 N=29 6-10-10 N=20 3-3-6	S-3 S-4 S-5 S-6	14.9		2
2 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	trace gravel, reddish brown, moist, medium dense brownish gray with dark reddish brown FAT CLAY (CH), with sillt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff light bluish gray	244+/-	-			16 13 18	5-8-12 N=20 3-5-14 N=19 17-13-16 N=29 6-10-10 N=20 3-3-6	S-4 S-5 S-6	14.9		
2 3.5 3.5 3.5 3.5 3.5 3.5 3.5 3.5	FAT CLAY (CH), with sillt and sand, olive gray with white, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, medium dense fine to coarse grained FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff light bluish gray	244+/-	-			13 18	N=19 17-13-16 N=29 6-10-10 N=20 3-3-6	S-5 S-6	14.9		
16.3	moist, medium dense fine to coarse grained <u>FAT CLAY (CH)</u> , with silt, olive gray with reddish brown, moist, stiff light bluish gray	<u>240.5+/-</u>	1			18	N=29 6-10-10 N=20 3-3-6	S-6	14.9		
16.3	FAT CLAY (CH), with silt, olive gray with reddish brown, moist, stiff light bluish gray	<u>240.5+/-</u>	1				N=20 3-3-6		_		
	moist, stiff		10 - - -	-	X	17		S-7	-		
	bluish gray, hard		-	-							
	bluish gray, hard		15-			30		ST-1			
3	<u>3</u> POORLY GRADED SAND WITH CLAY AND GRAVEL	233.5+/-		-	Д	18	3-19-50/4"	S-8			
	(<u>SP-SC</u>), medium to coarse grained, dark bluish gray, moist, very dense		- - 20-	-		0	50/0	S-9	_		
	wet		-								
Stratific	cation lines are approximate. In-situ, the transition may be gradual.		25-	1		Han	nmer Type: Automatio	c			
dvancement Me Hollow Stem A		d laborate	ocedures	for a dures u	ısed	Note	s:				
bandonment M Boring backfi ll	Aethod: Iled with bentonite chips upon completion.	nation for ations.			o cita						
WA	ATER LEVEL OBSERVATIONS		лпа (орс	graphi			Started: 01-05-2021	Bori	ing Comr	leted: 01-06-20	02 [,]
✓ Inferre ✓ Measu		61	CC						ler: Holoc		

	BORING LOG NO. B-C09 Page 2 of 2												
F	ROJ	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLI	ENT	: Pi Bo	uge othe	t We ell. V	estern Inc NA				
S	SITE:	2800 Jackson Highway Chehalis, WA						- ,					
н	Ŋ	LOCATION See Exploration Plan			_	NS II	Щ	(·u		,	()	ATTERBERG LIMITS	ES
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6240° Longitude: -122.9029°			DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)		PERCENT FINES
ODEL	RAPH	Approvim	ate Surface Elev.: 250 (Ft.) 1 /	DEPTI	ATER	MPLE	COVE	IELD	AMPL	WAT	LL-PL-PI	SCEN
ž	Ū	ДЕРТН	ELEVATION	·		≯80	SAI	RE	L L	Ś	l S		Ц Ц
		POORLY GRADED SAND WITH CLAY AN (SP-SC), medium to coarse grained, dark bl moist, very dense (continued) dark gray, wet	I D GRAVEL uish gray,		_		×	3	50/6"	<u>S-10</u>	7.9		
		dark bluich grou eilt content increased			30-						_		
3		dark bluish gray, silt content increased			-		\mathbb{X}	9	15-27-41 N=68	S-11			
					- - 35-	-							
	3	35.9 Boring Terminated at 35.92 Feet	2	214+/-	00		X	9	40-50/5"	S-12			
	Str	atification lines are approximate. In-situ, the transition may be	gradual.					Ha	mmer Type: Automatic				
⊦ Aba	Iollow Si Indonme Boring ba	nt Method: em Auger nt Method: ckfilled with bentonite chips upon completion.	See Exploration and Testi description of field and lat and additional data (If any See Supporting Informatic symbols and abbreviation: Elevations were interpolat plan	boratory /). on for ex is.	proceo	dures u		Note	es:				
॑	7	WATER LEVEL OBSERVATIONS erred from change in sample moisture						Borin	g Started: 01-05-2021	Bori	ng Com	bleted: 01-06-2	021
$\overline{\mathbf{A}}$	7	easured with water level indicator						Drill F	Rig: D-70	Drill	er: Holoo	ene	
			21905 64th Av Mountlake T					Proje	ct No.: 81215062				

BORING LOG NO. B-C10							Page 1 of 2			
PROJE	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	Γ: Ρι Β	uge othe	t We ell, V	stern Inc /A				
SITE:	2800 Jackson Highway Chehalis, WA									
GRAPHIC LO	LOCATION See Exploration Plan Latitude: 46.6237° Longitude: -122.9024° Approximate Surface Elev.: 250 (F	'	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	
1 <u>***</u> ***(SANDY FAT CLAY (CH), with organics, dark brown, moist, soft	19.5+/- -			17	2-1-1-2 N=2	S-0			
	trace organics grayish brown with orange mottling, moist 3.0 stiff, abundant rock fragments, blow counts might be	- 247+/-	-		8	2-5-6 N=11	S-1			
	FAT CLAY (CH), trace gravel, low to medium plasticity, olive gray with orange mottling, moist, stiff	5-			7	4-4-7 N=11	S-2			
	6.0 <u>SANDY FAT CLAY WITH GRAVEL (CH)</u> , orangish brown, moist, stiff	244+/-	-		10	3-5-8 N=13	S-3	_		
	abundant rock fragments, blow counts might be overstated very stiff	-		$\left \right\rangle$	7	5-12-13 N=25 7-9-14	S-4	-		
	olive gray with orange mottling, stiff, decrease in gravel content	10-		$\left \right\rangle$	10	N=23 4-5-9 N=14	S-5 S-6	-		
	FAT CLAY (CH), medium plasticity, bluish gray, moist, stiff to medium stiff	2 <u>37+/-</u> - - - - 233+/-	-		17	2-3-4 N=7	S-7	40.2	68-23-45	
	WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), dark gray, moist to wet, very dense abundant rock fragments, blow counts might be overstated	20-			10	36-50/5"	S-8			
Stra	atification lines are approximate. In-situ, the transition may be gradual.	23			 Han	nmer Type: Automatic	;	<u> </u>		L
	em Auger description of field and la and additional data (If an See Supporting Informat symbols and abbreviatio ckfilled with bentonite chips upon completion.	aboratory proce iy). ion for explana ns.	edures i		Note	S:				
	WATER LEVEL OBSERVATIONS	aco	זר	1	<u> </u>	Started: 01-05-2021			bleted: 01-05-2	02
V Infe	erred from change in sample moisture 21905 64th /	Ave W, Ste 100 Terrace, WA				ig: D-50 t No.: 81215062	Dri	ller: Holoo	cene	

BORING LOG NO. B-C10 Page 2 of 2													
PROJECT: Proposed Industrial Park - Chehalis PWI Site			CLIENT: Puget Western Inc Bothell, WA										
S	ITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6237° Longitude: -122.9024°			DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
ΝŌ	GR	DEPTH	urface Elev.: 250 (Ft.) ELEVATION (I		B	WA1 OBSE	SAM	REC		SAI	CO ¹		PERC
		WELL GRADED GRAVEL WITH CLAY AND SA (GW-GC), dark gray, moist to wet, very dense (c abundant rock fragments, blow counts might be	ontinued)		_		X	12	19-40-40/5"	S-9	13.1		8
3		28.0 <u>WELL GRADED SAND WITH CLAY AND GRA</u> (SW-SC), medium to coarse grained, bluish gray gray, wet, very dense	VEL	22+/-	_								
		abundant rock fragments, blow counts might be	overstated 218.		30- -		X	7	10-22-50/6"	S-10			
		Boring Terminated at 31.5 Feet											
	Stratification lines are approximate. In-situ, the transition may be gradual.				Har	 mmer Type: Automatic			I	<u> </u>			
Advancement Method: See Exploration and Testing Hollow Stem Auger description of field and labo and additional data (If any).			oratory p	edures procec	for a dures u	ised	Note	95:					
Abandonment Method: Sg		nt Method: ckfilled with bentonite chips upon completion.	See Supporting Information for explanation of symbols and abbreviations.										
_	-	WATER LEVEL OBSERVATIONS	Elevations were interpolated from a topographic site					ļ					
✓ Inferred from change in sample moisture			ler:						Boring Started: 01-05-2021 Boring Completed: 01-03 Drill Rig: D-50 Driller: Holocene				
			21905 64th Ave W, Ste 100						ct No.: 81215062		Driller: Holocene		

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		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	B	oth	t vve: ell, W	stern Inc /A				
S	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	5 LOG	LOCATION See Exploration Plan	(Ft.)	EVEL	ТҮРЕ	۲۲ (In.)	EST	N	:R Т (%)	ATTERBERG LIMITS	
MODELL	GRAPHIC LOG	Latitude: 46.6224° Longitude: -122.9002° Approximate Surface Elev.: 256 (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	
1	<u></u>	SANDY FAT CLAY (CH), with organics, dark brown, moist,	<u>(Ft.)</u> <u>5+/-</u>	-		16	0-0-0-0 N=0	S-1			
		2.0 very soft 2:0 2:0 2:0 2:0 2:0 2:0 2:0 2:0 2:0 2:0	<u> </u>	-		16	10-20-28	S-2	_		
		with gravel, fine to medium grained, orange brown		-	$\left \right\rangle$	13	N=48 6-15-21	S-3			
					$\left \right\rangle$	7.5	N=36 10-19-11	S-4	_		
2		6.5 <u>249</u> SANDY FAT CLAY (CH), trace gravel, fine grained, light brown to grey brown, moist, medium stiff	<u>1.5+/-</u> -		$\left \right\rangle$	15	N=30 2-4-4 N=8	S-5			
		8.0 24 CLAYEY SAND (SC), trace gravel, fine grained, orangish brown, moist, medium dense	<u>48+/-</u>			14 15	4-6-9 N=15 6-7-7 N=14	S-6	_		
		increasing sand content fine to medium grained, medium dense	10-	-	$\left \right\rangle$			S-7	_		
									_		
				-							
		15.0 24 CLAYEY SAND WITH GRAVEL (SC), wet, very dense,	4 <u>1+/-</u> 15-			0.5	50/5"	S-8	_		
		hard drilling, possibly cobble/boulder encountered		-							
3											
	30	20.1 22	- 36+/- 20-	-							
		no sample recovery Boring Terminated at 20.1 Feet	<u>36+/-</u> 20-				50/1"	<u>S-9</u>			
	Str	atification lines are approximate. In-situ, the transition may be gradual.				Ham	mer Type: Automati	c			
							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Hollow Stem Auger description of field and la			oratory proce	s for a dures i	used	Notes	5:				
		ent Method: ackfilled with bentonite chips upon completion. Elevations were interpolat	6.		ic site						
		WATER LEVEL OBSERVATIONS					Stated: 40.00.0000		oring Orin	alatad: 10.00 C	000
) C		1		Started: 12-28-2020			oleted: 12-28-2	020
\mathbf{V}	Z Me	easured with water level indicator 21905 64th Av	e W, Ste 100			Drill Rig	-	Driller: Holocene			
		Mountlake T	errace, WA			Project	No.: 81215062				

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Р	ROJ	ECT: Proposed Industrial Park - Chehalis Site	PWI C	LIENT			t We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.8997° Approximate Surface DEPTH	∋ Elev.: 258 (Ft.) +/- ELEVATION (Ft.)		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1		0.5 <u>TOPSOIL</u> , with organics, dark brown, moist, very sof <u>FAT CLAY (CH)</u> , trace gravel, low to medium plastic gray and orange, moist, soft to medium stiff, trace or trace organics, low to medium plasticity	t <u>257.5+</u> ity,			X	17	0-1-1-1 N=2	S-0)		
		olive gray, stiff, sand content increasing and clay con decreasing with depth 3.5	1tent 254.5+	./-		\square	9	0-2-6 N=8	S-1			
	No.	CLAYEY SAND WITH GRAVEL (SC), orange to ora brown, moist, very stiff, less gravel content, rock frag blow counts might be over stated		- 5-		\square	8	3-6-12 N=18	S-2	2		
2	3	hard, abundant rock fragments, blow counts might be overstated	e			\square	14	12-17-23 N=40	S-3	3 14.0		27
	3	stiff		-		\square	13	1-5-6 N=11	S-4	Ļ		
	3	very stiff, rock fragments, blow counts might be over		-	-	\square	13	1-7-12 N=19	S-5	5		
	3	abundant rock fragments, blow counts might be over	stated	10-		X	12	5-7-12 N=19	S-6	5		
		12.0 POORLY GRADED GRAVEL WITH CLAY AND SA (GP-GC), dark gray, wet, very dense	246+ ND	· <u>/-</u>								
3		rock fragments, blow counts might be over stated		15-		X	12	24-29-36 N=65	S-7	25.5		12
		20.3 rock fragments, blow counts might be over stated	237.5+	- - - <u>-</u> 20-	-	X	_4_	50/4"	S-8	3		
		Boring Terminated at 20.33 Feet										
		atification lines are approximate. In-situ, the transition may be gradual.						nmer Type: Automatic				
H Abai	ollow St	em Auger descriptior and additic see Suppo ckfilled with bentonite chips upon completion. Elevations	ration and Testing I n of field and labora onal data (If any). orting Information fo nd abbreviations. were interpolated	atory proce	dures u ion of		Note	95:				
							Boring	g Started: 01-05-2021		Boring Com	oleted: 01-05-2	021
\bigtriangledown		erred from change in sample moisture	Prra					-				
∇	Me	easured with water level indicator					Drill R	lig: D-50	'	Driller: Holo	cene	
			21905 64th Ave V Mountlake Terra				Projec	ct No.: 81215062				

		BORING LO	g nc). B	-C	16			I	Page 1 of	1
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN			t We ell, V	stern Inc			-	
5	SITE:	2800 Jackson Highway Chehalis, WA			oun	JII, V					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6218° Longitude: -122.8991° Approximate Surface Elev.: 260 (Ft. DEPTH ELEVATION		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1		0.5 TOPSOIL, with organics, dark brown, moist, very soft 259 FAT CLAY (CH), trace gravel, low to medium plasticity, gray with orange mottling, moist, soft, trace organics	9.5+/-	-		16	0-1-2-2 N=3	S-0)		
3/21		stiff	6.5+/-	_		6	1-3-6 N=9	S-1			
- GUI 8/2		POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), orange to orangish brown, moist, dense, rock fragments in sampler, blow counts might be overstated		_		13	9-17-21 N=38	S-2	11.6		13
EMPLAIE		medium dense	3.5+/-	_	\square	3	12-10-17 N=27	S-3	5		
		<u>CLAYEY SAND (SC)</u> , orangish brown to grayish brown, moist, loose, with interbedded sand		_		12	2-4-4 N=8	S-4	,		
EKKACO				_		15	2-3-3 N=6	S-5	32.7		48
61 KI.GPJ		trace gravel, gravel content increasing with depth	10	_		15	2-2-4 N=6	S-6	5		
			47+/-		-						
1074 230		WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), dark gray, wet, very dense									
LL 81215(rock fragments in sampler, blow counts might be overstated	15	_	X	6	22-50/6"	S-7	,		
			_{39+/-} 20			3	31-50/6"	S-8	3		
	Str	Boring Terminated at 21 Feet				Han	nmer Type: Automatic				
PA A		nt Method: See Exploration and Testi tem Auger description of field and lat			ISON	Note	s:				
	andonme	and additional data (If any see Supporting Information of the symbols and abbreviation of the	/) on for explan								
ا <u>م</u>	Boring ba	ckfilled with bentonite chips upon completion. Elevations were interpolation	ted from a to	oograph	ic site						
	7 Int	WATER LEVEL OBSERVATIONS				Boring	Started: 01-05-2021	E	Boring Comp	bleted: 01-05-20	021
	7	erred from change in sample moisture	JL			Drill Ri	ig: D-50		Driller: Holoc	cene	
2 E		21905 64th A	ve W, Ste 10 Ferrace, WA	0		Projec	t No.: 81215062				

B	ORING LOO	G NO	. B	-D(05			F	Page 1 of 3	3
PROJECT: Proposed Industrial Park - C Site	hehalis PWI	CLIENT	: Pi Bo	uge othe	t We ell, V	estern Inc VA			_	
SITE: 2800 Jackson Highway Chehalis, WA										
LOCATION See Exploration Plan Latitude: 46.6249° Longitude: -122.9055° Approxim	nate Surface Elev.: 247 (Ft.) + ELEVATION (Fi		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1 24: 20.5 TOPSOIL, with organics, dark brown, mois FAT CLAY (CH), with organics, reddish br moist, very soft	st, very soft246.5		-	X	18	0-0-0-2 N=0	S-1			
trace organics, reddish brown with olive gra olive grayish brown to grayish brown	ay, stiff, stratified 243.5	;+/			18	2-6-9 N=15	S-2	-		
FAT CLAY WITH SAND (CH), trace sand brownish gray with reddish brown, moist, s interbedded with sand layer at 4.7 ft	and silt, tiff, stratified,	5-		\square	18	4-5-8 N=13	S-3	22.7		73
grayish brown, very stiff trace gravel, interbedded with 1-foot thick of 6.5 silt at 5.5 ft	<u>i+/-</u>	-	X	14	6-9-8 N=17	S-4				
FAT CLAY (CH), trace silt, olive brown wit moist, stiff, small reddish brown striations with silt, olive grayish brown, medium stiff,		_		$\left \right\rangle$	11	4-5-5 N=10 3-3-4	S-5	33.9	-	90
2 gray sand pockets 9.5 <u>CLAYEY SAND (SC)</u> , with clay, fine to coa	237.5	<u>+/-</u> –		$\left \right\rangle$	18	N=7 2-7-21	S-6 			
olive gray, moist, medium dense, stratified with gravel, brown to reddish brown		-				N=28				
brownish gray with bluish gray interbedded with fine soft bluish gray silt la 18.5 CLAYEY GRAVEL WITH SAND (GC), blu very dense	228.5	15- ;+/ 20		X	15	6-5-15 N=20	S-8	_		
3			-	X	15	26-41-43 N=84	S-9	13.2		19
Stratification lines are approximate. In-situ, the transition may b	25-			Hai	nmer Type: Automatic					
Advancement Method: Hollow Stem Auger Abandonment Method: Boring backfilled with bentonite chips upon completion.	See Exploration and Testing description of field and labor and additional data (If any). See Supporting Information symbols and abbreviations. Elevations were interpolated	ratory proced	dures u		Note	95:				
WATER LEVEL OBSERVATIONS	plan		graphi	o site		g Started: 01-04-2021	Bor	ing Comr	leted: 01-04-20)21
✓ Inferred from change in sample moisture ✓ At 10:16 AM after completion of drilling	Ilerra	DCC				Rig: D-70		ler: Holoc		
At 10:16 AM after completion of drilling At 10:21 AM after completion of drilling	21905 64th Ave Mountlake Ter		_		Proje	ct No.: 81215062				

		BORING LC)G N	0.	B	-D	05				Page 2 of	3
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIE	ENT	: Pi Bo	uge	t We ell, V	stern Inc VA				
ę	SITE:						, 1					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6249° Longitude: -122.9055° Approximate Surface Elev.: 247 (F	- -t.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER	ATTERBERG	PERCENT FINES
_	0 .	DEPTH ELEVATION CLAYEY GRAVEL WITH SAND (GC), bluish gray, wet,	N (Ft.)		> 0	s S	⊻ 5	50/5"	S-1			
3		very dense <i>(continued)</i> dark gray, very dense	<u>18.5+/-</u>									
		bluish gray		30— _		X	12	26-34-43 N=77	S-1	1 12.	7	8
		33.5 <u>2</u> FAT CLAY (CH), bluish gray, wet, very stiff, homogeneous	<u>13.5+/-</u>									
				35- _ _		X	12	16-8-9 N=17	S-1:	2		
				- - 40-								
4				+0		X	17	10-9-10 N=19	S-1	3		
				_ _ 45—								
		with silt and sand		-		X	18	8-8-8 N=16	S-1-	4		
	St	ratification lines are approximate. In-situ, the transition may be gradual.		50-			Har	nmer Type: Automatio	;			
		nt Method: See Exploration and Tes description of field and I: and additional data (f ar	aboratory (ny).	proced	lures ı	used	Note	s:				
		See Supporting Informat symbols and abbreviatio ackfilled with bentonite chips upon completion. Elevations were interpol-	ons.			ic site						
~	7 .	WATER LEVEL OBSERVATIONS					Boring	Started: 01-04-2021		Boring Cor	npleted: 01-04-2	2021
$\overline{\Lambda}$	7	ferred from change in sample moisture	30				Drill R	ig: D-70		Driller: Hol	ocene	
	-	10:16 AM after completion of drilling 10:21 AM after completion of drilling 10:21 AM after completion of drilling	Ave W, Ste Terrace, V		_		Projec	t No.: 81215062				

			ORING LO								Page 3 of	3
F	ROJ	ECT: Proposed Industrial Park - Cl Site	nehalis PWI	CLIEN	Τ: Ρι Βα	uge othe	t We ell, V	stern Inc /A				
S	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6249° Longitude: -122.9055° Approxin	nate Surface Elev.: 247 (Ft.	/+(DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
4		DEPTH <u>FAT CLAY (CH)</u> , bluish gray, wet, very stif (continued)	ELEVATION f, homogeneous	(Ft.)	-0	N N	18	9-13-21	S-15			_ ∟
		51.5 hard Boring Terminated at 51.5 Feet	195	5.5+/-		\downarrow		N=34				
	Abandonment Method: See Supporting Inform symbols and abbreviat			poratory proce		Jused	Hana	nmer Type: Automatic				
		ent Method: ackfilled with bentonite chips upon completion.	and additional data (If any See Supporting Information symbols and abbreviation	on for explana s.								
WATER LEVEL OBSERVATIONS					ographi	ic site			<u> </u>			
Stratification lines are approximate. In-situ, the transition may be gradual. Advancement Method: Hollow Stem Auger Abandonment Method: Boring backfilled with benonite chips upon completion. WATER LEVEL OBSERVATIONS Inferred from change in sample moisture Material form change in the form change in the form chang					זכ			Started: 01-04-2021	Bor	ing Comp	leted: 01-04-2	021
\mathbf{V}	7	10:16 AM after completion of drilling	21905 64th A				Drill Ri	g: D-70	Dril	ler: Holoc	ene	
	At	10:21 AM after completion of drilling	Z 1905 64th A Mountlake		J		Projec	t No.: 81215062				

PROJ	ECT: Proposed Industrial Park - Che Site	ehalis PWI	CLIENT	Γ: Ρι Βα	uget othe	t We ell, W	stern Inc /A				
SITE:	2800 Jackson Highway Chehalis, WA		-			,					
LOG	LOCATION See Exploration Plan		Ft.)	IONS	ΥPE	((In.)	S	Ö	۲ (%)	ATTERBERG LIMITS	
MODEL LAYER GRAPHIC LOG	Latitude: 46.6240° Longitude: -122.9038° Approxima	te Surface Elev.: 249 (Fi	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	
1 1	DEPTH 0.5 TOPSOIL , with organics, dark brown, moist,		N (Ft.) 18.5+/-	-0	s S	Ľ.					┝
	FAT CLAY WITH SAND (CH), with organics. brown to grayish brown, moist, soft	-	-		\square	22	0-0-2-4 N=2	S-1	_		
	2.5 hard <u>CLAYEY SAND WITH GRAVEL (SC)</u> , with s brown with olive grayish brown, moist, dense	ilt, reddish	<u>+6.5+/-</u> -	-	X	18	4-12-18 N=30	S-2			
	fine to coarse grained		- 5 -		\mathbb{N}	14	18-18-21 N=39	S-3			
	medium dense		-		M	12	10-10-11 N=21	S-4			
10	trace gravel, fine to medium grained		-			18	5-7-12 N=19	S-5			
	8.5 FAT CLAY (CH), olive gray, moist, hard	24	<u>+0.5+/-</u>		\square	11	7-14-17 N=31	S-6			
2	olive gray with reddish brown vertical striation	is, very stiff	10-	-		18	4-6-11 N=17	S-7			
	bluish gray, stiff		- - - 15-	-			450			00.05.07	
	light bluish gray, stiff 18.5		- - <u>30.5+/-</u>	-	X	18	4-5-9 N=14	S-8A	33.3	62-25-37	
3	POORLY GRADED GRAVEL WITH CLAY A (GP-GC), fine to coarse grained, dark bluish very dense	<u>IND SAND</u> gray, moist,	20-	-	\times	5	50/6"	<u>S-9</u>	-		
			- - 25-								
	atification lines are approximate. In-situ, the transition may be g	jradual.					mer Type: Automatio	5			
Advanceme Hollow S	tem Auger d	See Exploration and Tes lescription of field and la ind additional data (If an	aboratory proce iy).	dures ι	used	Notes	5:				
Abandonme Boring ba	ent Method: sackfilled with bentonite chips upon completion.	See Supporting Informati ymbols and abbreviation Elevations were interpola	ns.		c site						
						Boring	Started: 12-31-2020	Bori	ng Comp	leted: 12-31-2	202
🔽 Int	ferred from change in sample moisture	loce	acc								

		BORING L	00	G NO.	B	-D	80				Page 2 of	2
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	0	CLIENT	: Pi Be	uge othe	t We ell, V	stern Inc VA				
ę	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6240° Longitude: -122.9038° Approximate Surface Elev.: 249			WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		DEPTH ELEVAT POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), fine to coarse grained, dark bluish gray, moist, very dense (continued) no sample recovery 28.5	<u>220.5</u>	-				50/3"	<u>S-10</u>			
3		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), coarse grained, bluish gray to dark gray, wet, very dense, rock fragments in sampler, blow counts might be overstated		30-		X	14	23-39-41 N=80	S-11	17.3		
4		33.5 FAT CLAY (CH) , with silt, bluish gray, wet, very stiff 36.5	<u>215.5</u> 212.5	35-			18	6-8-14 N=22	S-12	_		
		atification lines are approximate. In-situ, the transition may be gradual.						nmer Type: Automatio				
H Aba	Hollow S	nt Method: tem Auger See Exploration and a description of field an and additional data (If See Supporting Inforr symbols and abbrevia ckfilled with bentonite chips upon completion.	id labor f any). mation	ratory proced	dures ι	used	Note	s:				
		WATER LEVEL OBSERVATIONS	polated	l from a topo	ographi	ic site		.				
\sum		ierred from change in sample moisture				1		Started: 12-31-2020			bleted: 12-31-2)20
7	Z Me	easured with water level indicator 21905 64	th Ave	W, Ste 100 rrace, WA				ig: D-70 t No.: 81215062	Dril	ler: Holoo	cene	

		BORING LU	GNC). В	-D	11				Page 1 of	2
		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	IT: P B	uge oth	t We ell, V	estern Inc VA				
S		2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6231° Longitude: -122.9022° Approximate Surface Elev.: 252 (Ft DEPTH ELEVATION		WATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1		0.5 <u>TOPSOIL</u> , with organics, dark brown, moist, very soft 25 <u>FAT CLAY (CH)</u> , with organics, orangish brown with gray, moist, very soft	1.5+/-	-	X	12	0-0-0-2 N=0	S-1	1		
		trace sand, orangish brown to grayish brown, very stiff with silt, reddish brown with orangish brown, moist, stratified, 3.5 increased sand content, transitions to clayey sand with24	8.5+/-	_		18	5-4-18 N=22	S-2	2		
		<u>CLAYEY SAND WITH GRAVEL (SC)</u> , with clay, reddish brown, moist, medium dense, stratified interfedded with glive browning grav day layer at 4.2 ft bag	5	_		15	10-8-6 N=14	S-3	3		
2	3	interbedded with olive brownish gray clay layer at 4.2 ft bgs brownish gray with olive brownish gray 6.5 24 FAT CLAY (CH), with silt and sand, olive brownish gray	<u>5.5+/-</u>	_	K	14	5-7-11 N=18 3-6-7	S-4	4		
-		with reddish brown, moist, stiff reddish brown striations		_	$\left \right\rangle$	18	N=13 3-4-6	S-5 S-6			
		olive gray with bluish gray, transitions to fat clay trace sand, reddish brown with olive brownish gray, very stiff	10			18	N=10 8-12-14 N=26	S-0			
		13.5 CLAYEY SAND WITH GRAVEL (SC), with silt, reddish	<u>8.5+/-</u>	-							
		brown with olive brownish gray, wet, dense, stratified	15	- ▽ □		18	11-14-25 N=39	S-8	8		
			<u>3.5+/-</u>	_							
3		WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC), bluish gray to dark gray, wet, very dense	20	- 	\times	7	50/6"	S-9	9 12.7	-	12
			25	_ _ ;_							
	Str	atification lines are approximate. In-situ, the transition may be gradual.				Hai	mmer Type: Automatic				
		ht Method: em Auger See Exploration and Test description of field and la and additional data (If an	boratory proc y).	cedures	used	Note	95:				
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpola	is.								
<u></u>	,	WATER LEVEL OBSERVATIONS		-		Boring	g Started: 12-31-2020		Boring Com	pleted: 12-31-2	020
	_ Inf	erred from change in sample moisture	30			Drill F	Rig: D-70		Driller: Holo	ocene	
		21905 64th A Mountlake	we W, Ste 10 Terrace, WA		-		ct No.: 81215062				

	BORING LOG NO. B-D11 Page 2 of 2												
Р	ROJ	ECT: Proposed Industrial Park - Che Site	halis PWI	CL	IENT	: Pı Bo	uge othe	t We ell, V	estern Inc VA				
s	ITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6231° Longitude: -122.9022° Approximate	e Surface Elev.: 252 (Ft.	.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
2		DEPTH WELL GRADED GRAVEL WITH CLAY AND	ELEVATION			S ∰	s V		15-17-14		0		Ц
3		(GW-GC), bluish gray to dark gray, wet, very ((continued) fine to coarse grained, dark gray, dense 28.5		3.5+/-	-	-		13	N=31	S-10	_		
4		FAT CLAY (CH), light bluish gray, wet, stiff			- 30-								
		31.5 Boring Terminated at 31.5 Feet	220	<u>0.5+/-</u>			\mid	11	4-4-6 N=10	S-11			
	Str	atification lines are approximate. In-situ, the transition may be gr	adual					Hai	nmer Type: Automatic				
	Stratification lines are approximate. In-situ, the transition may be gradual. Advancement Method: See Exploration ar				icedures	for a		Note					
Aba	ndonme	em Auger de ar nt Method: sy ckfilled with bentonite chips upon completion.	escription of field and lat ad additional data (If any escription of field and lat additional data (If any escriptional data (If any mbols and abbreviation evations were interpolat an	borator /). on for e is.	y proceo explanati	dures u							
		WATER LEVEL OBSERVATIONS						Boring	g Started: 12-31-2020	Bor	ng Comp	oleted: 12-31-20	020
	_ ini	erred from change in sample moisture	nerr					Drill F	Rig: D-70	Dril	ler: Holoc	ene	
			21905 64th Av Mountlake T					Projec	ct No.: 81215062				

		BORING LC	JG	NO.	B	-D'	12				Page 1 of 2	2
Ρ	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CL	.IENT	: Pi Bo	ige othe	t We ell, V	stern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA								-1		
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6227° Longitude: -122.9017° Approximate Surface Elev.: 254 (DEPTH ELEVATIC		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1		0.5 TOPSOIL , with organics, dark brown, moist, very soft <u>FAT CLAY (CH)</u> , trace organics, orangish red with gray, moist, very soft	253.5+/-	_	-	X	18	0-0-1-2 N=1	S-1			
		CLAYEY SAND WITH GRAVEL (SC), reddish brown, moist, dense	251.5+/-	_		\square	18	6-19-21 N=40	S-2			
		5.0 LEAN CLAY (CL), trace sand, olive gray, moist, very stiff	249+/-	- 5 -	-	X	14	13-13-13 N=26	S-3			
2		interbedded with 3-inches thick reddish brown silty sand with		-		$\left \right\rangle$	16	3-6-9 N=15	S-4	20.6	41-16-25	
2		gravel at 6.5 ft trace gravel, olive grayish brown with reddish brown, moist increased sand content observed		_		$\left \right\rangle$	13	14-17-11 N=28 11-10-9	S-5	-		
		with sand, olive grayish brown, interbedded with sand layers		- 10-	∇	\bigotimes	17	N=19 3-8-10	S-6 S-7	-		
		13.5	240.5+/-	-			0	N=18	0-1			
		<u>CLAYEY SAND WITH GRAVEL (SC)</u> , fine to coarse grained, dark gray with brown, wet, very dense		- 15 -	∇			40.05.00		_		
	0			_	-	Å	12	18-35-38 N=73	S-8	_		
3		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), dark gray, wet, very dense	235.5+/-	- - 20-	-					_		
		rock fragements in sampler, blow counts might be overstated		-	-	X	10	22-50/5"	S-9	_		
	Str	atification lines are approximate. In-situ, the transition may be gradual.		25-			Har	nmer Type: Automatic				
		nt Method: See Exploration and Te tem Auger description of field and and additional data (If a	laborato			ised	Note	s:				
		ant Method: cckfilled with bentonite chips upon completion. Elevations were interport	ons.			c site						
		WATER LEVEL OBSERVATIONS					Dente	Otested: 10.01.0000	_		lated: 10.01.00	200
\bigtriangledown	Int	erred from change in sample moisture		F F			ьoring	Started: 12-31-2020	Bo	nng Comp	leted: 12-31-20	120
\mathbf{V}		easured with water level indicator					Drill R	ig: D-70	Dr	ller: Holoc	ene	
		21905 64th Mountlak					Projec	t No.: 81215062				

		E	BORING LO	<u>G NC</u>). B	-D	12				Page 2 of	2
P	ROJ	ECT: Proposed Industrial Park - C Site	hehalis PWI	CLIEN	IT: Pu Bo	uge othe	t We ell, V	estern Inc VA				
S	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6227° Longitude: -122.9017° Approxi	mate Surface Elev.: 254 (Ft.		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
3	×	DEPTH 25.4_dark gray with brown, very dense	ELEVATION	(Ft.) 3.5+/-		\ge	5	50/5"	S-10			
	anceme	ratification lines are approximate. In-situ, the transition may l	be gradual.	poratory pro		used	Har	nmer Type: Automatic s:				
Aba B		ent Method: ackfilled with bentonite chips upon completion.	- See Supporting Information symbols and abbreviation Elevations were interpola	on for explar s.		ic site						
	7 -	WATER LEVEL OBSERVATIONS					Boring	g Started: 12-31-2020	Bori	ng Comp	leted: 12-31-2	020
$\overline{\mathbf{v}}$	7	ferred from change in sample moisture easured with water level indicator	IIerr	DC		1	Drill R	ig: D-70	Drill	er: Holoo	ene	
	- 101		– 21905 64th A Mountlake				Projec	t No.: 81215062				

		BORING LO	g no). B	-D	14				Page 1 of	1
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	T: Pi Bi	uge	t We ell, V	stern Inc VA				
5	SITE:	2800 Jackson Highway Chehalis, WA		_		, -					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9006° Approximate Surface Elev.: 256 (Ft.	·	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1	<u><u>x</u> <u>x</u>. <u>x</u></u>	SANDY FAT CLAY (CH), with organics, dark brown, moist, medium stiff	5.5+/-			17	0-3-3-3 N=6	S-1			
3/21		2.0 2 <u>CLAYEY SAND (SC)</u> , with gravel, light brown to orange, medium dense	254+/-			17	7-9-12 N=21	S-2			
GD1 8/2		trace gravel, fine grained, light brown to orange, moist				17	2-4-10 N=14	S-3			
EMPLATE		fine to medium grained, moist	9.5+/-			17	10-12-14 N=26	S-4			
		LEAN CLAY WITH GRAVEL (CL), light brown, moist, very stiff	248+/-			2	11-13-11 N=24	S-5			
ERRACO	13	<u>CLAYEY SAND WITH GRAVEL (SC)</u> , medium grained, gray, moist, medium dense, embedded clay layer				16	5-9-15 N=24	S-6			
KI.GPJ I	0	fine grained, light brown, dense	10			17	13-15-20 N=35	S-7			
		orangish brown, very dense	15		X	14	11-29-40 N=69	S-8			
PORI. GEO SMARI	Poles Contraction of the second secon		20 ⁻	-		6	25-31-35 N=66	S-9			
	Stratification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
D IF VELV		nt Method: See Exploration and Test tem Auger description of field and la	boratory proc		used	Note	S:				
		and additional data (If any See Supporting Information See Supporting Information symbols and abbreviation ackfilled with bentonite chips upon completion.	/). on for explana is.	ation of							
		WATER LEVEL OBSERVATIONS		Jograph	IC SILE		Started: 12-28-2020	, ,	Boring Com	bleted: 12-28-20	020
	7 .	llerr	DC				ig: D-70		Driller: Holo		
	<u> </u>	easured with water level indicator 21905 64th A Mountlake	ve W, Ste 10 Terrace, WA	0	_		t No.: 81215062	[

	BORING LOG NO. B-D15 Page 1 of 1												
Р	ROJ	ECT: Proposed Industrial Park - Chehali Site	s PWI C		Γ: Ρι Βα	uge othe	t We ell, V	estern Inc VA			-		
S	ITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG		e Elev.: 257.5 (Ft.) +/-		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES	
1		DEPTH 0.5 TOPSOIL , with organics, dark brown, very soft SANDY LEAN CLAY (CL) , trace organics, dark bro moist, medium stiff to stiff	ELEVATION (Ft.) 257+ own,				20	0-4-4-4 N=8	S-1				
		2.0 CLAYEY SAND WITH GRAVEL (SC), coarse to m grained, light brown to orange brown, moist, dense		/ 	-	\square	14	7-18-21 N=39	S-2	15.4	38-18-20	24	
				5 -			13	6-16-21 N=37	S-3	13.4	33-17-16	14	
				-	_	X	15	6-20-18 N=38	S-4				
	0	medium dense no gravel		-	-	X	15	4-6-6 N=12	S-5				
	0			10-	-	$\left \right\rangle$	18	4-4-11 N=15	S-6	30.0	41-20-21	40	
2	2 with gravel					X	16	7-10-14 N=24	S-7				
		very dense, no sample recovery		- - 15-	-		0	50/1"	S-8				
		very dense, no sample recovery		-	-			()					
4		20.0 20.8 WELL GRADED SAND WITH GRAVEL (SW), coa	237.5+ arse to	7 ZU-	-	\mathbf{X}	10	30-50/4"	S-9	_			
	223 WELL GRADED SAND WITH GRAVEL (SW), coarse to 20.8 medium grained, brown to blackish brown, moist, very dense Boring Terminated at 20.83 Feet												
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic					
H Abar	ollow Si	em Auger descripti and add nt Method: ckfilled with bentonite chips upon completion.	ploration and Testing F ion of field and labora litional data (If any). opporting Information for and abbreviations. ns were interpolated f	itory proce or explana	dures u tion of		Note	15:					
		WATER LEVEL OBSERVATIONS	[occ-				Boring	g Started: 12-28-2020	Во	ring Comp	leted: 12-28-20)20	
\square	<i>M</i> e	easured with water level indicator	21905 64th Ave V Mountlake Terra					ig: D-70 :t No : 81215062	Dri	iller: Holoc	ene		

		BORING LOG NO. B-D16 Page 1 of 1									
P	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	T: P E	uge Soth	et We ell, V	estern Inc NA			-	
S	ITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6215° Longitude: -122.8995° Approximate Surface Elev.: 259 (Fi DEPTH ELEVATION		WATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER	ATTERBERG LIMITS	PERCENT FINES
1	<u></u>	0.5 <u>TOPSOIL</u> , with organics, dark brown, moist, very soft <u>25</u> <u>CLAYEY SAND (SC)</u> , trace organics, fine grained, brown, moist, soft	58.5+/-	-		24	0-4-4-4 N=8	S-′	1		
		trace gravel, fine grained, light brown to orange brown, moist, medium dense		_		12	3-4-11 N=15	S-2	2		
		dense, increasing sand content and broken rock stuck in tip	254+/- F	_		14	7-11-24 N=35	S-:	3		
	20	<u>CLAYEY SAND WITH GRAVEL (SC)</u> , fine to medium grained, light brown to orange, moist, dense	<u>254+/-</u> 5	-		14	15-16-19 N=35	S-4	4		
2	3		251+/-			16	12-24-10 N=34	S-(5		
		<u>CLAYEY SAND (SC)</u> , trace gravel, fine grained, brown to orange brown, moist, loose		_		16	3-3-5 N=8	S-6	6		
		medium dense, interbedded with 4-inches of sand lenses at center	10	_		17	4-5-12 N=17	S-7	7		
		15.0 CLAYEY SAND WITH GRAVEL (SC), fine to medium grained, orange brown, very dense	^{244+/-} 15	-		8	19-50/6"	S-8	3		
3		hard drilling at 17 ft		-							
		POORLY GRADED SAND WITH GRAVEL (SP), fine to medium grained, dark brown to blackish brown, wet, very	^{239+/-} 20 37.5+/-	-	X	14	26-40-50/3"	S-9	9		
		fine to coarse grained Boring Terminated at 21.3 Feet									
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic											
Advancement Method: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). Notes: See Supporting Information for explanation of See Supporting Information for explanation of											
	oring ba	nt Method: ckfilled with bentonite chips upon completion. Elevations were interpola plan	ns.			è					
		WATER LEVEL OBSERVATIONS Boring Started: 12-28-2020 Boring Completed: 12-28-2020									
∇	_ Me		ac				Rig: D-70		Driller: Ho	locene	
		Mountlake	Terrace, WA			Proje	ct No.: 81215062				

		BORING LU	GNO	. в	-E(07			F	Page 1 of 2	2
		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	T: Pu Bo	uge othe	t We ell, V	stern Inc VA				
5	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6240° Longitude: -122.9047° Approximate Surface Elev.: 248.5 (Ft. DEPTH ELEVATION	í I	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1	<u><u>s</u><u>1</u><u>z</u>. <u>s</u></u>	0.5 TOPSOIL , with organics, dark brown, moist, very soft 2 SANDY FAT CLAY (CH) , dark brown to olive brownish gray, moist, very soft, stratified	48+/-		X	24	0-0-0-0 N=0	S-1			
		with silt, olive brownish gray to reddish brown, very stiff 3.5	45+/-			18	4-8-10 N=18	S-2	31.5		52
2	13	CLAYEY SAND WITH GRAVEL (SC), dark brown with reddish brown, moist, dense, stratified	<u>3.5+/-</u> 5-	-	\square	8	10-19-16 N=35	S-3			
		FAT CLAY (CH), bluish gray and reddish brown, moist, very stiff 6.5 2	9 - 42+/-	-		4	10-6-13 N=19	S-4			
		<u>CLAYEY SAND (SC)</u> , with silt, fine to medium grained, reddish brown with olive brownish gray, moist, medium 8.0_dense).5+/-			18	4-5-5 N=10	S-5			
		FAT CLAY (CH), olive gray with reddish brown vertical striations, moist, stiff				18	3-6-9 N=15	S-6			
		wet, black striations	10-			12	5-6-8 N=14	S-7			
		bluish gray with reddish brown striations, wet, medium stiff	15 30+/-			12	6-3-2 N=5	S-8			
3		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), dark gray with olive grayish brown, moist, very dense	20	_	×	4	50/6"	<u>S-9</u>			
	St	atification lines are approximate. In-situ, the transition may be gradual.		_1	1	Har	nmer Type: Automatic				
H Aba	tollow S	nt Method: tem Auger See Exploration and Testi description of field and lat and additional data (If any See Supporting Informatic symbols and abbreviation Elevations were interpolat	poratory proc /). on for explana s.	edures u ation of		Note	S:				
		WATER LEVEL OBSERVATIONS	- 16 - 10 K			Boring	Started: 12-30-2020	E	Boring Comp	leted: 12-31-20)20
	7 .		DC				ig: D-70		Driller: Holoc		
	-	8:47 AM after completion of drlilling 21905 64th A 8:51 AM after completion of drlilling Mountlake	ve W, Ste 10 Ferrace, WA	0		Projec	t No.: 81215062				

	BORING L	UG	NO.	. В	-E	07				Page 2 of 2	2
	IECT: Proposed Industrial Park - Chehalis PWI Site	CL	.IENT	: Pi Bo	uge oth	t We ell, V	estern Inc VA				
SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6240° Longitude: -122.9047° Approximate Surface Elev.: 248.5 DEPTH ELEVATI		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
	POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), dark gray with olive grayish brown, moist, very dense (continued) coarse grained, dark brown, very dense, rock fragments in sampler, blowcounts might be overstated		-	-	\times	4	50/6"	S-10	-		
3	no sample recovery, gravel stuck in shoe, blowcounts might be overstated			-	2	0	50/6"	S-11	-		
	medium dense 36.5 Boring Terminated at 36.5 Feet	212+/-	- 35 -	-		8	16-12-12 N=24	S-12	_		
S	ratification lines are approximate. In-situ, the transition may be gradual.					Hai	mmer Type: Automatic				
Hollow S	ent Method: Stem Auger Stem Auge	l laborato any). ation for c ions.	ery proced	dures u		Note	95:				
	WATER LEVEL OBSERVATIONS	2				Borin	g Started: 12-30-2020	Bor	ing Com	oleted: 12-31-20)20
_	t 8:47 AM after completion of drilling 21905 64t		Ste 100				Rig: D-70	Dril	ller: Holo	cene	
<u> </u>	would would be an		5, 117			1. 1.0,00					

BORING LOG NO. B-E08A

	BC	RING LOG I	NO.	B-	E0	8 A			F	Page 1 of ²	1
PROJE	ECT: Proposed Industrial Park - Cho Site	ehalis PWI Cl	LIENT	: Ρι Βα	ige othe	t We ell, V	estern Inc VA				
SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYE GRAPHIC LO	DEPTH	9 Surface Elev.: 249.5 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1 2 2 2	<u>TOPSOIL</u> , with organics, dark brown, moist, <u>FAT CLAY WITH SAND (CH)</u> , with organics brown with reddish brown, moist, very soft 2.0	very soft249+/-	-		X	24	0-0-0-2 N=0	S-1			
	CLAYEY SAND WITH GRAVEL (SC), trace grayish brown to reddish brown, moist, medi stratified	organics, um dense,	-		\square	13	5-8-11 N=19	S-2			
	dense, gravel content increased, transitions with Sand Refer B-E08B for blowcounts at 6.5 ft, transi		- 5-	-	X	11	8-16-23 N=39	S-3	15.3		18
	Sand with Gravel reddish brown with dark brown, observed inc		-	-		17	7-9-21	9.5	_		
	content <u>8.0</u> <u>FAT CLAY (CH)</u> , with sand, olive grayish brown reddish brown striations, moist, stiff	241.5+/- own with 240+/-			\square		N=30	S-5			
2	reddish brown striations, moist, stiff 9.5 Refer B-E08B for blowcounts at 8 ft SANDY FAT CLAY (CH), olive grayish brown with reddish brown, moist, stiff			-	X	18	4-4-5 N=9	S-7	24.4		50
	brown, moist, stiff 13.5 23 FAT CLAY (CH), bluish gray, moist, hard			-			4-17-36				
	with sand and gravel, rock fragements in sar blowcounts might be overstated	npler, 231+/-	-	-		18	N=53	S-8	_		
	POORLY GRADED GRAVEL WITH CLAY / (GP-GC), dark gray, moist, dense		 20	-					_		
3	drilling was hard at 21.5 ft		-	-	X	4	2-3-29 N=32	S-9	_		
	Auger refusal at 24 ft, moved 5 ft in west dire 24.0 continue drilling and boring marked as B-E08 Auger Refusal at 24 Feet										
Stra	Stratification lines are approximate. In-situ, the transition may be gradual.					 Har	mmer Type: Automatic				
	ancement Method: Jollow Stem Auger See Exploration and Testi description of field and lat and additional data (If any				ised	Note	es:				
Boring bac	Adonment Method: See Supporting Information symbols and abbreviations. Elevations were interpolate plan				c site						
	WATER LEVEL OBSERVATIONS Iter level not determined					Boring	g Started: 12-30-2020	Во	ring Comp	leted: 12-30-20)20
		21905 64th Ave W				Drill F	Rig: D-70	Dr	iller: Holoc	ene	
		2 1905 64th Ave W Mountlake Terrad				Projec	ct No.: 81215062				

		BC	DRING LOO	G N	IO .	B-	E0	8B			1	Page 1 of :	2
P	ROJ	ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CL	IENT	: Pı Bo	uge othe	t We ell, V	stern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG		te Surface Elev.: 249.5 (Ft.		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		DEPTH Refer B-08A for blowcounts and soil compo	244	4.5+/-	- - - 5-								
2	15	CLAYEY SAND WITH GRAVEL (SC), with reddish brown, moist, medium dense 6.5 trace gravel, with clay Refer B-08A for blowcounts and soil compo	2	243+/-	-		X	11	8-11-10 N=21	S-4	-		
	Refer B-08A for blowcounts and soil component lithology FAT CLAY (CH) , with silt and sand, olive grayish brown with reddish brown, moist, stiff 9.5				-	-	X	18	2-5-5 N=10	S-6			
		Refer B-08A for blowcounts and soil compo	ment lithology		10 - - 15 -	-							
		Refer B-08A for blowcounts and soil compo		9.5+/-	-	-							
	20.0 22 POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), dark brown with grayish brown, moist, very dense, rock fragements in sampler, blowcounts might be overstated				20- - -	-	X	9	28-50/6"	S-9	12.7		5
	drilling was hard at 24 ft					_							
	Stratification lines are approximate. In-situ, the transition may be gradual.							Har	nmer Type: Automatic)			
Ho Abar	ancement Method: Dilow Stem Auger See Exploration and Tr description of field and and additional data (If See Supporting Inform symbols and abbreviat Elevations were interpr				y procee explanat	dures u			s: er rose to the surface i	n the boreh	ole after co	ompletion of dr	illing
		WATER LEVEL OBSERVATIONS						Started: 12-30-2020	Ro	ring Comr	bleted: 12-30-20	020	
∇		erred from change in sample moisture	from change in sample moisture						ig: D-70		iller: Holoc		
\square	_ At	completion of drilling	21905 64th A Mountlake						t No.: 81215062				

		BORING LOG NO. B-E08B Page 2 of 2											
P	ROJ	ECT: Proposed Industrial Park - Che Site	ehalis PWI	CLI	ENT	: Pı Bo	uge othe	t We ell, V	estern Inc VA				
S	SITE:	2800 Jackson Highway Chehalis, WA											
-AYER	C LOG	LOCATION See Exploration Plan Latitude: 46.6237° Longitude: -122.9042°			(Ft.)	EVEL	ТҮРЕ	۲ (In.)	EST	NO.	ER IT (%)	ATTERBERG LIMITS	FINES
MODEL LAYER	GRAPHIC LOG	-	Surface Elev.: 249.5 (Ft.	.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	PERCENT FINES
		DEPTH POORLY GRADED GRAVEL WITH CLAY A (GP-GC), dark brown with grayish brown, mo dense, rock fragements in sampler, blowcour	oist. verv	<u>(Ft.)</u>	_		X	6	38-50/6"	S-10			
3		overstated <i>(continued)</i> gray to bluish gray, wet rock fragements in sampler, blowcounts migl	ht be overstated	24.1	_								
		28.5 FAT CLAY (CH), light bluish gray, wet, stiff	2	21+/-	-								
					30- -		X	16	6-7-8 N=15	S-11			
4					_								
					- 35-								
		very stiff 36.5 Regime Terminated at 26.5 Foot	2	_		X	18	7-10-18 N=28	S-12				
		Boring Terminated at 36.5 Feet											
	Str	atification lines are approximate. In-situ, the transition may be g	gradual.			I	1	l Har	I mmer Type: Automatic				I
		em Auger o	See Exploration and Testi description of field and lab and additional data (If any	boratory			ised	Note	95:				
		nt Method: s ckfilled with bentonite chips upon completion. E	See Supporting Informatic symbols and abbreviation Elevations were interpolat	s.			c site						
		WATER LEVEL OBSERVATIONS						Borino	g Started: 12-30-2020	Bor	ing Com	bleted: 12-30-20	020
	7	erred from change in sample moisture	llerr						-				
\square	_ At	completion of drilling	21905 64th Av	ve W, S	ste 100				Rig: D-70		ler: Holoo		
			Mountlake 1					Projec	ct No.: 81215062				

BORING LOG NO. B-E11 Page 1 of 2 **PROJECT:** Proposed Industrial Park - Chehalis PWI **CLIENT: Puget Western Inc** Bothell, WA Site SITE: 2800 Jackson Highway Chehalis, WA ATTERBERG LIMITS LOCATION See Exploration Plan WATER LEVEL OBSERVATIONS PERCENT FINES MODEL LAYER LOG SAMPLE TYPE WATER CONTENT (%) RECOVERY (In.) FIELD TEST RESULTS SAMPLE NO DEPTH (Ft.) GRAPHIC Latitude: 46.6227° Longitude: -122.9026° LL-PL-PI Approximate Surface Elev .: 252 (Ft.) +/-ELEVATION (Ft.) DEPTH 1 0.5 TOPSOIL, with organics, dark brown, moist, very soft 251.5+/-0-0-2-3 FAT CLAY (CH), with organics, dark brown with orangish 19 S-1 N=2 brown, moist, soft, stratified 3-16-19 with sand, olive gray with orangish brown, hard 15 S-2 N=35 trace organics, very stiff 2-15-11 9 S-3 N=26 5 dark reddish brown, interbedded with 6 inches of clayey sand ,246.5+/-5-9-9 with gravel at 5 ft bgs 8 S-4 N=18 LEAN CLAY (CL), with sand, gray, moist, very stiff olive gray with reddish brown, medium stiff 3-3-4 18 S-5 30.9 38-18-20 N=7 243.5+/ 15-16-15 CLAYEY SAND WITH GRAVEL (SC), fine to coarse 18 S-6 N=31 grained, reddish brown to dark brown, wet, dense, stratified ∇ 2 olive brownish gray with reddish brown striations, medium 10-3-11-11 12 S-7 dense N=22 238.5+/-13.5 FAT CLAY (CH), bluish gray with orangish brown, wet, stiff 15 3-5-7 18 S-8 N=12 233.5+/-CLAYEY GRAVEL WITH SAND (GC), dark bluish gray to dark gray, wet, very dense \bigtriangledown 20-50/6" 6 S-9 rock fragements in sampler, blowcounts might be overstated 25 Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic Advancement Method: Notes: See Exploration on and Testing Procedures for a Hollow Stem Auger description of field and laboratory procedures used and additional data (If any). upporting Information for explanation of See Abandonment Method: symbols and abbreviations. Boring backfilled with bentonite chips upon completion. Elevations were interpolated from a topographic site WATER LEVEL OBSERVATIONS Boring Started: 12-30-2020 Boring Completed: 12-30-2020 Inferred from change in sample moisture Drill Rig: D-70 Driller: Holocene $\sqrt{2}$ Measured with water level indicator 21905 64th Ave W Ste 100 Project No.: 81215062 Mountlake Terrace, WA

		BOR	ING LO	G N	0.	B-	-E'	11			I	Page 2 of 3	2
	PROJ	ECT: Proposed Industrial Park - Cheha Site	lis PWI	CLIE	NT:	Pu Bo	ige [:]	t We ell, V	estern Inc VA			-	
	SITE:	2800 Jackson Highway Chehalis, WA						, -					
MODEL LAYER	GRAPHIC LOG		face Elev.: 252 (Ft.	·	UEPIH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
GDT 8/23/21 6		DEPTH CLAYEY GRAVEL WITH SAND (GC), dark bluisl dark gray, wet, very dense (continued) very dense, no sample recovery, rock fragements blowcounts might be overstated			-			0	50/2"	<u>S-10</u>	/		
EMPLATE		dark gray, stratified	220	0.5+/-	-0; -0		X	10	11-31-25 N=56	S-11	10.4		14
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21	Boring Terminated at 31.5 Feet												
PARATEL	St	catification lines are approximate. In-situ, the transition may be gradua	al.					l Har	mmer Type: Automatic	<u> </u>	I		
DG IS NOT VALID IF SE	Hollow S	Vancement Method: Hollow Stem Auger and additional data (If See Supporting Inform symbols and abbrevia Boring backfilled with bentonite chips upon completion. Elevations were interp				ures u n of		Note	es:				
NG LC	7 .	WATER LEVEL OBSERVATIONS						Boring	g Started: 12-30-2020	Bori	ng Comp	leted: 12-30-20	020
BORI	7	ferred from change in sample moisture		DC				Drill F	Rig: D-70	Drille	er: Holoc	ene	
THIS			21905 64th A Mountlake ⁻					Projec	ct No.: 81215062				

BORING LOG NO. B-E13A

		BORING LOG NO. B-E13A Page 1 of 1										
Р	ROJ	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIEI	NT: F E	Puge Both	et We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	DEPTH	ate Surface Elev.: 255 (Ft. ELEVATION		WATER LEVEL	OBSERVATIONS SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1		0.5 <u>TOPSOIL</u> , with organics, dark brown, very s <u>FAT CLAY WITH SAND (CH)</u> , with organics brown to orangish brown, moist, soft 2.0	s, tannish	<u>4.5+/-</u> 253+/-	_		17	1-1-2-3 N=3	S-1			
2		FAT CLAY (CH), tannish brown to brown, n stiff, stratified 4.0 Shelby tube was pushed at 3.5 ft bgs, but th	e sampler broke <u>2</u>	251+/-	_		15	1-3-5-9 N=8	S-2			
∿ Aba	anceme lud Rota ndonme	ry nt Method: ckfilled with bentonite chips upon completion.		boratory pr /). on for expla	nation o	s used f	Note bgs	mmer Type: Automatic				
		WATER LEVEL OBSERVATIONS	plan.			A IIC SITE	-	g Started: 12-21-2020	Bor	ing Comr	leted: 12-21-20	020
		ater level not determined, due to use of Mud tary Method		DC		Π		Rig: CME-850		ler: Holoc		
			21905 64th A Mountlake				Proie	ct No.: 81215062				

BORING LOG NO. B-E13B

	BC	ORING LOG	NO.	B-l	E1	3B			I	Page 1 of 2	2
PROJE	ECT: Proposed Industrial Park - Cl Site	nehalis PWI C	LIENT	: Pu Bo	iget othe	t We ell, V	estern Inc VA			-	
SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYE GRAPHIC LO	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9015° Approxin DEPTH	nate Surface Elev.: 255 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
		t, very soft254.5+/] -		$\left \right\rangle$	24	0-0-0-0 N=0	S-1			
	FAT CLAY (CH), tannish brown, moist, sol		-	-	/	30		S-2			
	CLAYEY SAND (SC), brown to reddish bro dense, stratified dark brown with reddish brown, interbedded	own, moist,	5-		X	12	9-15-28 N=43	S-3			
2	gravel layer reddish brown very dense, stratified		-	-	$\left\langle \right\rangle$	17	13-27-32 N=59	S-4	19.4		18
	medium dense	245.5+/			$\left\langle \right\rangle$	18	12-12-12 N=24	S-5	_		
	FAT CLAY (CH), olive gray with reddish br moist, very stiff		10-	-	Χ	18	5-7-9 N=16	S-6	-		
	13.5 CLAYEY GRAVEL WITH SAND (GC), with	241.5+/ clay, brown to		-							
	dark brown, moist, very dense, rock fragen blowcounts might be overstated	ients in sampler,	15-	-	X	10	19-31-50/5"	S-7	16.5		10
3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	fine to medium grained, reddish brown to b	rown	20-	-	\times	16	7-35-50/6"	S-8	-		
	23.5	231.5+/	25-	-							
Stra	tification lines are approximate. In-situ, the transition may \mathbf{b}	e gradual.	25-			Har	nmer Type: Automatic				
Advancement Mud Rotar		See Exploration and Testing P description of field and laborat and additional data (If any).	ory proce	dures u	sed	Note	IS:				
	adonment Method: pring backfilled with bentonite chips upon completion. Elevations were interporting backfilled with bentonite chips upon completion.				c site						
	WATER LEVEL OBSERVATIONS ter level not determined, due to use of Mud					Boring	g Started: 12-21-2020	Bori	ing Comp	leted: 12-21-20	020
	ary Method	21905 64th Ave W		J		Drill R	ig: CME-850	Dril	ler: Holoc	ene	
		Mountlake Terra				Projec	t No.: 81215062				

			BORIN	IG LOO	g no.	B-	E1	3B				Page 2 of :	2
	Ρ	ROJ	ECT: Proposed Industrial Park - Chehalis Site	s PWI	CLIEN	Γ: Ρι Β	uge oth	t We ell, V	estern Inc VA				
	S	ITE:	2800 Jackson Highway Chehalis, WA					- ,					
	MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9015° Approximate Surfac			WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
			DEPTH POORLY GRADED GRAVEL WITH CLAY AND SA (GP-GC), fine to coarse grained, brown to gray, very dense, rock fragements in sampler, blowcounts mig	y	<u>(Ft.)</u> -			12	22-42-50/5"	S-9			
GDT 8/23/21	3		overstated (<i>continued</i>) drilling was hard at 25 ft Drill bit broken at 30 feet, abandoning borehole. Ref B-E13C for further depths.	er	- - <u>*25+/-</u> 30-	-							
T. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI GPJ TERRACON_DATATEMPLATE.GDT 8/23/21		Boring Terminated at 30 Feet											
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-N		Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
SEPAR/	Adv		-t Mathad		Draw 1	- 6		Note					
IS NOT VALID IF	N Aba	lud Rota	ITY description and addit The Method: ckfilled with bentonite chips upon completion.	pration and Testi on of field and lat ional data (If any porting Information and abbreviation	boratory proce /). on for explana is.	dures			io.				
1 DOJ 5			WATER LEVEL OBSERVATIONS	s were interpolat					started: 12-21-2020	p,	oring Com	bleted: 12-21-20	020
ORING		Wa	ater level not determined, due to use of Mud stary Method	err	DCC				ig: CME-850		riller: Holoo		020
THIS B		7.0		21905 64th A Mountlake	ve W, Ste 100				t No.: 81215062				

		В	3C	;			Page 1 of	5					
P	ROJ	ECT: Proposed Industrial Park - Cl Site	hehalis PWI	CL	IENT	: Pi Br	uget	t We	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA				2		, .					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9015° Approxir DEPTH	nate Surface Elev.: 255 (Ft. ELEVATION	<i>`</i>	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
	Str	Refer B-E13A and B-E13B for depths above the second	ve 30 feet					Hat	mmer Type: Automatic				
	anceme lud Rota	nt Method: ary	See Exploration and Testi description of field and lal and additional data (If any	borato /).	ry proced	dures u	ised	Note	es:				
	oring ba	ent Method: ackfilled with bentonite chips upon completion.	See Supporting Information symbols and abbreviation Elevations were interpolat	IS.			c site						
⊢		WATER LEVEL OBSERVATIONS ater level not determined, due to use of Mud						Boring	g Started: 12-21-2020	Bor	ing Comp	bleted: 12-22-2	020
	Ro	otary Method						Drill F	Rig: CME-850	Dril	ller: Holoc	cene	
			21905 64th A Mountlake					Proje	ct No.: 81215062			-	

		В	g NC	D.	B-	E1	3C				Page 2 of	5	
F	PROJ	ECT: Proposed Industrial Park - Cl Site	hehalis PWI	CLIE	INT	: Pı Bo	uge othe	t We ell, V	stern Inc VA				
S	SITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9015° Approxir DEPTH	nate Surface Elev.: 255 (Ft. ELEVATION	·	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
		Refer B-E13A and B-E13B for depths abov (<i>continued</i>) 30.0 CLAYEY GRAVEL WITH SAND (GC), oliv	/e 30 feet 2		- - - 30-								
		 <u>SCLATE GRAVEL WITH SAND (GC)</u>, onv gray, moist, very dense, rock fragements ir blowcounts might be overstated <u>BOORLY GRADED SAND WITH CLAY AI</u> (<u>SP-SC</u>), fine to coarse grained, light bluish very dense 	n sampler, <u>22</u> ND GRAVEL	1.5+/-	- - - 35-			9	48-50/4"	S-10	13.4		9
3		38.5 FAT CLAY (CH), with clay, very stiff	216	6.5+/-	- - -		\times	12	28-50/6"	S-11			
		<u> </u>		2	 		X	18	7-9-17 N=26	S-12	35.9	45-26-19	-
4	hard						X	18	7-14-32 N=46	S-13	_		
	Str	atification lines are approximate. In-situ, the transition may b	e gradual.		00			Har	nmer Type: Automatic	<u> </u> ;			
N Aba	Aud Rota	nt Method: ary ent Method: ickfilled with bentonite chips upon completion.	See Exploration and Testi description of field and lat and additional data (If any See Supporting Informatic symbols and abbreviation Elevations were interpolat	boratory p /). on for exp is.	lanati	dures u on of		Note	s:				
				ar				Boring	Started: 12-21-2020	Вс	oring Comp	bleted: 12-22-20	020
		Water level not determined, due to use of Mud Rotary Method				ונ		Drill R	ig: CME-850	Dr	iller: Holoo	cene	
			21905 64th A Mountlake T					Projec	it No.: 81215062				

		BORI		G NO.	B-	E1	3C			I	Page 3 of	5
F	PROJ	ECT: Proposed Industrial Park - Chehali Site	is PWI	CLIEN	Γ: Ρι Βι	uge othe	t We ell, V	stern Inc /A			-	
ę	SITE:	2800 Jackson Highway Chehalis, WA					, -					
MODEL LAYER	GRAPHIC LOG		ace Elev.: 255 (Ft.)		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
		DEPTH FAT CLAY (CH), with clay, very stiff (continued) very stiff	ELEVATION ((Ft.)			18	10-13-16 N=29	S-14			
E.GDT 8/23/21		53.5 POORLY GRADED SAND (SP), dark gray with blu moist, very dense		- <u>1.5+/-</u> - 55-	-							
DATATEMPLATE					_	X	16	15-27-37 N=64	S-15	26.7		9
D INDUSTRI.GPJ TERRACON_		196	<u>),5+/-</u> - 60- - -	-	X	18	7-12-17 N=29	S-16	_			
	a interbedded with fine sand layer, increased sand content at bottom of sample			- 65- -	-	X	18	8-12-16 N=28	S-17	-		
AL REPORT. GEO SMART L		68.5 POORLY GRADED SAND WITH CLAY AND GRA (SP-SC), medium to coarse grained, dark bluish gr moist, very dense, interbedded with silt layer at 70.	AVEL ray,	<u>5.5+/-</u> 70- -	-	X	12	25-50/6"	S-18	-		
		73.5 FAT CLAY (CH), dark bluish gray, moist, hard	181	<u></u>	-							
PAKAIL	Str	atification lines are approximate. In-situ, the transition may be gradual.		I			Han	nmer Type: Automatic				•
DG IS NOT VALID IF SE	Mud Rota andonme 3oring ba	ITY descript and add nt Method: ckfilled with bentonite chips upon completion. Elevatio	oloration and Testin tion of field and lab ditional data (If any) pporting Informations and abbreviations ons were interpolate	poratory proce). on for explana s.	dures ution of			s: below ground surface				
		WATER LEVEL OBSERVATIONS ater level not determined, due to use of Mud	[occ				Boring	Started: 12-21-2020	Во	ring Comp	leted: 12-22-20	020
IIS BOF		atary Method	21905 64th Av					g: CME-850	Dri	ller: Holoc	ene	
₽			Mountlake T				Projec	t No.: 81215062				

		В	ORING LOO	G NO.	B-	E1	3C			I	Page 4 of :	5		
Р	ROJ	ECT: Proposed Industrial Park - Cl Site	hehalis PWI	CLIEN	Γ: Ρι Βί	uge	t We ell, V	estern Inc						
S	ITE:	2800 Jackson Highway Chehalis, WA			D	oun	, .							
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9015° Approxir	nate Surface Elev.: 255 (Ft.)	-/+ DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES		
2		DEPTH FAT CLAY (CH), dark bluish gray, moist, h	ELEVATION (≥ ©	s/		8-11-19				ЪЕ		
		hard, organics were found at 75.5 ft bgs ar light bluish gray	nd 76 ft bgs	- - - 80-	-		17	N=30	S-19		63-26-37			
				- - - 85-	-			N=30	5-20					
4	4 bluish gray			- - - 90-	-		18	8-15-17 N=32	S-21	34.2	70-24-46			
		93.5	161	. <u>.5+/-</u> -	-	X	18	9-16-21 N=37	S-22					
	93.5 <u>FAT CLAY (CH)</u> , gray, moist, very stiff			95-	-	X	18	7-10-17 N=27	S-23	51.6	86-31-55			
	Stratification lines are approximate. In-situ, the transition may		e gradual.	- - 100	-		Har	nmer Type: Automatic						
Adv		nt Method:	1	ng Procedure	for a									
N Aba	lud Rota ndonme loring ba	nt Method: ckfilled with bentonite chips upon completion.	description of field and lab and additional data (If any See Supporting Information symbols and abbreviations	Information for explanation of										
⊢	W	WATER LEVEL OBSERVATIONS ater level not determined, due to use of Mud	Terr	arr				Started: 12-21-2020		Boring Completed: 12-22-2020				
	Ro	tary Method		21905 64th Ave W, Ste 100 Mountlake Terrace, WA					Driller: Holocene					

		DRING LOC									Page 5 of	5	
P	ROJ	ECT: Proposed Industrial Park - Cl Site	nehalis PWI	CLIE	ENT	: Pu Bo	ige othe	t We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA						ŗ					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6221° Longitude: -122.9015°	, nate Surface Elev.: 255 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		DEPTH FAT CLAY (CH), gray, moist, very stiff (co	ELEVATION	·		≥≞	S₽		9-12-16		0		ЪЕ
4		bluish gray, very stiff 101.5	153	3.5+/-	_		\square	18	N=28	S-24			
		Boring Terminated at 101.5 Feet											
	Str	atification lines are approximate. In-situ, the transition may be	e gradual.					Har	nmer Type: Automatic				
	vancement Method: See Exploration an Mud Rotary description of field and additional date						ised	Note	S:				
			See Supporting Informatic	on for exp	planatio	on of							
		nt Method: ckfilled with bentonite chips upon completion.	symbols and abbreviations Elevations were interpolat		a tono	araphi	c site						
		WATER LEVEL OBSERVATIONS	plan						g Started: 12-21-2020	Bor	ing Comr	leted: 12-22-20	120
		ater level not determined, due to use of Mud tary Method	llerra	70					ig: CME-850		ler: Holoc		,20
			21905 64th Av Mountlake T	ve W, St	e 100		-		st No.: 81215062				
			moundance I	J	- * * * · · · ·								

		BORING LO	G N	O .	B-	Έ	14				F	Page 1 of [·]	1
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIE	NT:	Pu	get	t We ∋II, V	stern Inc					
ę	SITE:	2800 Jackson Highway Chehalis, WA			50		, , ,						
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6218° Longitude: -122.9010° Approximate Surface Elev.: 256.5 (Ft.) +/-	DEPTH (Ft.) ATER I EV/EI	OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.		WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
∑ 1	0	DEPTH ELEVATION	·		8	SA	RE	ш. 	S		õ		PEI
		FAT CLAY WITH SAND (CH), with organics, orangish brown to brown, moist, medium stiff	4.5+/-	_		X	18	2-3-3-3 N=6	S-′	1			
		<u>CLAYEY SAND WITH GRAVEL (SC)</u> , fine to medium grained, reddish brown, moist, medium dense, stratified		_		$\left \right\rangle$	14	10-14-13 N=27	S-2	2			
	13	with 6-inches of soft gray clay 4.5 ft		5	∇	X	17	10-5-8 N=13	S-3	3			
	3	with clay, reddish brown with olive gray, wet, medium dense, stratified		-		X	18	11-11-15 N=26	S-4	4			
2		very dense, no sample recovery		_		\square	0	13-19-37	S-	5			
		fine to coarse grained, reddish brown with olive brown, dense		_		X	18	19-18-19 N=37	S-6	6			
		medium dense	1	0-		\times	17	11-11-7 N=18	S-7	7			
		13.5 2 POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), dark reddish brown to dark gray, wet, very dense, rock fragements in sampler, blowcounts might be overstated	243+/-										
	0	· · · · · · · · · · · · · · · · · · ·	1	5		\times	1	50/6"	S-8	8			
3					x	\times	10	14-50/6"		9			
		Boring Terminated at 21 Feet	<u>5.5+/-</u>	+	_	\bigtriangleup							
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Han	nmer Type: Automatic					
		nt Method: iem Auger See Exploration and Testi description of field and Ial and additional data (If any	boratory p /).	rocedur	es us	sed	Note	S:					
		nt Method: cckfilled with bentonite chips upon completion. Elevations were interpolation	IS.			: site							
_	WATER LEVEL OBSERVATIONS				_		Boring	Started: 01-11-2021		Boring	Comp	leted: 01-11-20	21
L V	7	DC	0			Drill R	ig: D-70		Driller:	Holoc	ene		
*		easured with water level indicator 21905 64th A Mountlake					Projec	t No.: 81215062					

		BURING L	OG NO). E	3-P	04				Page 1 of	2
		ECT: Proposed Industrial Park - Chehalis PWI Site		IT: F F	Puge Both	et We ell, W	stern Inc /A				
S	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6270° Longitude: -122.9052° Approximate Surface Elev.: 248 DEPTH ELEVAT		WATER LEVEL	OBSERVATIONS SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1	<u>x, 1</u> x, <u>x</u> ,	0.5 TOPSOIL, with organics, dark brown, moist, very soft CLAYEY SAND (SC), with organics, dark brown, moist, very soft with silt, gray with orangish brown	247.5+/-	- ~	7	20.5	0-0-0-0 N=0	S-1			
		trace organics, gray, wet, medium dense, stratified, with varying gravel and clay content trace organics, brownish gray and reddish brown, interedded				16	4-6-11 N=17	S-2			
		with clay, trace gravel with gravel, trace clay		-		15	5-7-16 N=23	S-3			
		trace clay, dark reddish brown	5	-		5	10-8-10 N=18	S-4			
		6.8 FAT CLAY (CH) , olive gray to reddish brown, wet, medium 8.0 stiff, black striations, with reddish brown silt and sand	241+/-	-		18	6-4-3 N=7	S-5			
2	3	CLAYEY SAND WITH GRAVEL (SC), light bluish gray to dark reddish brown, wet, dense		_		14	5-21-25 N=46	S-6	15.9		16
		medium dense	1()		9	5-12-8 N=20	S-7			
2 3 4 Adv H Aba E		trace gravel, dark grayish blue 15.7	232.5+/-	- - 5			5-14-20				
		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), medium to coarse grained, dark grayish blue, wet, dense		-		13	N=34	S-8	_		
3		very dense	20) - -		11	5-26-43 N=69	S-9	-		
4		23.5 FAT CLAY (CH), dark bluish gray, wet, very stiff	224.5+/-	-							
	Str	atification lines are approximate. In-situ, the transition may be gradual.	2	,		 Harr	nmer Type: Automati	c			
Adv ⊦		nt Method: See Exploration and description of field an and additional data (II	d laboratory pro			Notes	5:				
Aba E		nt Method: ckfilled with bentonite chips upon completion. Elevations were international states and abbreviations were international states and abbreviatit	tions.								
Ę	7	WATER LEVEL OBSERVATIONS				Boring	Started: 01-07-2021	Во	ring Com	oleted: 01-07-2	2021
$\overline{\mathbf{v}}$	Inferred from change in sample moisture Icr Measured with water level indicator Icr				Π	Drill Ri	g: D-70	Dr	iller: Holod	cene	
—		21905 64	h Ave W, Ste 1 ke Terrace, W/			Project	t No.: 81215062				

	BORING LOG NO. B-P04 Page 2 of 2 PROJECT: Proposed Industrial Park - Chehalis PWI CLIENT: Puget Western Inc												
F	PROJ	ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CLIEN	T: Pi Bi	uge oth	t We ell, V	estern Inc VA			~		
S	SITE:	2800 Jackson Highway Chehalis, WA											
AYER	SLOG	LOCATION See Exploration Plan Latitude: 46.6270° Longitude: -122.9052°	·	(Ft.)	EVEL	ТҮРЕ	۲ (In.)	EST TS	ON	ER T (%)	ATTERBERG LIMITS	FINES	
MODEL LAYER	GRAPHIC LOG		nate Surface Elev.: 248 (Ft.)	-/+ DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	PERCENT FINES	
		DEPTH FAT CLAY (CH), dark bluish gray, wet, very (continued)	ELEVATION y stiff	(Ft.)	- 0		11	10-12-8 N=20	S-10	40.3	60-31-29	<u> </u>	
					-		\	IN-20				-	
		trace wood debris at 30.2 ft				-							
				30-	-		1	9-12-14		-			
4						Å	18	N=26	S-11	-			
					-								
				35-									
		trace silt	<u>I.5+/-</u>		X	18	11-9-15 N=24	S-12					
		Boring Terminated at 36.5 Feet											
	Stratification lines are approximate. In-situ, the transition may be		e gradual.		_1	1	Hai	mmer Type: Automatic			L	1	
		nt Method: iem Auger	See Exploration and Testi description of field and lat and additional data (If any	poratory proce		used	Note	es:					
		nt Method: ckfilled with bentonite chips upon completion.	See Supporting Informatic symbols and abbreviations	S.		io -''							
L		WATER LEVEL OBSERVATIONS	Elevations were interpolat		Jograph	IC SITE							
$\overline{\nabla}$	_ Int	erred from change in sample moisture	There				Boring Started: 01-07-2021 Boring Completed: 01-07-2021						
$\overline{\Lambda}$	7	easured with water level indicator					Drill F	Rig: D-70	Drill	ler: Holoo	ene		
			21905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062										

PR	OJEC	T: Proposed Industrial Park - C Site	hehalis PWI	CLIENT	: Pi Bi	uge	t We ell, M	stern Inc /A			Page 1 of	
SIT	ſE:	2800 Jackson Highway Chehalis, WA					, .					
MODEL LAYER	2	CATION See Exploration Plan ude: 46.6264° Longitude: -122.9046°	·	H (Ft.)	LEVEL ATIONS	Е ТҮРЕ	RY (In.)	ILTS JLTS	E NO.	ER NT (%)	ATTERBERG LIMITS	à
MODEL	DEP DEP		mate Surface Elev.: 248 (Ft.) ELEVATION (WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	
1		<u>TOPSOIL</u> , with organics, dark brown, mois <u>FAT CLAY (CH)</u> , with organics, dark brow	st, very soft <u>247</u>			\mathbb{N}	24	0-0-0-0 N=0	S-1			T
	2.3	soft brown to brownish gray, with silt and sand trace organics, gray with reddish brown, w	et, with silt	. <u>5+/-</u> –		$\left \right\rangle$	18	7-11-15		-		
		CLAYEY SAND (SC), gray with reddish br medium dense, stratified, with varying amo gravel	ounts of clay and	-		$\left \right\rangle$	18	N=26	S-3	-		
		olive gray with reddish brown, interbedded gray trace clay, orangish brown	with clay	5 -	-	$\left \right\rangle$	9	N=26	S-4	-		
				-		$\left \right\rangle$	9	N=24 15-18-11	S-5	-		
		olive grayish brown to reddish brown		-		$\left \right\rangle$	18	N=29 7-11-17 N=28	S-6	-		
2		dense, interbedded with 6-inches thick gra	y silty sand	10-		$\left \right\rangle$	14	5-17-29 N=46	S-7	-		
	with gravel, dark brown and dark gray, wet, very dense		, very dense	- - 15- -	-		10	10-40-19 N=59	S-8	-		
3	18.5	POORLY GRADED SAND WITH CLAY A (SP-SC), dark bluish gray to dark gray, we	ND GRAVEL	 	-	\times	7	20-39-50/2"	S-9	-		
				25-	_			—				
Advon	cement Me	ation lines are approximate. In-situ, the transition may b	-					nmer Type: Automatic				
	ow Stem A		See Exploration and Testin description of field and lab and additional data (If any)	oratory proce	dures (used	Note					
	onment Me ng backfille	sthod: ad with bentonite chips upon completion.	 See Supporting Informatio symbols and abbreviations Elevations were interpolate 	6.		ic site						
_		TER LEVEL OBSERVATIONS					Boring	Started: 01-07-2021	Bori	ng Comp	leted: 01-07-2	:02
$\frac{\nabla}{\nabla}$		Inferred from change in sample moisture					Drill Ri	ig: D-70	Drill	er: Holoc	ene	_

		BC	ORING LO	g no	. B-I	P05			I	Page 2 of 2	2
	PRC	DJECT: Proposed Industrial Park - Che Site	ehalis PWI	CLIEN	ר: Pug Bot	get We hell, \	estern Inc NA				
	SITE	E: 2800 Jackson Highway Chehalis, WA									
	GRAPHIC LOG		e Surface Elev.: 248 (Ft.		WATER LEVEL OBSERVATIONS	SAMPLE TYPE RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		DEPTH POORLY GRADED SAND WITH CLAY AND (SP-SC), dark bluish gray to dark gray, wet, v (continued)		-		6	34-21-26 N=47	S-10			
8/21		fine to coarse grained, dense	240	9.5+/-							
E.GDT 8/23		FAT CLAY (CH), with silt, bluish gray, wet, h		30-							
ATEMPLAT						<u> </u>	50/3"	<u>S-11</u>)		
CON_DAT				-							
SPJ TERRA		35.1	2	- <u>-</u> : 		9	50/2"	S-12			
NDUSTRI.G		Boring Terminated at 35.1 Feet						<u> </u>			
KOPOSED 											
1215062 PF											
IO WELL 8											
ART LOG-N											
L. GEO SM/											
AL REPORI											
M ORIGIN/											
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21		Stratification lines are approximate. In-situ, the transition may be g	radual.			Ha	mmer Type: Automatic				
SEPAF	dvancer	ment Method:	ee Exploration and Testi	ing Procedure	s for a	Not	es:				
		v Stem Auger d	escription of field and lat nd additional data (If any see Supporting Information	boratory proce /).	dures use						
AI NOI		ment Method: s backfilled with bentonite chips upon completion. E	ymbols and abbreviation	s.		site					
NG L	7	WATER LEVEL OBSERVATIONS			Borin	g Started: 01-07-2021	Bori	ng Comp	bleted: 01-07-20)21	
BOR		Measured with water level indicator		DC		Drill F	Rig: D-70	Drill	er: Holoc	ene	
THIS				J5 64th Ave W, Ste 100 puntlake Terrace, WA Project No.: 81215062							

PR	ROJECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIEN	Γ: Ρι Βί	uget	t We ell, W	stern Inc /A				
SIT	TE: 2800 Jackson Highway Chehalis, WA		-	_		, .					
VER				IONS	YPE	< (In.)	S	ġ	۲ (%)	ATTERBERG LIMITS	6
MODEL LAYER	0	nate Surface Elev.: 251 (F		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	
1	<u>DEPTH</u> <u>10.5</u> <u>TOPSOIL</u> , with organics, dark brown with c moist, very soft	ELEVATION rangish brown, 25	N (Ft.) 50.5+/-		\square	19	0-0-0-3	S-1			t
	FAT CLAY (CH), with organics, brownish g orangish brown, moist, very soft 2.5_trace organics	-	- 8.5+/-	-	\square		N=0	0-1	_		
	CLAYEY SAND WITH GRAVEL (SC), redo moist, medium dense, stratified with varying		-	-	$\left \right\rangle$	18	7-7-8 N=15	S-2	_		
	clay interbedded with clay layer	2/	15.5+/ 5 -			18	8-11-11 N=22	S-3			
	FAT CLAY (CH), olive gravish brown, mois reddish brown and black striations		-	-		18	6-8-11 N=19	S-4			
	8.0		- 243+/-		\square	18	7-7-8 N=15	S-5			
2	8.0 CLAYEY SAND (SC), olive gray with reddish brown, moist, dense, trace gravel with gravel medium dense, interbedded with gray clay layer at 9.5 ft bgs with clay and gravel, reddish brown with olive gray, with gravel	h brown, moist,	-	-	\mathbb{X}	17	6-8-27 N=35	S-6			
		10-		\mathbb{X}	14	9-8-5 N=13	S-7				
			-	-							
	13.5 FAT CLAY (CH), with silt, bluish gray, wet,		- <u>37.5+/-</u> -	_							
	brown striations		15-	\mathbf{x}		18	5-7-5	S-8			
			-	-	\square	10	N=12	3-0	-		
	18.5		- <u>32.5+/-</u>	-							
	POORLY GRADED SAND WITH CLAY AN (SP-SC), fine to coarse grained, bluish gray dense	r, wet, very	20-	-					_		
			-	-	\mathbb{X}	14	13-35-41 N=76	S-9			
3			-								
0			-	-							
	Stratification lines are approximate. In-situ, the transition may be	e gradual.	25-			Ham	nmer Type: Automatio				
	ncement Method:	See Exploration and Tes				Notes	5:				_
	Illow Stem Auger	description of field and la and additional data (If an See Supporting Informat	iy)		used						
	donment Method: ring backfilled with bentonite chips upon completion.	symbols and abbreviatio	ns.		ic site						
	WATER LEVEL OBSERVATIONS				Boring	Started: 01-07-2021	Во	ring Comp	oleted: 01-07-20	202	
\sim	Inferred from change in sample moisture									—	

		BORING	LO	g no.	B	-P(06			I	Page 2 of 2	2
F	PROJ	ECT: Proposed Industrial Park - Chehalis PW Site	/I	CLIENT	: Pu Bo	iget othe	t We ell, M	stern Inc /A				
5	SITE:	2800 Jackson Highway Chehalis, WA					, -					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6261° Longitude: -122.9035° Approximate Surface Elev.:			WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), fine to coarse grained, bluish gray, wet, very dense (continued)	<u>VATION (</u>	(<u>Ft.)</u>		Ĩ	6	8-19-26 N=45	S-10	-		ш
3		dense 28.5 <u>FAT CLAY (CH)</u> , trace silt, dark grayish blue, wet, very sti		<u>5+/-</u>								
				30-		X	28	6-9-12 N=21	S-11	-		
4				-			30		ST-1	-		
		36.5 Boring Terminated at 36.5 Feet	214	. <u>.5+/-</u> 35–		X	28	5-9-14 N=23	S-12	_		
	/anceme	atification lines are approximate. In-situ, the transition may be gradual.	ld and lab	oratory procee		sed	Ham	nmer Type: Automatic				
		nt Method: ckfilled with bentonite chips upon completion. Elevations were i plan	Informatio previations	n for explanati s		c site						
	WATER LEVEL OBSERVATIONS						Boring	Started: 01-07-2021	Bori	ng Comp	oleted: 01-07-20)21
	7		DCC			Drill Ri	g: D-70	Drill	er: Holoc	ene		
2			1905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062									

PROJ	ECT: Proposed Industrial Park - Che Site	RING LOO					-	estern Inc WA			Page 1 of	2
SITE:	2800 Jackson Highway Chehalis, WA				_		,					
OG EK	LOCATION See Exploration Plan	INSTALLATION		ū	NS NS	ΡE	ln.)	Т	Ġ	(%	ATTERBERG LIMITS	
GRAPHIC LOG	Latitude: 46.6255° Longitude: -122.9023°	DETAILS	DEPTH (Ft.)	1	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)		
RAPI	Approximate Surface Elev.: 255 (Ft.) +/-		DEPT		SER	MPL	covi	RESI	SAMP	ONTE	LL-PL-PI	
	DEPTH ELEVATION (Ft.)			141	N SOB	SA	RE	Ľ.	S	ŏ		
1 3 2	dark brown, moist, very soft		- 🕅			M	19	0-2-2-3	S-0			
	FAT CLAY (CH), low to medium plasticity, dark brown, moist, soft		- 🕅			\square		N=4		-		
	trace organics, with orange mottling gray and orange, moist, sand content increasing and clay content		- E			Х	6	2-2-3 N=5	S-1			
	decreasing with depth 4.5 medium stiff 250.5+/	_	-			X	14	2-6-12 N=18	S-2			
	olive gray, very stiff, trace weathered rock <u>CLAYEY SAND (SC)</u> , yellowish	-Bentonite	5			\bigtriangledown	15	9-12-11	S-3			
	brown, moist, medium dense, with interbedded silt and clay		_			\bigcirc	45	N=23	0.4	05.5		
	rock fragements in sampler, blowcounts might be overstated increase in silt content		i			$\left \right\rangle$	15	N=15	S-4	25.5		_
	increase in clay content		-	_		Д	12	4-6-7 N=13	S-5			
	10.0 245+/ SANDY FAT CLAY WITH GRAVEL (CH), orangish brown,	-Sand	16)-		X	13	4-8-29 N=37	S-6			
	moist, hard rock fragements in sampler,											
	12.5 blowcounts might be overstated 242.5+/- CLAYEY SAND (SC), medium											
	grained, reddish brown to dark gray, wet, loose, with interbedded silt, silt content increasing with depth		· · -									
	,		15	;	∇			3-3-3				_
	transitions to dark gray silt		· -	_		Д	15	N=6	S-7	37.9		
	18.0 237+/	-Screen	-									
0	WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC),		1.1									
	orangish brown to grayish brown, wet, very dense		: : 26									
	only rock fragments recovered, blowcounts might be overstated			_		X	10	17-34-50/5"	S-8			
3 0 0			-									
			-	_								
				-								
			25	;-								
Sti	ratification lines are approximate. In-situ, the transition may be g	radual.					Ha	ammer Type: Automa	atic			
	dem Auger d	ee Exploration and Testi escription of field and lab	poratory p	dures rocec	for a dures	a used		tes: ell protrudes 3 feet ab	ove grour	nd surface		
handonmo	s	nd additional data (If any ee Supporting Informatic ymbols and abbreviation:	n for expl	anati	ion of	F		, —	U			
	rater monitoring well was installed after completion of	levations were interpolat		topo	ograp	hic sit	e					
_	WATER LEVEL OBSERVATIONS						Borir	ng Started: 01-06-202	:1	Boring (Completed: 01-06-2	202
	ferred from change in sample moisture	lien	ЭC				Drill	Rig: D-50		Driller: I	Holocene	
	easured with water level indicator n 02/08/2021	21905 64th Av Mountlake T	ve W, Ste	100		_		ect No.: 81215062				

	BORING LOG NO. B-P07p Page 2 of 2												
Р	ROJ	ECT: Proposed Industrial Park - Cr Site	ehalis PWI	CLIE	ENT:	Pu Bo	uget othe	: Western Inc ell, WA					
S	ITE:	2800 Jackson Highway Chehalis, WA											
ËR	gC	LOCATION See Exploration Plan			Ē	SNS L	Ц Ц	р.) Т		(%	ATTERBERG LIMITS	ES	
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6255° Longitude: -122.9023°		DEPTH (Ft.)	WATER LEVEL	ATIC	SAMPLE TYPE	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)		PERCENT FINES	
IODE	RAPI	Approximate Surface Elev.: 255 (Ft.)	+/-	DEPT	ATEF	SER	MPL	ELL FIELD	SAMP	ONTE	LL-PL-PI	RCEN	
2	0	DEPTH ELEVATION (F 2511 refusal, no sample recovery,	rt.)		3	8				0		PE	
	Abandonment Method: See Exploration and Testing 1 Bandonment Method: See Exploration and Testing 1 Bandonment Method: See Supporting Information for diffing Abandonment Method: See Supporting Information for diffing Choundwater monitoring well was installed after completion of diffing See Supporting Information for diffing							0 50/1" Hammer Type: Auton	A S-9				
G	roundw		symbols and abbreviatio	ons.			c site						
		WATER LEVEL OBSERVATIONS						Boring Started: 01-06-20	21	Boring	Completed: 01-06-20	021	
$\mathbf{\nabla}$		ferred from change in sample moisture easured with water level indicator	lierr	70				Drill Rig: D-50		Driller:	Holocene		
		easured with water level indicator n 02/08/2021	21905 64th / Mountlake					Project No.: 81215062		1			

	BORING LOG NO. B-P08 Page 1 of 1											
Р	ROJ	ECT: Proposed Industrial Park - Chehalis P Site	WI CI	IENT	: Pı Bo	iget othe	t We ell, V	estern Inc VA			0	
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6250° Longitude: -122.9015° Approximate Surface E	: ev.: 261 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1	-	DEPTH E 0.5 TOPSOIL , with organics, brown to dark brown, moist, v \soft	ELEVATION (Ft.) very <u>260.5+/-</u> /		>ō	s	_	1-2-3-3				E .
		SANDY FAT CLAY (CH), trace organics, yellowish browith orange mottling, moist, medium stiff, trace gravel soft	own	_		$\left \right\rangle$	14	N=5	S-0	_		
		stiff, trace weathered gravel		_		$\left \right\rangle$	10	1-1-1 N=2 2-6-5	S-1			
		5.0 <u>FAT CLAY (CH)</u> , trace weathered gravel, low to mediu	256+/- Im	5-		$\left \right\rangle$	8	N=11	S-2	_		
		plasticity, yellowish brown to brown, moist, stiff	254+/-		-	$\left(\right)$	15	3-3-5 N=8	S-3			
	SANDY FAT CLAY WITH GRAVEL (CH), gray and orange, moist, very stiff, gravel content increasing with depth stiff, rock fragments in sampler, blowcounts might be overstated				-	$\left \right\rangle$	8	6-10-12 N=22	S-4	_		
			251+/-	-		$\left \right\rangle$	15	5-6-7 N=13	S-5	_		
2		FAT CLAY (CH). low to medium plasticity, light bluish with orange mottling, moist, medium stiff, silt content increasing with depth		10- -		Д	15	2-3-4 N=7	S-6			
				-	-		12		S-ST	1		
		stiff		15- -	-	\mathbf{X}	17	4-6-3 N=9	S-7	39.5	80-24-56	
		18.0 FAT CLAY WITH SAND (CH), trace gravel, light bluish gray, moist, very stiff	<u>243+/-</u> า		-		9		ST-2	2		
		rock fragments in sampler, blowcounts might be overst	tated 239.5+/-	20-	-	X	15	5-7-9 N=16	S-8	_		
		Boring Terminated at 21.5 Feet										
	Stratification lines are approximate. In-situ, the transition may be gradual.							T				
	Str					Har	nmer Type: Automatic					
	Ancement Method: See Exploration and Testing P description of field and laborat and additional data (If any).					sed	Note	s:				
		donment Method: ring backfilled with bentonite chips upon completion. Elevations were interpolated is				c site						
	WATER LEVEL OBSERVATIONS						Boring	Started: 01-06-2021	E	Boring Comp	bleted: 01-06-20	021
	Gr	Groundwater not encountered			זנ		Drill R	ig: D-50		Driller: Holod	cene	
		2	1905 64th Ave W			-		t No.: 81215062				

<u> </u>					-					F	Page 1 of	I
		Site	CLIEN.			t We ell, V	estern Inc VA					
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6243° Longitude: -122.9006° Approximate Surface Elev.: 265 (Ft.) DEPTH ELEVATION (f		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.		WALEK CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1		0.5 TOPSOIL (ML) , with organics, brown to dark brown, moist, <u>264.</u> Very soft FAT CLAY (CH), with organics, medium plasticity, brown			X	12	1-2-3 N=5	S-	D			
		to dark brown, moist, medium stiff yellowish brown to orangish brown, with gray mottling trace organics, stiff				18	2-3-6 N=9	S-	1			
		very stiff, increase in sand content, more gravel at the bottom of the sample				12	3-6-10 N=16	S-	2			
		trace gravel	5 -	-		12	4-10-11 N=21	S-	3			
		gray with orange and black mottling, medium stiff			$\left \right $	13	3-3-4 N=7	S-	4 2	25.5	77-22-55	
		stiff				14	2-5-9 N=14	S-	5			
		increase in sand content 10.5 254.	_{5+/-} 10-	-		15	2-5-8 N=13	S-	6			
2		SANDY FAT CLAY (CH), trace gravel, gray and orange, moist, very stiff, with interbedded sand rock fragments in sampler, blowcounts might be overstated				15	2-6-12 N=18	S-	7			
		13.0 25 FAT CLAY (CH), trace gravel, medium plasticity, orange with gray mottling, moist, very stiff, silt content increasing with depth	<u>2+/-</u>	_								
		stiff	15	-		16	3-5-7 N=12	S-	8			
				-								
		21.5 243.	20- 5+/-	_		16	2-4-7 N=11	S-	9 2	29.5	54-21-33	
		Boring Terminated at 21.5 Feet			ľ							
	Stra	atification lines are approximate. In-situ, the transition may be gradual.				Hai	mmer Type: Automatic					
	ancement Method: Allow Stem Auger See Exploration and Testin and additional data (If any). See Supporting Information			edures i		Note	es:					
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpolate plan		ograph	ic site							
		WATER LEVEL OBSERVATIONS oundwater not encountered				Boring	g Started: 01-04-2021		Boring	Comp	leted: 01-04-20	21
	Gr		וכ	1	Drill F	Rig: D-50		Driller:	Holoc	ene		
		21905 64th Ave)	-		-					
		Mountlake Te	errace, WA			I roje	ct No.: 81215062					

PRO	JECT: Proposed Industrial Park - Chehalis PWI Site	С	LIENT	: Pi Bo	uge othe	t We ell. W	stern Inc /A				
SITE				_		,					
LAYER IC LOG	LOCATION See Exploration Plan			EL DNS	ΡE	(ln.)	E.a	o	(%	ATTERBERG LIMITS	;
NODEL LAYER GRAPHIC LOG	Latitude: 46.6238° Longitude: -122.8995°		DEPTH (Ft)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	1	
GRAPH	Approximate Surface Elev.: 269	.5 (Ft.) +/-	DEP .	WATE	SAMP	SECO	REL	SAM	CON1	LL-PL-PI	
1 0	<u>0.4</u> POORLY GRADED GRAVEL (GP), black, medium dense,	TION (Ft.) <u>269+</u> 268.5+	1-		7						┢
	Aggregate Base FILL - SANDY SILT WITH GRAVEL (ML), trace rock fragments, brown, very stiff	/_268.5+			K	18	13-7-8-8 N=15	S-0		l	
	SANDY FAT CLAY (CH), trace gravel, orange with gray mottling, moist, very stiff		_		\mathbb{X}	10	4-6-9 N=15	S-1		l	
	dark brown to gray stiff, trace weathered rock		-	-	\square	9	4-5-7 N=12	S-2		1	
	increase in gravel content		5-		$\left \right\rangle$	10	2-5-7 N=12	S-3		l	
	with interbedded sand, trace weathered rock		_		\bigotimes	15	4-5-6	S-4	34.6	l	_
	grayish brown with orange mottling, increase in sand		-	-	$\left \right\rangle$	$\left \right $	N=11 3-5-8		0110	l	_
	content, trace rock fragments		10-		$\left \right\rangle$	15	N=13 3-5-8	S-5	-	1	
			- 10		Å	14	N=13	S-6	_	1	
2			-							l	
			-	-						1	
	rock fragments in sampler, blowcounts might be overstated		15-		\mathbf{X}	14	4-5-7 N=12	S-7	-	l	
			-	-						1	
			_	_						l	
	orangish brown, very stiff, decrease in gravel content, trace rock fragments		20-		\bigtriangledown	9	5-11-7	S-8		l	
	U U U U U U U U U U U U U U U U U U U		_		\square		N=18		-	l	
			-	-						1	
			25-							l	
	Stratification lines are approximate. In-situ, the transition may be gradual.		20			 Harr	mer Type: Automati	C			
	nent Method: See Exploration and description of field a	and labora	Procedures	s for a dures ι	used	Notes	S:				
	and additional data (If an See Supporting Informati		or explanat	ion of							
	nent Method: symbols and abbrev backfilled with bentonite chips upon completion. Elevations were inte		rom a topo	ographi	c site						
	WATER LEVEL OBSERVATIONS					Boring	Started: 01-07-2021	Bor	ing Comp	leted: 01-07-2	2021
(Groundwater not encountered					Drill Ri	g: D-50	Dril	ler: Holoc	ene	

			B	ORING LO	GN	10.	B	-P	10				Page 2 of	2
	Ρ	ROJ	ECT: Proposed Industrial Park - Cho Site	ehalis PWI	CLI	ENT	: Pu Bo	ige othe	t We ell, V	estern Inc VA				
	S	ITE:	2800 Jackson Highway Chehalis, WA						, -					
	MODEL LAYER	GRAPHIC LOG		ə Surface Elev.: 269.5 (Ft.		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	2		DEPTH SANDY FAT CLAY (CH), trace gravel, orang mottling, moist, very stiff (continued) 26.5 trace weathered rock, increase in sand conte		(Ft.) 43+/-	_		X	16	5-7-12 N=19	S-9			
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI. GPJ TERRACON_DATATEMPLATE.GDT 8/23/21														
PARATED I		Str	atification lines are approximate. In-situ, the transition may be	gradual.					 Har	nmer Type: Automatic				
S IS NOT VALID IF SEF	H Aba	vancement Method: Hollow Stem Auger andonment Method: Boring backfilled with bentonite chips upon completion. Bring backfilled with bentonite chips upon completion.				procec	lures u on of		Note	IS:				
G LOG				plan						started: 01-07-2021	Во	ring Com	leted: 01-07-2	021
30RIN		Gr	oundwater not encountered	llerra	20	_ C				ig: D-50		iller: Holoc		
THIS E				21905 64th Av Mountlake T	ve W, Si	te 100	_			ot No.: 81215062				

PROJ	ECT: Proposed Industrial Park - C Site	hehalis PWI	CLIENT	: Pu Bo	uget othe	t Wes ell, W	stern Inc /A				
SITE:	2800 Jackson Highway Chehalis, WA					,					
MODEL LAYER GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6233° Longitude: -122.8987°		-/+ -/- DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	
-	DEPTH	mate Surface Elev.: 274 (Ft. ELEVATION	, (Ft.)	WATER OBSER\	SAMPL	RECOVI	FIELD	SAMPI	WA. CONTE	LL-PL-PI	
1 5 5	moist, soft SANDY FAT CLAY (CH), trace gravel, vel	/	<u>3.5+/-</u> —		X	17	1-2-4-4 N=6	S-0			
	orange, moist, medium stiff		-	-		9	2-3-6 N=9	S-1			
	yellowish brown with gray mottling, very st	iff	5-	-	\square	12	3-6-17 N=23	S-2	18.5		
			-	_	X	10	5-12-17 N=29	S-3			
	yellowish brown to grayish brown, rock frag 7.5 blow counts might be overstated FAT CLAY (CH), trace gravel, orange to o	260	<u>6.5+/-</u> –	-	X	14	3-6-10 N=16	S-4			
	moist, stiff rock fragments in sampler, blow counts mi increase in gravel content very stiff	ight be overstated	-	-	X	11	3-4-7 N=11	S-5	_		
2			10- - -	-	X	10	4-7-13 N=20	S-6	_		
	yellowish brown to orangish brown, rock fr sampler, blow counts might be overstated	agments in		-	X	16	5-7-8 N=15	S-7	_		
	stiff, interbedded with silty clay, rock fragm blow counts might be overstated	ients in sampler,	- 20- - -	-	X	13	9-5-6 N=11	S-8	-		
Str	atification lines are approximate. In-situ, the transition may b	pe gradual.	25-	-		Ham	mer Type: Automatio				
Advanceme Hollow S	nt Method: iem Auger	See Exploration and Testi description of field and lal	boratory proce		ised	Notes	::				
	onment Method: ing backfilled with bentonite chips upon completion.		on for explanat is.		c site						
	WATER LEVEL OBSERVATIONS			- 3 . april			Started: 01-06-2021	Bori	na Comp	leted: 01-06-2	

BORING	LOG NO.	B-P11
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	BORING LOG NO. B-P11 Page 2 of 2											
		ECT: Proposed Industrial Park - Chehalis PWI Site	CI	LIENT	: Pu Bo	ige othe	t We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6233° Longitude: -122.8987° Approximate Surface Elev.: 274 (F DEPTH ELEVATIO		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
2		FAT CLAY (CH), trace gravel, orange to orangish brown, moist, stiff (continued) interbedded with clay, trace weathered rock, increase in clay and silt content at the bottom	<u> </u>	-		X	15	4-6-7 N=13	S-9	33.4	80-26-54	
2		transitions to silt with sand 29.0 Boring Terminated at 29 Feet	<u>245+/-</u>	-			20		S-ST			
н	anceme ollow St	atification lines are approximate. In-situ, the transition may be gradual.	aborate ny). tion for	ory proce	dures u	used	Har	nmer Type: Automatic				
	oring ba	nt Method: ckfilled with bentonite chips upon completion. Elevations were interpol	ons.	·		c site						
		WATER LEVEL OBSERVATIONS		_			Boring	g Started: 01-06-2021	Bori	ng Comp	bleted: 01-06-20)21
	0/			CC			Drill R	kig: D-50	Dril	er: Holoc	cene	
		21905 64th Mountlake					Projec	ct No.: 81215062				

	BORING LOG NO. B-P12 Page 1 of 1												
P	ROJ	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIE	ENT			t We ell, V	estern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG		nate Surface Elev.: 263 (Ft.)		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits LL-PL-PI	PERCENT FINES
1		DEPTH 0.5 TOPSOIL , with organics, brown to dark brow soft <u>FAT CLAY (CH)</u> , trace organics, gray and c	prange, moist,	2.5+/-	_		\setminus	14	0-1-1-2 N=2	S-0			
2		2.0 soft LEAN CLAY (CL), trace organics, bluish gr mottling, medium stiff, sand content increas	ay with orange	<u>61+/-</u>			$\left \right\rangle$	6	1-2-4 N=6	S-1	_		
		orangish brown with gray mottling, stiff			_ 5 —		X	13	4-5-9 N=14	S-2	22.4	49-21-28	
		very stiff, rock fragments in sampler, blowco 6.0 overstated WELL GRADED GRAVEL WITH CLAY AN	<u>ID SAND</u>	57+/-	-		X	13	3-7-19 N=26	S-3			
3		(GW-GC), orangish brown to brown, moist, increase in gravel content, rock fragments in blowcounts might be overstated medium dense, rock fragments in sampler,	n sampler,				X	13	8-16-17 N=33	S-4			
		be overstated	-	53+/-	_		Å	13	5-14-10 N=24	S-5	_		
2		FAT CLAY (CH), gray with orange mottling, 11.0 Boring Terminated at 11 Feet	, moist, very stiff	52+/-	10- _		Д	10	5-7-8 N=15	S-6			
	Str	ratification lines are approximate. In-situ, the transition may be	gradual.					Har	nmer Type: Automatic				
F Aba	vancement Method: Hollow Stem Auger andonment Method: Soring backfilled with bentonite chips upon completion. Soring backfilled with bentonite chips upon completion.				oroced olanatio	lures u on of		Note					
	WATER LEVEL OBSERVATIONS							Boring	g Started: 01-06-2021	Во	ring Comp	leted: 01-06-20)21
	Gľ	roundwater not encountered	llerra					Drill R	lig: D-50	Dri	ller: Holoc	ene	
			21905 64th Av Mountlake T					Projec	xt No.: 81215062				

		BURING LU	JG	NO.	В-	P	13				Page 1 of	1
		ECT: Proposed Industrial Park - Chehalis PWI Site	CI	LIENT	: Pu Bo	get the	: We ell, V	estern Inc VA				
S		2800 Jackson Highway Chehalis, WA								_		
Æ	90	LOCATION See Exploration Plan			NS NS	ЪЕ	(lu)	t. o	o	(%	ATTERBERG LIMITS	NES
IL LA	HICL	Latitude: 46.6212° Longitude: -122.8992°		DEPTH (Ft.)	R LEV	ЦЩ	ΈRΥ	FIELD TEST RESULTS	SAMPLE NO.	ATER ENT (NTFI
MODEL LAYER	GRAPHIC LOG	Approximate Surface Elev.: 260 (I	=t.) +/-	DEP	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELL	SAMF	WATER CONTENT (%)	LL-PL-PI	PERCENT FINES
_	<u></u>	DEPTH ELEVATIO 0.5 TOPSOIL , with organics, dark brown, moist, very soft	N (Ft.) 59.5+/-		20	S S	۳					
		FAT CLAY WITH SAND (CH), with organics, dark brown, moist, medium stiff		-		X	18	0-2-3-3 N=5	S-1			
		trace organics, light brown too orangish brown, stiff, trace gravel		_		X	13	0-4-6 N=10	S-2			
		very stiff <u>4.5</u> increase in sand content <u>CLAYEY SAND (SC)</u> , fine to medium grained, gray to light	255.5+/-	1		X	18	4-9-21 N=30	S-3			
		brown, moist, dense, with varying gravel content orangish brown		5-		X	14	9-18-22 N=40	S-4			
		trace gravel, light brown to orangish brown, medium dense		-		X	13	20-15-10 N=25	S-5			
				_		X	17	5-5-5 N=10	S-6			
		orangish brown to grayish brown 11.0	249+/-	10-		\times	17	7-6-7 N=13	S-7			
		Boring Terminated at 11 Feet										
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic				
F	vancement Method: Hollow Stem Auger description of field and and additional data (If a See Supporting Inform			ory proced	dures us	sed	Note	s:				
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpo	ons.			: site						
	<u> </u>	WATER LEVEL OBSERVATIONS oundwater not encountered					Boring	Started: 12-29-2020	Bori	ng Comp	oleted: 12-29-20	020
	Gí			CC	J		Drill R	ig: D-70	Drill	ler: Holoc	cene	
		21905 64th Mountlake					Projec	t No.: 81215062				

		BORI	NG LOC	J NO	. В	-P	14				Page 1 of	2
		ECT: Proposed Industrial Park - Chehalis Site	s PWI	CLIENT	: Pi Bi	uge othe	t We ell, V	stern Inc /A				
Ş	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6208° Longitude: -122.9012° Approximate Surfac	ce Elev.: 257 (Ft.) - ELEVATION (F		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
1		0.5 TOPSOIL , with organics, dark brown, moist, very so FAT CLAY WITH SAND (CH) , with organics, orang brown with brown, moist, soft	oft <u>256.</u>		-		19	0-1-2-2 N=3	S-1			
		olive gray to brown, moist, very stiff, stratified		-	-	\mathbf{X}	18	4-9-11 N=20	S-2			
		orangish brown to brown, wet olive gray to brownish gray 5.0trace gravel and sand	252				18	2-5-17 N=22	S-3			
	0.0	POORLY GRADED SAND WITH CLAY AND GRAV (SP-SC), fine to coarse grained, orangish brown to b 6.5 wet, very dense		_	∇		10	6-21-31 N=52	S-4			
	20	CLAYEY SAND WITH GRAVEL (SC), fine to coars grained, orangish brown to brown, wet, dense	249				18	12-17-17 N=34	S-5			
		FAT CLAY WITH SAND (CH), olive gray with orang brown, wet, soft	gish	-	-		17	0-0-2 N=2	S-6			
				10-	-	X	17	0-0-2 N=2	S-7	31.1	-	74
2				- - 15-	-							
		stratified, interbedded with sand layer		-	-	X	18	0-0-2 N=2	S-8	_		
		bluish gray, stiff, orangish brown vertical striations, interbedded with sand	202.4	20- - -	-	X	18	3-4-5 N=9	S-9	-		
3		23.5 CLAYEY GRAVEL WITH SAND (GC), fine to mediu grained, olive brownish gray to dark gray, wet, very o	233.9 um dense	25-	-							
	Sti	atification lines are approximate. In-situ, the transition may be gradual.					Ham	imer Type: Automatio	2			
	Hollow S	tem Auger description and additi See Supp	oration and Testing on of field and labo tional data (If any). porting Information and abbreviations.	for explanat	dures ı	used	Note	5:				
	Sound De	Elevation: plan	s were interpolate	d from a topo	ograph	ic site						
	Z Int	WATER LEVEL OBSERVATIONS	loce-				Boring	Started: 12-29-2020	Bor	ing Comp	oleted: 12-29-2	020
	7	easured with water level indicator	21905 64th Ave					g: D-70	Dril	ller: Holoc	cene	
-			Mountlake Te	errace, VVA			I - rojec	t No.: 81215062				

		B	ORING LO	g no.	B	-P [^]	14				Page 2 of	2
F	PROJ	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIENT	: Pu Bo	iget othe	t We ell, V	stern Inc VA				
ę	SITE:	2800 Jackson Highway Chehalis, WA					- ,					
MODEL LAYER	GRAPHIC LOG		ate Surface Elev.: 257 (Ft.		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
3		DEPTH CLAYEY GRAVEL WITH SAND (GC), fine grained, olive brownish gray to dark gray, we (continued) rock fragments in sampler, blowcounts migh	t, very dense	(<u>Ft.)</u> — — — —		X	6	50/6"	<u>S-10</u>			
		rock fragments in sampler, blowcounts migh 31.0		26+/-		\times	6	7-50/6"	S-11			
	Str	atification lines are approximate. In-situ, the transition may be	gradual.				Har	nmer Type: Automatic				
	Hollow St	em Auger	See Exploration and Testi description of field and lat and additional data (If any See Supporting Informatic	poratory proced). on for explanation	lures u	sed	Note	s:				
	Boring ba	ckfilled with bentonite chips upon completion.	symbols and abbreviation Elevations were interpolat		graphic	c site						
	7	WATER LEVEL OBSERVATIONS					Boring	Started: 12-29-2020	Bori	ng Comp	leted: 12-29-20)20
	7	erred from change in sample moisture pasured with water level indicator					Drill R	ig: D-70	Dril	ler: Holoc	ene	
É			21905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062									

		BORING L	.00	g no.	B	-P	15				Page 1 of	1
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site		CLIENT			t We ell, V	estern Inc				
5	SITE:	2800 Jackson Highway Chehalis, WA			D	50110	511, v					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6216° Longitude: -122.9015°	- (=())	-+ DEPTH (Ft.)	MATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER	ATTERBERG LIMITS	PERCENT FINES
⊻	<u></u>	Approximate Surface Elev.: 256.5 DEPTH ELEVAT 0.5 TOPSOIL , with organics, dark brown, moist, soft	ION (F		AW OBS	SAN	REC		S		3	PER
		1.2 FAT CLAY WITH SAND (CH), with organics, dark brown with orangish brown, moist, soft	 			X	14	0-0-2-2 N=2	S-	1		
12/2	Pol	<u>CLAYEY SAND WITH GRAVEL (SC)</u> , with organics, orangish brown to dark brown, moist, very loose, with clay medium dense		_	-		18	6-5-15 N=20	S-2	2		
201 8/2					-	\square	18	4-18-9 N=27	S-:	3		
EMPLATE	20	orangish brown to brown, moist, medium stiff		5-			7	2-3-2 N=5	S-	4 30.	5	29
	3	fine to coarse grained, reddish brown with brown, wet, medium dense, stratified		-			0	13-15-10 N=25	S-	5		
EKKACOL	36			-		$\left \right $	18	10-14-8 N=22	S-I	6		
4.GPJ 1		10.0 <u>FAT CLAY (CH)</u> , with sand, gray, wet, medium stiff	_246.5	<u>5+/-</u> 10-	-	$\left \right\rangle$	18	2-4-4 N=8	S-	7		
		11.5 <u>CLAYEY SAND WITH GRAVEL (SC)</u> , with clay, orangish 12.5 brown and gray, wet, dense	245 244	_	-	$\overline{\mathbf{X}}$	18	5-17-17 N=34	S-i	8		
OPOSED		Boring Terminated at 12.5 Feet		+*/-								
77 P.K												
FLL 8121												
AKI LU(
GEOSIN												
KEPUKI.												
	Str	atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic	;			
		nt Method: tem Auger See Exploration and description of field ar and additional data (I	nd labo			used	Note Wat	es: er rose to the surface in	n the bo	rehole after	completion of d	rilling
April 100		nt Method: See Supporting Information Symbols and abbrevia	mation	for explanati	on of							
	-	ckfilled with bentonite chips upon completion. Elevations were inter	polated	d from a topo	ographi	c site						
	7	WATER LEVEL OBSERVATIONS					Boring	started: 12-30-2020		Boring Cor	npleted: 12-30-2	020
	7	completion of drilling	Drill Rig: D-70 Driller: Holocene									
^{//} E		21905 64	05 64th Ave W, Ste 100 Duntlake Terrace, WA Project No.: 81215062									

Γ		BORING LO	G NG	D. E	3-P	16				Page 1 of	1
P	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	NT: F	Puge	et We ell, V	estern Inc				
S	SITE:	2800 Jackson Highway Chehalis, WA		-							
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6216° Longitude: -122.9025°	DEPTH (Ft.)	WATER LEVEL	OBSERVATIONS SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS	PERCENT FINES
		Approximate Surface Elev.: 254 (Ft DEPTH ELEVATION	(Ft.)	WATE	SAMP	RECO	REL	SAMI	CONT CONT	LL-PL-PI	PERCE
1		FAT CLAY WITH SAND (CH), with organics, olive grayish brown, wet, very soft	<u>3.5+/-</u>	-1	z	16	0-0-0-0 N=0	S-1			
	10	2.2 olive gray with reddish brown CLAYEY SAND WITH GRAVEL (SC), with clay, reddish brown, moist, medium dense	<u>252+/-</u>		7	18	3-8-11 N=19	S-2			
		gray and grayish brown, wet, dense	5			9	2-11-22 N=33	S-3			
2		reddish brown to dark brown, stratified		-		13	11-19-16 N=35	S-4			
		medium dense dense		_	X	16	7-8-9 N=17	S-5			
			244+/-		X	18	16-24-17 N=41	S-6			
		FAT CLAY (CH), with sand, olive gray, very stiff reddish brown to brownish gray, hard	1(X	17	10-13-11 N=24 20-22-19	S-7			
2		12.5 interbedded with sand layer at 12 ft24 Boring Terminated at 12.5 Feet	- <u>1.5+/-</u>	-		10	N=41	S-8			
	Str	atification lines are approximate. In-situ, the transition may be gradual.				Har	mmer Type: Automatic				
	anceme	nt Method: See Exploration and Test		urge for :	2	Note	es:				
 		tem Auger description of field and la and additional data (If an See Supporting Informati	boratory pro y).	cedures	s used						
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpola	ns.			e					
	7 1	WATER LEVEL OBSERVATIONS				Boring	g Started: 12-30-2020	Bor	ing Comp	leted: 12-30-20)20
$\overline{\mathbf{v}}$	7	erred from change in sample moisture	JC			Drill F	Rig: D-70	Dri	ler: Holoc	ene	
		21905 64th A	5 64th Ave W, Ste 100 untlake Terrace, WA Project No.: 81215062								

		В	ORING LOO	g no	. B	-P [·]	17			I	Page 1 of	1
Р	ROJ	ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CLIEN	Γ: Ρι Βα	uge othe	t We ell, V	estern Inc VA			-	
S	ITE:	2800 Jackson Highway Chehalis, WA					·					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6222° Longitude: -122.9027°		- / DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
	-	DEPTH	nate Surface Elev.: 254 (Ft.) - ELEVATION (F	-t.)	WA ⁻ OBSI	SAN	REC	—————————————————————————————————————	SA	° Ö		PER
1		0.5 TOPSOIL, with organics, dark brown, moist FAT CLAY (CH), with organics, olive gravis very soft, with reddish brown striations 2.0		-	-	X	24	0-0-0-2 N=0	S-1			
		CLAYEY SAND (SC), with silt, olive grayist reddish brown, moist, loose, trace gravel 3.5	brown with		-		18	0-3-3 N=6	S-2			
		4.0 FAT CLAY (CH), with sand, olive gray with brown, moist, very stiff CLAYEY SAND WITH GRAVEL (SC), redo		<u>0+/-</u> - 5 -	_	\mathbb{X}	15.5	3-4-12 N=16	S-3			
2		brown, moist, medium dense fine to coarse grained, stratified, dark gray g			-		9	8-16-12 N=28	S-4			
				-	_	\mathbb{X}	13	6-13-9 N=22	S-5	16.3		24
		9.0 FAT CLAY (CH) , bluish gray, moist, stiff	24	5+/-	-	\mathbb{X}	18	9-10-5 N=15	S-6			
		<u>CLAYEY SAND (SC)</u> , with silt, olive grayish 11.0 medium dense, stratified, with orangish bro	n brown, wet,	10- 3+/-		X	18	4-8-12 N=20	S-7			
	Str	atification lines are approximate. In-situ, the transition may be	o gradual					nmer Type: Automatic				
Adv		nt Method:	-	- Der sis 1	- f		Note					
H Aba	ollow St ndonme oring ba	em Auger nt Method: ckfilled with bentonite chips upon completion.	See Exploration and Testing description of field and labo and additional data (If any). See Supporting Information symbols and abbreviations. Elevations were interpolated plan	for explana	edures u			u.				
		WATER LEVEL OBSERVATIONS		Boring Started: 12-30-2020 Boring Completed:						leted: 12-30-20)20	
W Measured with water level indicator			21905 64th Ave Mountlake Te	ig: D-70 	Drill	ler: Holoc	ene					

		BORING LO	<u>G</u> N	0.	В	-P	18				Page 1 of	1
Ρ	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIE	NT	: Pi Be	uge othe	t We ell, V	stern Inc VA				
S	ITE:	2800 Jackson Highway Chehalis, WA			_		, -					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6229° Longitude: -122.9035°		UEP I H (Ft.)	MATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	RESULTS RESULTS	SAMPLE NO.	WATER		PERCENT FINES
	-	Approximate Surface Elev.: 252 (Ft. DEPTH ELEVATION	(Ft.)	<u> </u>	MAT OBSE	SAM	REC	뿐~	SAI		<u>}</u>	PER(
1		0.5 TOPSOIL , with organics, dark brown, moist, very soft 25 FAT CLAY WITH SAND (CH) , with organics, brown to brownish gray, moist, very soft	<u>1.5+/-</u>	_		X	22	0-0-0-1 N=0	S-1			
		dark olive brown with reddish brown, moist, stiff				\mathbb{X}	18	4-7-7 N=14	S-2	2		
		medium stiff 5.0 2	47+/-			\mathbb{X}	18	2-2-5 N=7	S-3	3 33.	6	82
		<u>CLAYEY SAND (SC)</u> , with silt, dark olive brown with reddish brown, moist, medium dense		- c		\mathbb{X}	14	5-14-15 N=29	S-4	1		
		trace organics, trace gravel with gravel, fine to coarse grained, reddish brown		_		\mathbb{X}	15	4-9-15 N=24	S-5	5		
2		8.3 243 FAT CLAY (CH), moist, stiff	3.5+/-			$\left \right $	18	7-6-7 N=13	S-6	6		
		with sand	1	0-			18	4-5-7 N=12	S-7	,		
		no sand 16.5 23	5.5+/-	_ 5_ _		X	18	0-4-5 N=9	S-8	3 34.	9 44-22-22	_
		Boring Terminated at 16.5 Feet										
	Str	atification lines are approximate. In-situ, the transition may be gradual.				•	Har	nmer Type: Automatic				
		nt Method: See Exploration and Testi tem Auger description of field and lat and additional data (If any	poratory p			used	Note Wate	s: er rose to the surface in	n the bor	ehole afte	r completion of d	Irilling
		nt Method: cckfilled with bentonite chips upon completion. Elevations were interpolation	s.			c site						
		WATER LEVEL OBSERVATIONS					Boring	Started: 12-30-2020	I	Boring Co	mpleted: 12-30-2	2020
∇	At	completion of drilling					Drill R	ig: D-70		Driller: Ho	locene	
		21905 64th A Mountlake					Projec	t No.: 81215062				

		BORING LOC	g No).	B-l	P1	9				Page 1 of	1
Р	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIEN	IT:	Puç Bot	get	We	estern Inc				
S	ITE:	2800 Jackson Highway Chehalis, WA			DOL		, •					
AYER	C LOG	LOCATION See Exploration Plan Latitude: 46.6224° Longitude: -122.9041°	(Ft.)	FVFI	TIONS	ТҮРЕ	۲ (In.)	EST	NO.	ЕR IT (%)	ATTERBERG LIMITS	FINES
MODEL LAYER	GRAPHIC LOG	Approximate Surface Elev.: 252 (Ft.)	++ DEPTH (Ft.)	WATER I	OBSERVATIONS	SAMPLE TYPE	RECOVERY	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	LL-PL-PI	PERCENT FINES
1	<u>xt 1x</u> . <u>xt</u>	soft		_			17	0-0-1-1	S-0			
	Po	CLAYEY SAND WITH GRAVEL (SC), with organics, brown to dark brown, moist, very soft trace organcs, with orange mottling		-	K			N=1		_		
	20	trace gravel, gray and orange trace organics, medium stiff interbedded with sand			K	$\overline{\mathbf{A}}$	11	N=5	S-1	-		
	26	stiff grayish brown, very stiff, trace weathered rock, increase in	5	-	K	$\overline{\mathbf{A}}$	12	N=14 8-9-12	S-2			
	36	gravel content olive gray with orange mottling, increase in silt content			K	$\overline{\mathbf{A}}$	12	N=21 5-8-15	S-3	22.6		35
2		orangish brown, stiff, increase in sand and gravel content		_	K	$\overline{\mathbf{A}}$	13	N=23 3-6-7	S-4	_		
	10	moist, interbedded with sand very stiff	10		K	\mathbf{X}	13	N=13 8-15-9	S-5	_		
		rock fragments in sampler, blowcounts might be overstated gray with orange mottling, transitions to silt		, 	K	\mathbb{A}	14	N=24	S-6	_		
	0	13.023	9+/-									
		<u>CLAYEY SAND (SC)</u> , coarse grained, orangish brown, moist, medium dense		_								
			15	5-		\mathbf{X}	9	4-6-6 N=12	S-7	24.4		31
		16.5 fine grained, gray 235.	5+/-	7	_/	$^{\prime}$		N=12		_		
H	anceme ollow Si	Boring Terminated at 16.5 Feet atification lines are approximate. In-situ, the transition may be gradual. nt Method: rem Auger See Exploration and Testin description of field and labo and additional data (If any). See Supporting Information	for explai	cedur	es use	ed	Han	nmer Type: Automatic				
	oring ba	nt Method: ckfilled with bentonite chips upon completion. Elevations were interpolate				site						
		WATER LEVEL OBSERVATIONS oundwater not encountered				E	Boring	started: 01-07-2021	Во	ring Comp	leted: 01-07-20	021
	G			U	Π		Drill R	ig: D-50	Dr	ller: Holoc	ene	
		21905 64th Ave Mountlake Te				ļ	Projec	t No.: 81215062				

		BORING LC)G N	0. E	3-P	20			I	Page 1 of	1
F	PROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CLIE	NT: F	Puge	et We ell, V	estern Inc			-	
Ę	SITE:	2800 Jackson Highway Chehalis, WA		-	5011	сп, т					
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6219° Longitude: -122.9047° Approximate Surface Elev.: 252 (F DEPTH ELEVATION		WATER LEVEL	OBSERVATIONS SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	PERCENT FINES
1	<u>x: 12: .11</u>	0.5 TOPSOIL , with organics, dark brown, moist, very soft <u>2</u> <u>FAT CLAY (CH)</u> , with organics, dark brown, moist, very soft	51.5+/-	-		24	0-0-0-0 N=0	S-1			
		olive brownish gray with orangish brown trace organics with silt, medium stiff		_		12	0-3-4 N=7	S-2	31.8	52-20-32	
		stiff		_		18	2-4-6 N=10	S-3			
		5.7 <u>2</u> <u>CLAYEY SAND (SC)</u> , light olive gray with reddish brown, moist, medium dense	<u>46.5+/-</u>			15	2-5-20 N=25	S-4			
		with gravel, brownish red interbedded with clay		_		18	7-8-9 N=17	S-5	_		
2			42.5+/-	-	zX	7	12-15-9 N=24	S-6			
		FAT CLAY (CH), olive gray with reddish brown, wet, stiff with silt and sand	1	-0 		18	4-5-7 N=12	S-7	_		
			1	- - - 5-	Z						
			35.5+/-	Ŭ		18	3-4-7 N=11	S-8			
	/anceme	Boring Terminated at 16.5 Feet attification lines are approximate. In-situ, the transition may be gradual.				Har	nmer Type: Automatic				
Aba	andonme	tem Auger description of field and I and additional data (If and symbols and abbreviation).	aboratory pr ny). tion for expla ns.	ocedure: anation c	s used of						
		WATER LEVEL OBSERVATIONS	ated from a	topograp	onic site	-	Otated: 04.00.000 (
$\overline{\boldsymbol{\Sigma}}$			ЭС			-	y Started: 01-06-2021			oleted: 01-06-20	J21
7	Z Me	easured with water level indicator 21905 64th /	05 64th Ave W, Ste 100					Dri	iller: Holoc	ene	
		Mountlake	Terrace, W	A		Projec	ct No.: 81215062				

		BORING LO	G	NO.	. В	-P2	22				F	Page 1 of	1
PI	ROJ	ECT: Proposed Industrial Park - Chehalis PWI Site	CL	IENT.	: Pı Bo	ige othe	t We ell, V	estern Inc VA					
S	TE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6234° Longitude: -122.9049° Approximate Surface Elev.: 249 (Ft DEPTH ELEVATION	· .	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.		WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	PERCENT FINES
1	<u>7, 1</u> ,	0.5 TOPSOIL , with organics, dark brown, moist, very soft <u>24</u>	8.5+/-			_	17	0-0-0-1/-17"	S	1			
		FAT CLAY WITH SAND (CH), with organics, dark brown with reddish brown, moist, very soft reddish brown with gray, very stiff		_				5 7 44					
		3.8	245+/-	_			18	5-7-14 N=21	S-	2			
		<u>CLAYEY SAND (SC)</u> , trace gravel, reddish brown, moist, medium dense, stratified, interbedded with clay with silt and sand layer		- 5			16	5-10-11 N=21	S-	3			
		with clay, brownish gray, wet, dense with gravel, reddish brown to dark brown trace gravel, medium dense		-			18	8-24-19 N=43	S-	4			
		8.0 grayish brown with reddish brown	241+/-	_			18	5-5-9 N=14	S-	5			
		FAT CLAY (CH), with silt and sand, gray with brown (vertical striations), moist, very stiff trace silt		_		X	18	4-6-10 N=16	S-	·6			
2		olive gray with reddish brown		10-		X	17	4-8-10 N=18	S-	7			
				- - 15 -									
			233+/-	-		X	18	12-35-40 N=75	S-	8			
- - - - - - - - - - - - - - - - - - -		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), trace clay, bluish gray, wet, very dense		- - 20-									
		dark gray	7.5+/-			X	18	20-34-38 N=72	S-	9			
		Boring Terminated at 21.5 Feet											
		atification lines are approximate. In-situ, the transition may be gradual.					Har	nmer Type: Automatic					
		nt Method: em Auger See Exploration and Test description of field and la and additional data (If any	borato y).	ry proced	dures u	ised	Note	s:					
		nt Method: ckfilled with bentonite chips upon completion. Elevations were interpola	IS.			c site							
		WATER LEVEL OBSERVATIONS	Boring Started: 01-07-2021 Boring Corr						g Comp ⁱ	leted: 01-07-20)21		
		erred from change in sample moisture				Drill Rig: D-70 Driller: Holocene							
∇	. <i>М</i> е		5 64th Ave W, Ste 100 with a Project No : 81215062							-			

PRO	OJECT: Proposed Industrial Park - Cl Site	nehalis PWI	CLIE	NT:	Pug Botl	et W hell,	estern Inc WA			Page 1 of	
SIT	E: 2800 Jackson Highway Chehalis, WA										
MODEL LAYER	Big LOCATION See Exploration Plan Latitude: 46.6225° Longitude: -122.9053° Approximate Surface Elev.: 251 (Ft.) DEPTH ELEVATION (DEPTH (Ft.)	WATER LEVEL	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)	Atterberg Limits	
1	½: 1/20.5 TOPSOIL, with organics, dark 250. brown, moist, very soft		-	_		24	0-0-0-0 N=0	S-1			T
	dark brown, moist, very soft dark brown with orangish brown trace organics, olive grayish brown with reddish brown, moist, stiff, with	-Concrete	-	_		18	0-4-5 N=9	S-2			
	4.3 silt and sand olive brown, hard <u>246.</u> CLAYEY SAND WITH GRAVEL	<u>5+/-</u>	× _		, X	18	4-14-19 N=33	S-3			
	(SC), olive brown to orangish brown, moist, dense brownish red to reddish brown, very		5- -	_		18	10-18-33 N=51	S-4	16.8		
	dense reddish brown with yellow, dense, rock fragments, interbedded sand		-			8	8-25-24 N=49	S-5			
	242. FAT CLAY (CH), reddish brown, moist, very stiff	5+/-	-			14	5-12-6 N=18	S-6A	33.6	74-32-42	
	olive brown with silt and sand, olive grayish brown with reddish brown, stiff	-Bentonite ──►	10 -			18	3-4-9 N=13	S-7	31.2		
	olive grayish brown, no silt and sand gray with reddish brown vertical striations dark gray bluish gray		- - 15 -		X	18	3-4-6 N=10	S-8			
3	18.5 232. CLAYEY SAND WITH GRAVEL (SC), medium to coarse grained, dark gray with dark bluish gray, wet, very dense	-Sand Filter	 20 		7	9	33-50/4"	S-9	13.6		
	Stratification lines are approximate. In-situ, the transition may b		25			н	ammer Type: Autom	atic			
Hollo Abando	cement Method: ow Stem Auger onment Method: undwater monitoring well was installed after completion of ng	See Exploration and Test description of field and la and additional data (If an See Supporting Informati symbols and abbreviation Elevations were interpola	boratory pr y). on for explans.	ocedur anation	es useo of	w k	tes: ell protrudes 3 feet al	bove grour	nd surface		
$\overline{\nabla}$	WATER LEVEL OBSERVATIONS Inferred from change in sample moisture		90			Bori	ng Started: 01-06-20	21	Boring C	Completed: 01-06-2	202 [,]
							Rig: D-70		Driller: H		

A A A A A A A A A A A A A A A A A A A	Site 2800 Jackson Highway Chehalis, WA CATION See Exploration Plan Ide: 46.6225° Longitude: -122.9053° Approximate Surface Elev.: 251 (Ft.) +// TH ELEVATION (Ft. CLAYEY SAND WITH GRAVEL (SC), medium to coarse grained, dark gray with dark bluish gray, wet, very dense (<i>continued</i>) dark bluish gray, very dense, with dark bluish gray gravel				WATER LEVEL		2 RECOVERY (In.)	Estern Inc VA LEEID TESH LESULTS LEENTES LESULTS LESUL	Sample no.	WATER CONTENT (%)	ATTERBERG LIMITS LL-PL-PI	DEPCENT FINES
A A A A A A A A A A A A A A A A A A A	Ide: 46.6225° Longitude: -122.9053° Approximate Surface Elev.: 251 (Ft.) +/ TH ELEVATION (Ft. CLAYEY SAND WITH GRAVEL (SC), medium to coarse grained, dark gray with dark bluish gray, wet, very dense (<i>continued</i>) dark bluish gray, very dense, with dark bluish gray gravel				WATER LEVEL OBSERVATIONS	SAMPLE TYPE				WATER CONTENT (%)	LIMITS	
448.5	CLAYEY SAND WITH GRAVEL (SC), medium to coarse grained, dark gray with dark bluish gray, wet, very dense (continued) dark bluish gray, very dense, with dark bluish gray gravel			 		X	7	26-50/4"	S-10			
40.2	no sample recovery			3 0 -		$ \rightarrow $						
40.2	no sample recovery						4	50/5"	<u>S-11</u>			
4		- Caved Mat erial ►		35	-		0	20-50/2"	S-12			
	dark brown <u>FAT CLAY (CH)</u> , bluish gray, wet, very stiff	<u>-/-</u>		40- 45-	2	X	17	13-18-9 N=27	S-13			
	<u>202.5+</u> SANDY FAT CLAY (CL-ML), bluish gray, wet, very stiff	-/-		45 50-		X	18	7-11-16 N=27	S-14			
Stratificat	ation lines are approximate. In-situ, the transition may be g	gradual.					Har	nmer Type: Autom	natic			
dvancement Meth Hollow Stem Au bandonment Metl	Auger c	See Exploration and Tes description of field and li and additional data (If ar See Supporting Informal symbols and abbreviatic	aborato iy). ion for	ory proc	edures	used	Note	95:				
Groundwater mo drilling	nonitoring well was installed after completion of	Elevations were interpol plan		om a top	oograph	nic site						
WAT		ler	7	C		٦		9 Started: 01-06-20 lig: D-70	21		Completed: 01-06-2 Holocene	.021

		BC	ORING LO	G	NO	. B	-P	26p	D			Page 3 of 3	3
	PROJ	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	C	LIEN	T: P E	uge Soth	et W 1ell,	/estern Inc WA				
	SITE:	2800 Jackson Highway Chehalis, WA											
ER	g	LOCATION See Exploration Plan			_	NS	ЫШ	(· u			(%)	ATTERBERG LIMITS	S
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6225° Longitude: -122.9053°			DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS	SAMPLE NO.	WATER CONTENT (%)		PERCENT FINES
ODEL	RAPH	Approximate Surface Elev.: 251 (Ft.) +	<i>(</i>		DEPTI	ATER	MPLI	COVE	IELD	AMPL	WA NTE	LL-PL-PI	SCEN.
Ň	Ū	DEPTH ELEVATION (F				N OB	SA	RE	ш	S	ö		PEF
4		SANDY FAT CLAY (CL-ML), bluish gray, wet, very stiff 51.5 (continued)199.5	+/-				X	18	9-8-13 N=21	S-15	29.4		53
		Boring Terminated at 51.5 Feet											
121													
8/23													
GDT													
ATE.													
MPL													
TATE													
CON													
ERRA													
L L													
R.GP													
USTF													
Q													
SED													
81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21													
2 PR													
1506													
μĻ													
5-0 00													
ST LO													
SMAF													
с, С													
G.T.G													
POF													
AL RE													
2 U U													
1 OR													
ROV													
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-WELL	Sti	atification lines are approximate. In-situ, the transition may be	gradual.					H	lammer Type: Automa	atic			
N N N	/anceme	nt Method:	See Employed and Table	tin - I	Drootel			Nr	otes:				
Щ Ц		iem Auger	See Exploration and Test description of field and la	abora									
VAL			and additional data (If an		or ovoloo	ation o	F						
Q Ab		nt Method:	See Supporting Informati symbols and abbreviatior		n exhiau	ลแบบ 0							
S S	Groundw	ater monitoring well was installed after completion of	Elevations were interpola	ated	from a to	pograp	hic sit	te					
d Lo		WATER LEVEL OBSERVATIONS						Bori	ing Started: 01-06-202	1	Borina (Completed: 01-06-20	021
	7	erred from change in sample moisture	llerr						Rig: D-70		-		
	_	easured with water level indicator							-		Differ	Holocene	
티그	<u> </u>	02/08/2021	21905 64th Ave W, Ste 100 Mountlake Terrace, WA						ject No.: 81215062				

TEST I	PIT LOG	NO. TP	-A06
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	IEST PITLOG NO. IP-A06 Page 1 of 1									
		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIENT: Puge Bothe	t Western Inc ell, WA						
S	ITE:	2800 Jackson Highway Chehalis, WA								
YER	00	LOCATION See Exploration Plan			t.)	/EL ONS	ŕΡΕ	(In.)	O	
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6254° Longitude: -122.9035°			DEPTH (Ft.)	R LEV RVATIO	LE T	VERY	SAMPLE NO.	
MODI	GRAI		Approxin	nate Surface Elev.: 248 (Ft.) +/-	DEP	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAM	
		DEPTH <u>TOPSOIL</u> , abundant fine roots, dark brown to black, moist, w	ELEVATION (Ft.)							
1	$\frac{12}{\sqrt{2}} \frac{\sqrt{2}}{\sqrt{2}}$									
	· <u>··</u> ·· <u>·</u> //· . · //			247+/-	_		an		C 1	
		SANDY FAT CLAY (CH), trace fine roots, gray and orange, I	noist to wet, stiff				V		S-1	
					_					
		2.5 perched groundwater above clay layer FAT CLAY (CH), low to medium plasticity, olive gray to grayi.	sh brown moist stiff to v	245.5+/-						
		3.2		245+/-	_					
		SANDY FAT CLAY (CH), trace weathered rocks, gray with o stiff to stiff	range mottling, moist to v							
		interbedded clay			5 —					
		interbedded gravel			_					
2										
					_					
		9.0		239+/-		\bigtriangledown				
	o () o ()	WELL GRADED GRAVEL WITH CLAY AND SAND (GW-G brown, wet, medium dense to dense	C) , with cobbles, orange			_ _				
	6 ()				10-					
				227.4						
		11.0 Test Pit Terminated at 11 Feet		237+/-	-					
	Su	atification lines are approximate. In-situ, the transition may be gradual.								
	anceme xcavatio		Testing Procedures for a Id laboratory procedures used f any).	Notes:						
		nt Method: symbols and abbrevi	mation for explanation of ations.							
B	ackfillec	with spoils Elevation information	obtained from Google Earth							
$\overline{\nabla}$,	WATER LEVEL OBSERVATIONS		Test Pit Started: 12-21-2020	Test	Pit Co	omple	ted: 12	2-21-2020	
		hile excavating	racon	Excavator: ECR 88	Ope	erator: (Greer	n Earth	works	
			th Ave W, Ste 100 ake Terrace, WA	Project No.: 81215062						

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	IESI PII LOG NO. IP-A09 Page 1 of 1									
		ECT: Proposed Industrial Park - Chehal Site	is PWI	CLIENT: Puget Bothe	t Western Inc ell, WA					
S	ITE:	2800 Jackson Highway Chehalis, WA								
ËR	g	LOCATION See Exploration Plan					NS	ΡE	(u	Ġ
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6245° Longitude: -122.9020°				H (Ft.	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.
DDEL	SAPH			A		DEPTH (Ft.) ATER LEVE	VTER SERV	MPLI	COVE	AMPI
Ň	5	DEPTH		Approxim	ate Surface Elev.: 252 (Ft.) +/- ELEVATION (Ft.)		N OBS	SAI	RE(Ś
		TOPSOIL, abundant fine roots, dark brown to blac	k, moist, very :	soft						
1	<u>// · · · · · · · · · · · · · · · · · · </u>									
	· <u>···</u> ·· <u>·</u> · //····	orange mottling, trace fine roots			251+/-	-		000		
		SANDY FAT CLAY (CH), trace fine roots, gray an	d orange, mois	st to wet, very soft to s		1		B		S-1
						-				
		2.7 perched groundwater above the clay layer			249.5+/-					
		<u>SILTY CLAY (CL-ML)</u> , low to medium plasticity, g 3.2 stiff	rayish brown v	vith orange mottling, m	noist, medium 249+/-	_				
		SANDY FAT CLAY (CH), gravish brown with oran	nge mottling, m	oist to wet, medium st		1				
		interbedded silt and gravel, sand content increases	s with depth							
						-				
						5-				
2		gravel lense								
						-				
						_	\bigtriangledown			
		wet								
								an		S-2
		silt lense, trace gravel and weathered rock				-				
						-				
		10.2 with gravel and cobbles 8 inch maximum grain size	e		242+/-	10-				
		Test Pit Terminated at 10.2 Feet								
	Str	atification lines are approximate. In-situ, the transition may be gradual	l.							
	Advancement Method: See Exploration and Testing Procedures for a Notes: Excavation description of field and laboratory procedures used									
	Excavation description of field and laboratory procedures used and additional data (If any).									
Aba	ndonme		pporting Informations and abbreviation	on for explanation of s.						
	Abandonment Method: symbols and abbreviations. Backfilled with spoils Elevation information obtained from Google Earth									
		WATER LEVEL OBSERVATIONS			Test Pit Started: 12-21-2020	Ter	t Pit O	omnle	ted: 1	2-21-2020
\bigtriangledown	W	hile excavating	lerr	acon	Excavator: ECR 88					
		•	21905 64th A	ve W, Ste 100			Operator: Green Earthworks			
			Mountlake ⁻	errace, WA	Project No.: 81215062	1				

TEST PIT LOG NO. TP-A12

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			CT: Proposed Industrial Park - Che Site	ehalis PWI	CLIENT:	Puget Bothe	Western Inc I, WA								
	SITE	E:	2800 Jackson Highway Chehalis, WA												
	MOUEL LAYER GRAPHIC LOG		LOCATION See Exploration Plan Latitude: 46.6234° Longitude: -122.9001° DEPTH			Approxima	te Surface Elev.: 259 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.			
	Image: State of the state								-						
Image: Seepage in the seepage in th										M.		S-1			
I_DATATEMPLAT			orange with gray mottling, trace fine roots, lo	w plasticity				-							
SPJ TERRACON			grayish brown with orange mottling					.							
LOG-NO WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21	2		wet					5-	_						
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81216		light gray with orange mottling, low to medium plasticity							_						
VAL REPO			1.0				248+/	<u>_</u>							
ED FROM ORIGI			Test Pit Terminated at 11 Feet												
EPARATI		Strat	tification lines are approximate. In-situ, the transition may be o	gradual.											
NOT VALID IF SE	Excava	nmen	t Method:	See Exploration and Test description of field and la and additional data (If an See Supporting Informati symbols and abbreviatior	boratory procedu y). on for explanatior	res used	Notes: Difficult to locate stabilized (r weather and perched ground								
OG IS I	Backfi			Elevation information obt	ained from Googl	le Earth									
SINGL	$\overline{\mathbf{\nabla}}$		NATER LEVEL OBSERVATIONS ile excavating		aco		est Pit Started: 12-17-2020	Te	est Pit C	omple	eted: 12	2-18-2020			
IIS BOF			er 24 hours	21905 64th A	we W, Ste 100		Excavator: ECR 88	0	perator:	Greer	n Earth	works			
臣	21905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062														

TEST PIT LO	DG NO.	TP-A15
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	IEST PITLOG NO. IP-A15 Page 1 of 1										
		ECT: Proposed Industrial Park - Chehalis PW Site	VI C	LIENT: Puget Bothe	t Western Inc ell, WA						
S	ITE:	2800 Jackson Highway Chehalis, WA									
ER	Ŋ	LOCATION See Exploration Plan				_	NS II	ЪЕ	(-u	Ċ	
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6226° Longitude: -122.8987°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.	
DEL	SAPF			. .		EPTI	TER SERV	MPLI	COVE	AMPL	
¥	9	DEPTH	Approximate Surface Elev.: 261 (Ft.) +/- ELEVATION (Ft.)						REC	Ś	
TOPSOIL, abundant fine roots, dark brown to black, moist to wet, soft											
	$\frac{1}{12} \frac{1}{12} \frac$										
1	t										
							\bigtriangledown	SW2		S-1	
$\underbrace{\overset{\sim}{\leftarrow}}_{\underline{\nu}}, \underbrace{\overset{\sim}{\leftarrow}}_{\underline{\nu}}$ seepage, possible perched groundwater										5-1	
		SANDY FAT CLAY (CH), trace gravel, gray and orange,	moist to we	et, medium stiff to s	259+/- stiff	_					
						_	-				
2				_							
								m		S-2	
	.0.	6.5 POORLY GRADED SAND WITH CLAY AND GRAVEL ((SP-SC), or	angish brown, moi	254.5+/- st to wet.			an L			
		medium dense to dense, silt content increases with depth	h, with cobb	bles		_		5		S-3	
		8.5 SANDY FAT CLAY (CH), orangish brown to grayish brow	wn, moist to	wet, medium stiff	252.5+/-						
		, · · · · · · · · · · · · · · · · ·	,	· · · · ,		_	-				
		10.5 trace weathered rock				10-		m		S-4	
		Test Pit Terminated at 10.5 Feet			250.5+/-						
	Ctr	atification lines are approximate. In-situ, the transition may be gradual.									
	00	auncauon nnes are approximate. In esta, une transition may be gradual.									
	ancemei xcavatio	nt Method: See Exploration description of file		Procedures for a tory procedures used	Notes:						
		and additional d	data (If any).		Difficult to locate stabilized (reg weather and perched groundw						
		See Supporting nt Method: symbols and abl	Information for Information for the second sec	or explanation of							
В	ackfilled	with spoils Elevation inform	nation obtaine	d from Google Earth							
		WATER LEVEL OBSERVATIONS			Test Pit Started: 12-17-2020	Ter	st Pit Co	omple	eted: 12	2-17-2020	
∇	W	hile excavating			Excavator: ECR 88		erator:				
			005 64th Ave V	V, Ste 100		+	5.4.01.	2,001	aru		
		Ma	lountlake Terra	ice, WA	Project No.: 81215062						

	IEST PITLOG NO. IP-B04 Page 1 of 1										
		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIENT: Puget Western Inc Bothell, WA								
S	ITE:	2800 Jackson Highway Chehalis, WA									
ER	ЭС	LOCATION See Exploration Plan		_	EL	Ы	ln.)	Ċ			
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6255° Longitude: -122.9051°		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO			
ODEI	RAPI		Approximate Surface Elev.: 247 (Ft.) +/	DEPT	ATER SERV	MPL	COVI	AMPI			
ž	Ū	DEPTH	ELEVATION (Ft.)		N 0 880	SA	RĒ	Ň			
	<u>717</u> 7	TOPSOIL, abundant fine roots, brown to dark brown, moist, ve									
1	<u>//</u> · <u>···</u> /	orange mottling, trace fine roots									
	· <u>·</u> ··· //· · ·//		245.5		-	m					
		SANDY FAT CLAY (CH), trace fine roots, gray and orange, me	245.5+ pist to wet, very soft	1		Ű		S-1			
				_							
		2.3 seepage \possible perched groundwater above the clay layer	/244.51	4							
		SILTY CLAY (CL-ML), low to medium plasticity, olive gray to g	rayish brown, wet, medium stiff								
					-						
		clay content decreases and sand content increases with depth									
		4.0	243+	<u> </u>	_						
		SANDY FAT CLAY (CH), gray with orange mottling, moist, me	dium stiff								
				5-	1						
		increase in gravel content									
2		6.0		\bigtriangledown							
		SANDY FAT CLAY WITH GRAVEL (CH), trace cobbles, grayi medium stiff to stiff	sh brown with orangish brown, wei,								
				-	1	.000					
						S.		S-2			
					-						
		gravel lense									
				-	_						
		silt content increases with depth									
				10-	-	SWN		S-3			
		10.5 Test Pit Terminated at 10.5 Feet	236.5+	4							
	Str	atification lines are approximate. In-situ, the transition may be gradual.									
	Advancement Method: See Exploration and Testing Procedures for a description of field and laboratory procedures used Difficult to locate stabilized (res										
		and additional data (If a	ny) weather and perched ground								
		nt Method: with an elle	ition for explanation of ons.								
В	acktillec	with spoils Elevation information o	otained from Google Earth								
		WATER LEVEL OBSERVATIONS	Test Pit Started: 12-21-2020	Te	st Pit C	omple	eted: 1	2-21-2020			
	_ W	hile excavating	Excavator: ECR 88	Or	erator:	Greer	n Earth	works			
	21905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062										

	IEST PIT LUG NU. TP-BU8						Page 1 of 1				
		ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIENT: Puge Bothe	t Western Inc ell, WA						
5	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6243° Longitude: -122.9029°				DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.	
IOM	GRV	DEPTH			nate Surface Elev.: 250 (Ft.) +/- ELEVATION (Ft.)	D	WAT OBSE	SAM	RECO	SAN	
	<u>17 - 77 - 17</u>	TOPSOIL, abundant fine roots, brown to dar	rk brown, moist, very	r soft							
1	<u>1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.</u>	orange mottling, trace fine roots, organics	to modium plasticity	olivo gravita gravica	248.5+/-	-		en s		S-1	
	SILTY CLAY (CL-ML), trace fine roots, low to medium plasticity, olive gray to grayish brown, moist to wet, soft to medium stiff seepage, possible perched groundwater										
		3.0 WELL GRADED GRAVEL WITH CLAY AN	ID SAND (GW-GC).	orangish brown to bro	247+/-	_					
I		wet, medium dense to dense	. <u></u> ,		,	_		en s		S-2	
						_					
		decrease in gravel content				5-					
2		6.0 CLAYEY SAND WITH GRAVEL (SC), orang dense	gish brown to brown	, moist to wet, mediun	244+/- n dense to	-					
	20	with thin bluish gray clay lenses				_		~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		S-3	
						_					
Adv Adv E											
		9.5 FAT CLAY WITH SAND (CH), trace gravel,	gray with orange mo	ottling, moist, medium	240.5+/- stiff to stiff	10-		000			
		10.5 Test Pit Terminated at 10.5 Feet			239.5+/-			M.		S-4	
	Sti	atification lines are approximate. In-situ, the transition may be	gradual.								
Adv E	anceme Excavatio	n	See Exploration and Test description of field and la and additional data (If an See Supporting Informati	boratory procedures used y).	Notes: Difficult to locate stabilized (re- weather and perched groundw						
Aba E		ent Method: d with spoils	symbols and abbreviation Elevation information obt	IS.							
$\overline{\nabla}$	7 147	WATER LEVEL OBSERVATIONS hile excavating			Test Pit Started: 12-18-2020	Tes	st Pit Co	omple	eted: 12	2-18-2020	
	_ //	nine excavaling			Excavator: ECR 88	Op	erator:	Greer	n Earth	works	
2 21905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062											

TEST PIT LO	G NO. TP-C12	Page 1 of 1
d Industrial Park - Chehalis PWI	CLIENT: Puget Western Inc Bothell, WA	

	PRC	DJE	ECT: Proposed Industrial Park - Chehalis Site	PWI C	LIENT: Puge Bothe	t Western Inc ell, WA					
	SITE	E:	2800 Jackson Highway Chehalis, WA								
		פגארחוט בטפ	LOCATION See Exploration Plan Latitude: 46.6227° Longitude: -122.9012°		Approxin	nate Surface Elev.: 254 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.
1	1/1.	<u> </u>	DEPTH TOPSOIL, abundant fine roots, brown to dark brown,	, moist, very sof		ELEVATION (Ft.)			0)		
лт 8/23/21	1.2 253+/ SANDY FAT CLAY (CH), trace fine roots, gray and orange, wet, soft 253+/ 1.7 perched groundwater above the clay layer 252.5+/ SILTY CLAY (CL-ML), low to medium plasticity, olive gray to grayish brown, moist, soft to medium 252.5+/								en y		S-1
ATATEMPLATE.GD			3.0 WELL GRADED GRAVEL WITH CLAY AND SAND medium dense to dense) (GW-GC) , ora	nge to orangish br	251+/- own, moist,	_	-			
TERRACON_D/	<u> </u>						-	-	m	-	S-2
D INDUSTRI.GPJ		grayish brown with orange mottling interbedded clay							m.		S-3
062 PROPOSEI	00000	increase in all and contact						-		-	
0 WELL 81215			increase in silt and sand content				-	-	m.		S-4
SMART LOG-N							_	-	sm,		
DRT. GEO (10.0 Test Pit Terminated at 10 Feet			244+/-	10-		5		S-5
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21											
SEPARAT			tification lines are approximate. In-situ, the transition may be gradual.								
IOT VALID IF S	Advancement Method: See Excavation des and Abandonment Method: See			ration and Testing P n of field and laborat onal data (If any). orting Information fo nd abbreviations.	ory procedures used	Notes: Difficult to locate stabilized (re weather and perched groundw					e to wet
N SI DO		filled	with spoils Elevation in	information obtained	from Google Earth						
RING L	Z		WATER LEVEL OBSERVATIONS			Test Pit Started: 12-17-2020	Tes	st Pit C	omple	ted: 12	-17-2020
THIS BO	While excavating					Ор	Operator: Green Earthworks				

TEST	PIT L	.OG I	NO.	TP-	C16
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		IESI PII L	OG NO. TP-0	516			Pa	ige 1	of 1
		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIENT: Puget Bothe	t Western Inc ell, WA				•	
S	ITE:	2800 Jackson Highway Chehalis, WA							
ER	g	LOCATION See Exploration Plan			~	NS EL	Щ	(·u	Ġ
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6218° Longitude: -122.8991°			DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.
DDEL	SAPF		A		EPTI	VTER SERV	MPLI	COVE	AMPL
Ň	5	DEPTH	Approxim	nate Surface Elev.: 260 (Ft.) +/- ELEVATION (Ft.)		N N N	SAI	RE(S.
	<u> </u>	TOPSOIL, abundant fine roots, dark brown to black, moist, ve							
	[<u>// · <u>·</u> · · // ·</u>								
1	· <u>····</u> ·· <u>·</u> ·	harver to doub here to the sector			_				
		brown to dark brown, trace fine roots					m		S-1
	<u>i, </u>	2.0 possible perched groundwater above sandy silt with gravel lay	ver	258+/-					
		SANDY FAT CLAY WITH GRAVEL (CH), gray and orange, r			_				
		gravel content increases with depth							
		3.0 WELL GRADED GRAVEL WITH CLAY AND SAND (GW-G	C) with cobbles orange t	257+/-	_				
	s (brown, moist to wet, medium dense to dense							
						∇	M		S-2
					5 —		NN2		
									S-3
		6.0		254+/-	_				
2		SANDY FAT CLAY (CH), trace gravel and cobbles, orangish	brown, moist, soft to med	dium stiff					
2									
					_				
		grayish brown							
					_				
					_				
					10-				
				249+/-	_				
		Test Pit Terminated at 11 Feet							
	Str	atification lines are approximate. In-situ, the transition may be gradual.							
	0.								
	ancemei xcavatio		Testing Procedures for a diaboratory procedures used	Notes:					
		and additional data (I	fany).	Difficult to locate stabilized (regineration of the stabilized stabilized weather and perched groundwater and perched groundwater and perched groundwater and perched stabilized (regineration of the stabilized stabilized stabilized stabilized stabilized stabilized stabilized (regineration of the stabilized (regineration of the stabilized st					
		nt Method: symbols and abbrevia	nation for explanation of ations.						
В	ackfilled	with spoils Elevation information	obtained from Google Earth						
_		WATER LEVEL OBSERVATIONS		Test Pit Started: 12-17-2020	Test	t Pit Co	omple	eted: 12	2-17-2020
	W	hile excavating	racon	Excavator: ECR 88	Ορε	erator: (Greer	n Earth	works
			th Ave W, Ste 100	Project No : 81215062	+				

	IEST PIT LOG NO. IP-EU/ Page 1 of 1												
		ECT: Proposed Industrial Park - Chehalis PWI Site	CLIENT: Puget Bothe	Western Inc II, WA				•					
S	SITE:	2800 Jackson Highway Chehalis, WA											
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6238° Longitude: -122.9044°	Approxim	ate Surface Elev.: 249 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.				
		DEPTH TOPSOIL, abundant fine roots, brown to dark brown, moist, ver	y soft	ELEVATION (Ft.)									
1		0.8 SANDY FAT CLAY (CH), fine roots, grayish brown with orange 2.0		_		m		S-1					
	0	SILTY CLAY (CL-ML), low to medium plasticity, olive gray to ol stiff, clay content decreases and sand content increases with de seepage, possible perched groundwater 3.0 <u>WELL GRADED GRAVEL WITH CLAY AND SAND (GW-GC)</u> moist, dense	oft to medium246+/-	_									
					_		ENV2		S-2				
2		6.4	242.5+/-	5-									
		FAT CLAY WITH SAND (CH), light gray with orange mottling, r	noist, medium stiff to s	iff	_		sm2		S-3				
		orangish brown			_								
		sand content decreases			_								
		10.5 FAT CLAY (CH), trace sand, gray with purple mottling, stiff, tra	ce weathered rock	238.5+/-	10-		an c		S-4				
		11.5		237.5+/-	_				0-4				
		Test Pit Terminated at 11.5 Feet		231.37/-									
	Str	atification lines are approximate. In-situ, the transition may be gradual.											
E	Excavatic	and additional data (If ar See Supporting Informat nt Method: symbols and abbreviatio	aboratory procedures used ny). ion for explanation of	Notes: Difficult to locate stabilized (regi weather and perched groundwa									
E	аскппес		tained from Google Earth										
$\overline{\nabla}$	W	WATER LEVEL OBSERVATIONS hile excavating	acon	Test Pit Started: 12-18-2020					2-18-2020				
			Ave W, Ste 100	Excavator: ECR 88 Project No.: 81215062	Ope	erator:	Greer	n Earth	works				
		Mountlake	Terrace, WA	PTUIECT NO.: 81215062	1								

	TEST PIT LOG NO. TP-E10 Page 1 of 1											
Ρ	ROJ	ECT: Proposed Industrial Park - Ch Site	ehalis PWI	CLIENT: Puget Bothe	: Western Inc ell, WA							
S	ITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6229° Longitude: -122.9029°		Approxim	ate Surface Elev.: 252 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.		
1	<u>, , , , , , , , , , , , , , , , , , , </u>	DEPTH <u>TOPSOIL</u> , abundant fine roots, brown to dat	rk brown, moist, very	soft	ELEVATION (Ft.)							
		0.7 SANDY FAT CLAY (CH), fine roots, grayish	h brown and orange,	moist to wet, very soft	251.5+/- to soft	_						
						_		M		S-1		
		2.5 seepage, possible perched groundwater about the seepage of the second se	249.5+/- dish brown,	_	∇							
2		6.5	245.5+/-	5 —								
		FAT CLAY WITH SAND (CH), gray with ora	ange mottling, moist,	medium stiff		_						
								M.		S-2		
						_						
		gravel lense				_						
		10.0 Test Pit Terminated at 10 Feet			242+/-	10-						
	Str	tification lines are approximate. In-situ, the transition may be	gradual.									
E	xcavatio		See Exploration and Testi description of field and lal and additional data (If any See Supporting Laboration See Supporting Laboration	poratory procedures used). on for explanation of	Notes: Difficult to locate stabilized (reg weather and perched groundw	regional) groundwater level due to wet water flowing into the test pit						
		nt Method: with spoils	symbols and abbreviation Elevation information obta									
$\overline{\nabla}$		WATER LEVEL OBSERVATIONS hile excavating			Test Pit Started: 12-18-2020	Tes	t Pit Co	omple	ted: 12	2-18-2020		
<u> </u>	//	me enouroung		DLUN ve W, Ste 100	Excavator: ECR 88	Ope	erator:	Greer	n Earth	works		
			21905 64th A Mountlake		Project No.: 81215062							

 THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21

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				G NO. TP-I	Page 1 of 1							
		ECT: Proposed Industrial Park - Cheh Site	nalis PWI	CLIENT: Puge Bothe	t Western Inc ell, WA							
5	SITE:	2800 Jackson Highway Chehalis, WA										
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6223° Longitude: -122.9017°		Approxim	nate Surface Elev.: 254 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.		
1	<u>11. 11. 11.</u> 11. <u>11. 11.</u> 11. <u>11. 11.</u>	TOPSOIL , abundant fine roots, brown to dark b	prown, moist, very	soft								
8/23/21		1.4 SANDY FAT CLAY (CH), fine roots, grayish br	own with orange r	nottling, moist, very s		-		₩.		S-1		
AIEMPLAIE.GUI		2.7 seepage, possible perched groundwater WELL GRADED GRAVEL WITH CLAY AND S	<u>SAND (GW-GC),</u>	brown to grayish brow	251.5+/- /n, wet, dense	-						
D IEKRACUN_DAIP		orangish brown to reddish brown layer 3.7 to 4.	.5 feet			-	_					
						5 -	-					
		7.5 test pit terminated due to the high water level Test Pit Terminated at 7.5 Feet			246.5+/-							
	Str	atification lines are approximate. In-situ, the transition may be grad	dual.									
Adv	/anceme Excavatio		e Exploration and Testi		Notes:							
	andonme	nt Method: sym with spoils	d additional data (If any e Supporting Information nbols and abbreviation	on for explanation of	Difficult to locate stabilized (reg weather and perched groundw							
	-	WATER LEVEL OBSERVATIONS							eted: 12	2-18-2020		
	<u> </u> W	hile excavating		acon	Excavator: ECR 88	Op	erator:	Greer	n Earth	works		
2 L	21905 64th Ave W, Ste 100 Mountlake Terrace, WA Project No.: 81215062											

TEST	PIT I	_OG	NO.	TP-E15
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			SI PII LC	PIT LOG NO. TP-E15				Page 1 of 1			
		ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CLIENT: Puge Bothe	t Western Inc ell, WA						
5	SITE:	2800 Jackson Highway Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6214° Longitude: -122.9002° DEPTH		Approxin	nate Surface Elev.: 259 (Ft.) +/- ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.	
1	<u>11 - 11 - 11 - 11 - 11 - 11 - 11 - 11 </u>	TOPSOIL, abundant fine roots, dark brown,	moist, very soft				-	5		S-1	
		 <u>SANDY FAT CLAY (CH)</u>, with fine roots, ye soft <u>3.2</u> <u>SILTY CLAY (CL-ML)</u>, trace fine roots, low medium stiff 			256+/-	-	-				
PU IEKKAU		clay content decreases and sand content in 4.5 CLAYEY SAND (SC), olive gray to brown, v		dense	254.5+/-	- 5-		Mr.		S-2	
		6.0									
										S-3	
		10.5 Test Pit Terminated at 10.5 Feet	o geogluci		248.5+/-						
DEPAKA		atification lines are approximate. In-situ, the transition may be	9 gradual.								
	Excavatio	nt Method: n nt Method: i with spoils	See Exploration and Test description of field and le and additional data (If an See Supporting Informati symbols and abbreviation Elevation information obt	boratory procedures used y). on for explanation of is.	Notes:						
	7				Test Pit Started: 12-18-2020	Test Pit Completed: 12-18-2020					
		hile excavating		acon	Excavator: ECR 88	Ор	erator:	Greer	n Earth	works	
				we W, Ste 100 Terrace, WA	Project No.: 81215062			_	_		

	TEST PIT LOG NO. TP-P04										Page 1 of 1				
	PRO	JEC	T: Proposed Industrial Park - Ch Site	ehalis PWI	CLIENT:	Puget Bothe	t Western Inc ell, WA								
	SITE	:	2800 Jackson Highway Chehalis, WA		_	20110	,								
	GRAPHIC LOG	Lati	CATION See Exploration Plan tude: 46.6254° Longitude: -122.9029°			Approxim	nate Surface Elev.: 249 (Ft.) +/		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.			
1	<u>x 17</u> .	DEF . <u></u>	TOPSOIL, abundant fine roots, brown to dar	k brown, moist, very	soft		ELEVATION (Ft.)							
		\ <u>0.8</u>	orange mottling, with fine roots <u>SANDY FAT CLAY (CH)</u> , with fine roots, gra	av and orange mois	t to wet verv	soft	248-	<u>+/-</u>							
TE.GDT 8/23/21		2.2	perched groundwater above clay layer SILTY CLAY (CL-ML), low to medium plasti				247- stiff	+/-	_	EW.		S-1			
ON_DATATEMPLAT			thin gravel lense						_						
USTRI.GPJ TERRAC	2	5.5	gray				243.5-	5	_						
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL 81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21			WELL GRADED GRAVEL WITH CLAY AN medium dense to dense, gravel content decr	D SAND (GW-GC), reases with depth	with cobbles,	orangist	n brown, moist,		-	-					
VELL 8		8.0					241-	<u>+/-</u>	_						
ON-O			CLAYEY SAND WITH GRAVEL (SC), orang	gish brown to gray, r	noist, dense										
ART LO	6	9.0	SANDY FAT CLAY (CH), trace gravel, gray	to dark gray moist	very soft		240-	<u>+/-</u>	_						
EO SM			<u>OANDTTATOLAT(ON</u>), trace graver, gray	to dain gray, moist,	very son										
ORT. G		10.0	Test Pit Terminated at 10 Feet				239-	<u>*</u> 10	-						
AL REP															
RIGIN															
ROM C															
CATED F	s	Stratific	ation lines are approximate. In-situ, the transition may be	gradual.											
SEPAF	1.000	ort M	stbod:				Netec								
- VALID IF {	Advancement Method: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). Notes: Difficult to locate stabilized (re weather and perched groundweather) Difficult to locate stabilized (re weather and perched groundweather)											ue to wet			
IS NOT	oandonm Backfille		ethod: n spoils	See Supporting Information symbols and abbreviation Elevation information obta	IS.										
e Loc		WA	TER LEVEL OBSERVATIONS				Test Pit Started: 12-21-2020	Т	est Pit C	Comple	eted: 12	2-21-2020			
	ZИ	Vhile	excavating	llerr	DCO		Excavator: ECR 88	-	Test Pit Completed: 12-21-2020 Operator: Green Earthworks						
THIS					ve W, Ste 100 Terrace, WA		Project No.: 81215062								

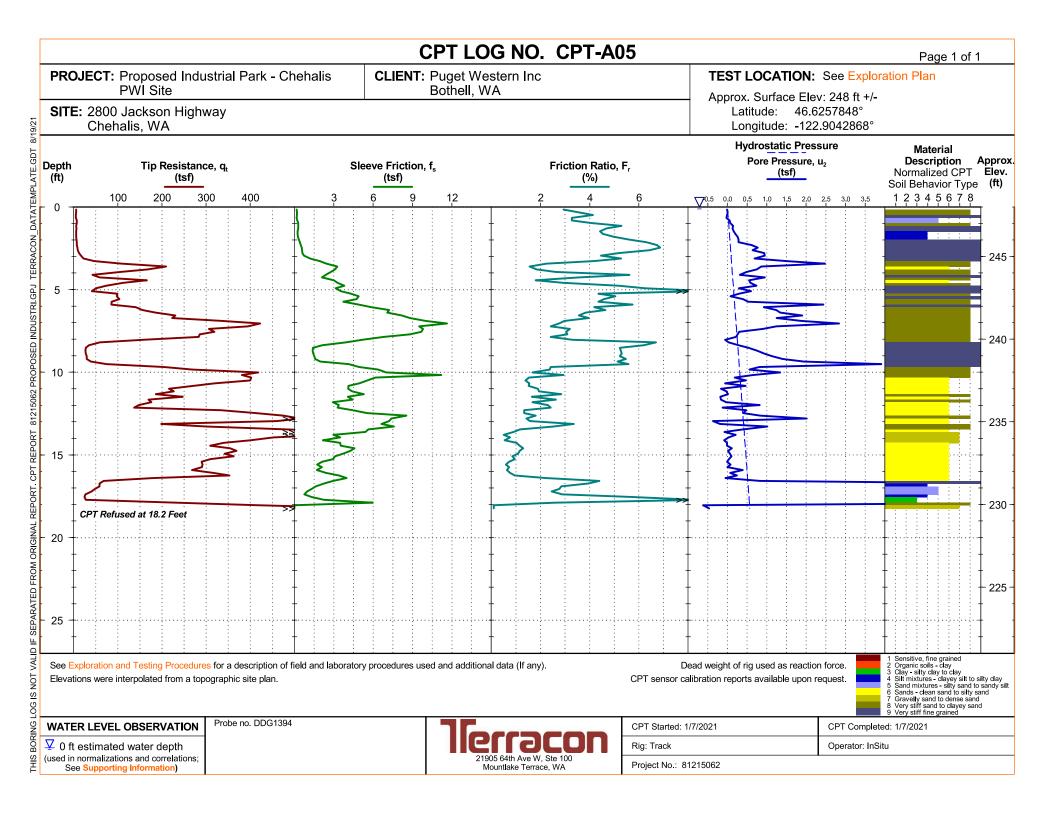
	TEST PIT LOG NO. TP-P05 Page 1 of 1												
Ρ	ROJ	ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CLIENT: Puget Bothe	t Western Inc ell, WA								
S	ITE:	2800 Jackson Highway Chehalis, WA											
Æ	ĐO	LOCATION See Exploration Plan				î	EL DNS	ЪЕ	(In.)	ö			
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6239° Longitude: -122.9000°	atitude: 46.6239° Longitude: -122.9000°						RECOVERY (In.)	SAMPLE NO.			
IODE	GRAP			Approxim	nate Surface Elev.: 268 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	COV	SAMF			
2	* • • •	DEPTH			ELEVATION (Ft.)		×ö	s/	RE				
4	<u>, 11/7</u> , 1 <u>7</u> 1/	TOPSOIL, abundant fine roots, brown to da											
•	<u></u>	1.0	267+/-										
		SANDY FAT CLAY (CH), with fine roots, g		t to wet, very soft to so		_		NN,		S-1			
		1.6 seepage, possible perched groundwater abo <u>SILTY CLAY (CL-ML)</u> , trace fine roots, low		orango with gray mot	266.5+/-								
		soft to medium stiff	to mediam plasticity	, orange with gray mor		_							
		at 2 feet, an old drainage was encountered											
						_		SW2		S-2			
										01			
						_							
						5 —							
•													
2						_							
		6.5			261.5+/-								
		LEAN CLAY (CL), trace organics, medium mottling, moist, medium stiff	to high plasticity, gra	yish brown with orang	e and purple								
						_							
						_		M		S-3			
						_							
		10.3			257.5+/-	10-							
		Test Pit Terminated at 10.3 Feet											
	Str	atification lines are approximate. In-situ, the transition may be	e gradual.										
			I										
	ancemei xcavatio	nt Method: n	See Exploration and Test description of field and la	boratory procedures used	Notes: Difficult to locate stabilized (reg	jiona l) a	roundw	/ater l	evel dı	ie to wet			
			and additional data (If any See Supporting Informati		weather and perched groundwa	ater flow	ing into	o the t	est pit				
		nt Method: with spoils	symbols and abbreviation	is.									
			Elevation information obt	ained from Google Earth									
		WATER LEVEL OBSERVATIONS ng-term, steady-flow groundwater not	Terr	acon	Test Pit Started: 12-17-2020	Tes	t Pit Co	omple	ted: 12	2-17-2020			
		countered		ULUII ve W, Ste 100	Excavator: ECR 88	Ope	erator:	Greer	n Earth	works			
				Ve W, Ste 100 Terrace, WA	Project No.: 81215062								

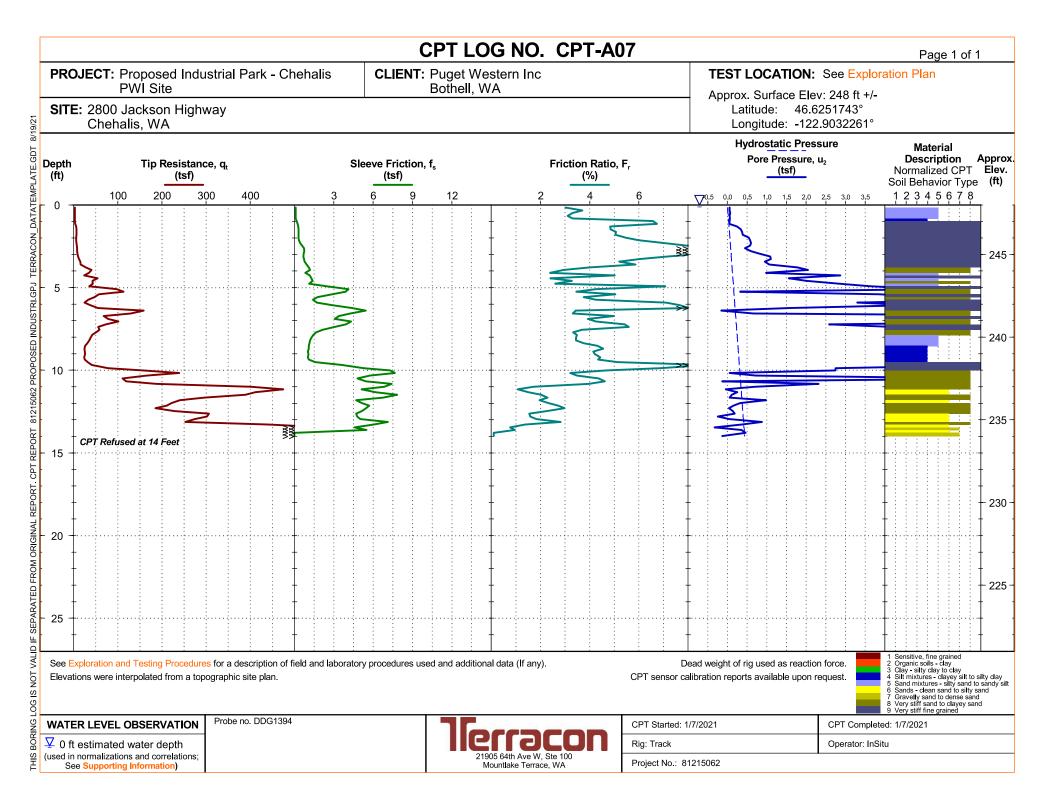
		IE	Page 1 of 1									
		ECT: Proposed Industrial Park - Cl Site	CLIENT: Puget Bothe	t Western Inc ell, WA								
3	ITE:	2800 Jackson Highway Chehalis, WA										
ÈR	g	LOCATION See Exploration Plan					EL	ΡE	(In.)	Ċ		
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6230° Longitude: -122.8985°	985°									
ODEI	RAPI			Approvin	nate Surface Elev.: 266 (Ft.) +/-	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.		
Ž	G	DEPTH		Аррголіт	ELEVATION (Ft.)		N OB:	SA	RE	S		
	<u></u>	TOPSOIL, trace gravels, brown to dark bro	wn, moist, very soft, a	bundant fine roots								
1	<u>// · · · · · · · · · · · · · · · · · · </u>											
		1.0 SANDY FAT CLAY (CH), trace fine roots,	trace gravels, grav an	d orange, moist to wet	265+/-	-	-					
		soft	adob gravolo, gray an	a orango, molot to wo								
		seepage, possible perched groundwater				_		M		S-1		
		3.0 SILTY CLAY (CL-ML), trace fine roots, low	v to medium plasticity.	orange with grav mot		-		m				
		soft to medium stiff, clay content decreases	s and sand content ind	creases with depth	<u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			V		S-2		
						_						
						5 -	-					
2												
						_						
		orangish brown with gray mottling, trace gra	avel									
						_	-					
		8.0		-	258+/-	_	-					
		SANDY FAT CLAY (CH), low plasticity, gra	ay, moist, medium stif	f								
								M.				
						_		V		S-3		
					256+/-	10-						
		Test Pit Terminated at 10 Feet										
	Str	atification lines are approximate. In-situ, the transition may b	e gradual.									
A			1		N /							
Advancement Method: See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any). Notes:												
Aba	ndonme	nt Method:										
		with spoils	symbols and abbreviation									
		WATER LEVEL OBSERVATIONS		-	Test Pit Started: 12-17-2020	Ter		molo	ted: 1	-17-2020		
		ng-term, steady-flow groundwater not										
	en	countered	21905 64th A	DCON ve W, Ste 100	Excavator: ECR 88		erator:	⊨arth	WOIKS			
			Mountlake	Terrace, WA	Project No.: 81215062							

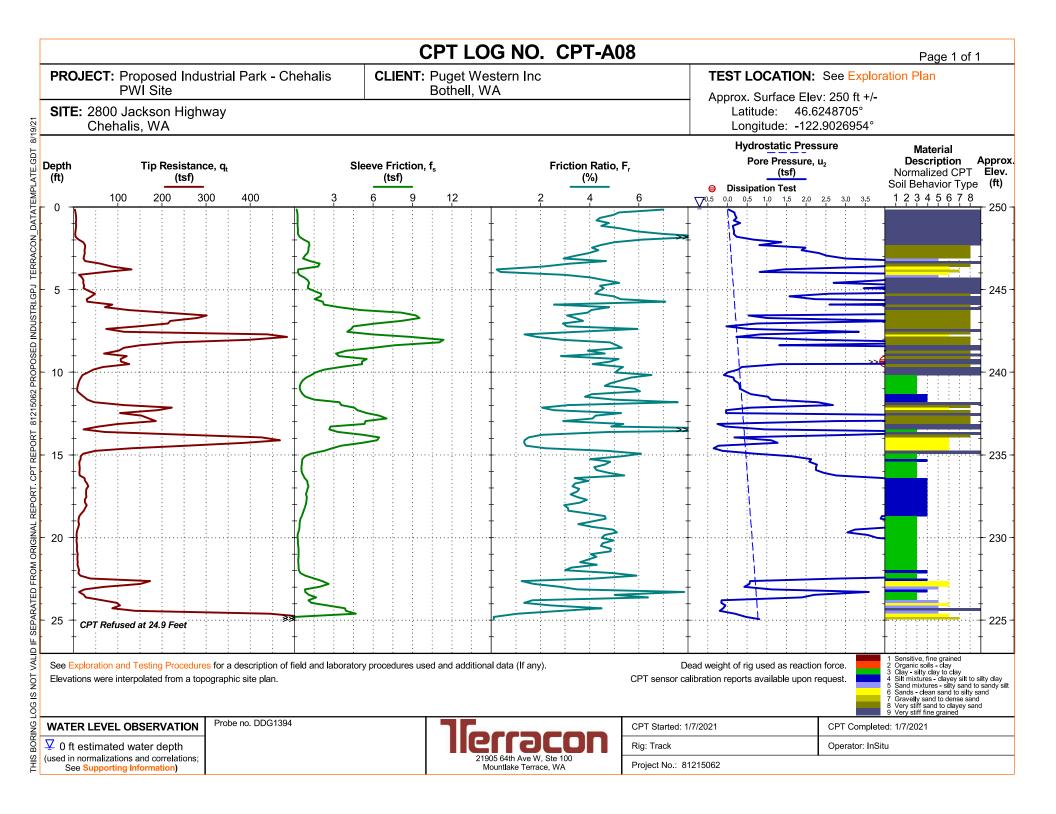
TEST PIT LOG NO. TP-P07

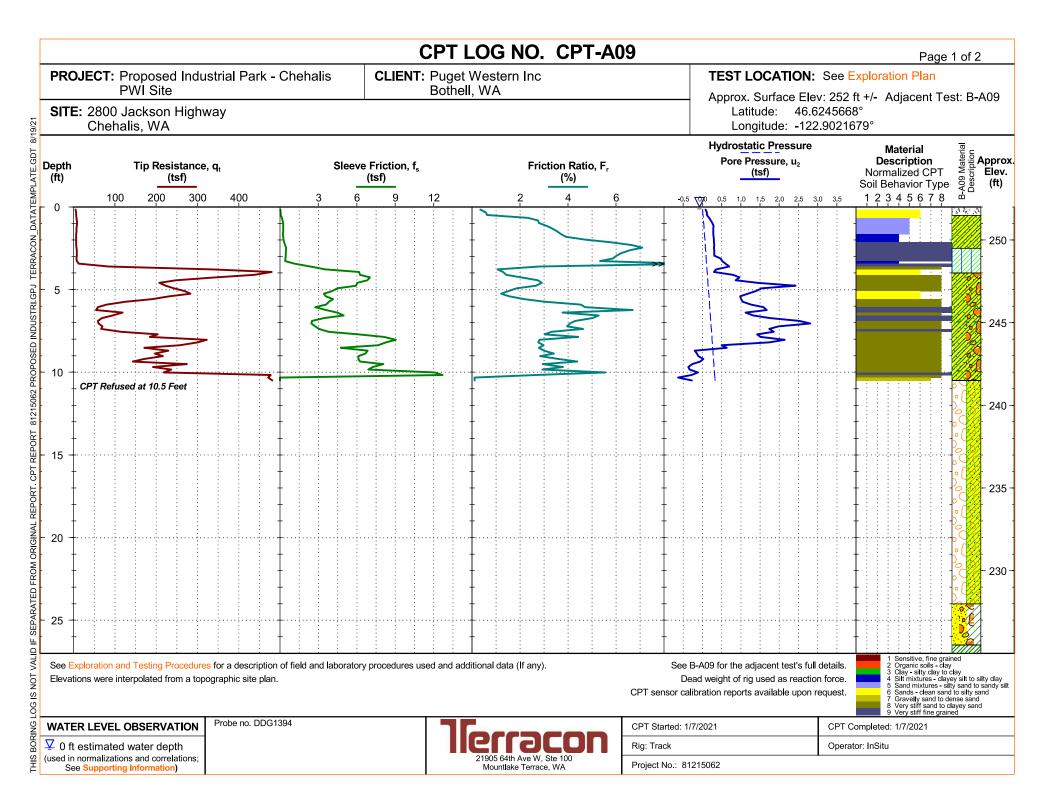
		IESI	PIT LOC	3 NO. 11	P-PU/			Pa	ige 1	of 1	
	PROJ BITE:	ECT: Proposed Industrial Park - Chehali Site 2800 Jackson Highway	is PWI	CLIENT: Pu Bo	iget Western Inc othell, WA						
		Chehalis, WA									
MODEL LAYER	GRAPHIC LOG	LOCATION See Exploration Plan Latitude: 46.6212° Longitude: -122.9007° DEPTH		Арг	proximate Surface Elev.: 258 (Ft.) ELEVATION (I		WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.	
	. <u></u>	TOPSOIL, abundant organics, reddish brown to da	ark brown, moist	, very soft	ELEVATION	<u>.,</u>					
1	<u>17 · <u>1</u> · <u>1</u> · <u>17 · <u>1</u> · <u>1</u></u></u>	1.1				7+/-					
DT 8/23/21		FAT CLAY WITH SAND (CH), trace fine roots, day moist to wet, very soft	rk brown to gray	vish brown, with	orange mottling,			€®}		S-1	
DATATEMPLATE.GI		3.5			254.	<u>5+/-</u>	_				
ERRACON_D		WELL GRADED GRAVEL WITH CLAY AND SAM brown, moist to wet, loose to medium dense	<u>ND (GW-GC)</u> , w	rith cobbles, orai	ngish brown to						
STRI.GPJ TE						5-	_	en se		S-2	
81215062 PROPOSED INDUSTRI.GPJ TERRACON_DATATEMPLATE.GDT 8/23/21		7.7 test pit terminated due to the high water level			250.	5+/-	_				
THIS BORING LOG IS NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GEO SMART LOG-NO WELL	Str	Test Pit Terminated at 7.7 Feet									
EPARA	Str	atification lines are approximate. In-situ, the transition may be gradual.									
S NOT VALID IF SE	Excavatio	n descript and add See Sup	ploration and Testing tion of field and labo ditional data (If any). pporting Information s and abbreviations.	pratory procedures u	sed Notes:						
		WATER LEVEL OBSERVATIONS									
	Z W) T(est Pit C	omple	npleted: 12-18-2020						
IS BO		I	c	perator:	Greer	reen Earthworks					
Ξ			21905 64th Ave Mountlake Te		Project No.: 81215062						

		IE	Page 1 of 1								
		ECT: Proposed Industrial Park - Ch Site	nehalis PWI	CLIENT: Puge Bothe	t Western Inc ell, WA				-		
S	ITE:	2800 Jackson Highway Chehalis, WA									
ŕer	00	LOCATION See Exploration Plan				Ê	NS NS	ΡE	(In.)	Ö	
MODEL LAYER	GRAPHIC LOG	Latitude: 46.6229° Longitude: -122.9042°		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	SAMPLE NO.			
AODE	GRAP			Approxim	nate Surface Elev.: 251 (Ft.) +/-	DEP.	VATE	AMPI	ECOV	SAMF	
~	-	DEPTH			ELEVATION (Ft.)		> 8	ŝ	R		
1		TOPSOIL, trace gravel, brown to dark brow	n, moist, very soft, ab	oundant fine roots							
		0.8 SANDY FAT CLAY (CH), with fine roots, g	row and aronge maint	towat	250+/-						
		SANDT FAT CLAT (CH), With the roots, g	ray and orange, moisi	l lo wel		_		an		S-1	
		1.5 feet, encountered a root mat									
		seepage, possible perched groundwater				_	-				
		3.0			248+/-	_		000			
		SILTY CLAY (CL-ML), trace organics, low moist, soft to medium stiff	to medium plasticity,	grayish brown with ora	ange mottling,			M		S-2	
							4	M		S-3	
						5 —					
2											
						_					
		7.0			244+/-						
		SANDY FAT CLAY (CH), trace gravel, orar	nge, moist, soft to me	dium stiff		_					
						_					
			modium placticitu ar	auto graviah braum m	242+/-	_					
		SILTY CLAY WITH SAND (CL-ML), low to	medium plasticity, gr	ay to grayish brown, h	noist, sun						
		10.0			241+/-	10-		M		S-4	
		Test Pit Terminated at 10 Feet				10					
	Str	atification lines are approximate. In-situ, the transition may be	e gradual.				<u> </u>				
	ancemei xcavatio	nt Method: n	See Exploration and Testi description of field and la		Notes:						
Excavation description of field and laboratory procedures used and additional data (If any). See Supporting Information for explanation of											
		nt Method:									
В	acktilled	with spoils	Elevation information obta	ained from Google Earth				_			
		WATER LEVEL OBSERVATIONS			Test Pit Started: 12-18-2020	Tes	2-18-2020				
		ng-term, steady-flow groundwater not countered	lierr	JCON	Excavator: ECR 88	Opr	erator: (Green	Earth	works	

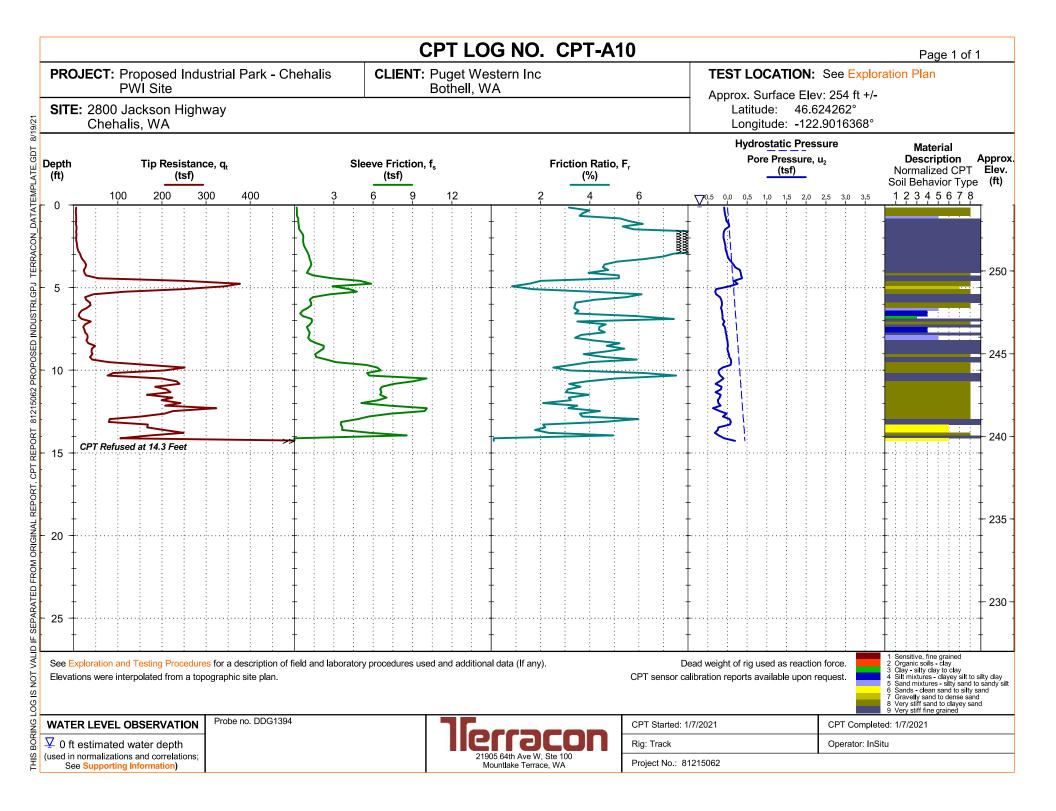


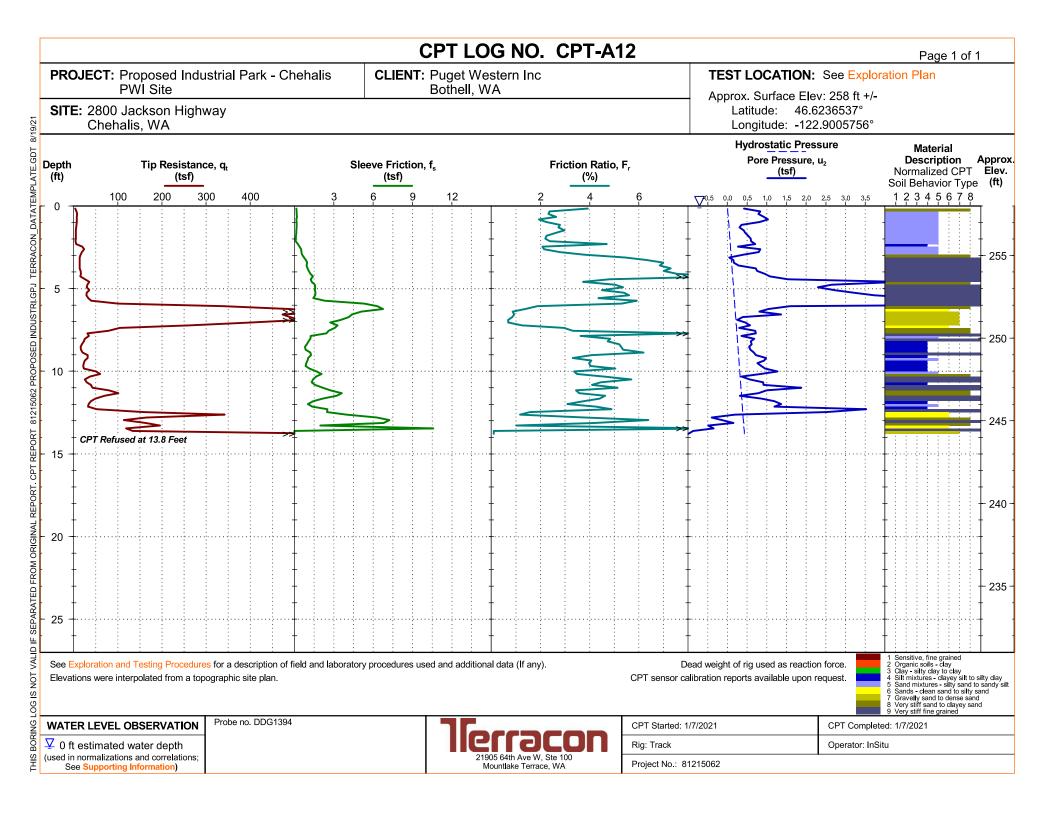


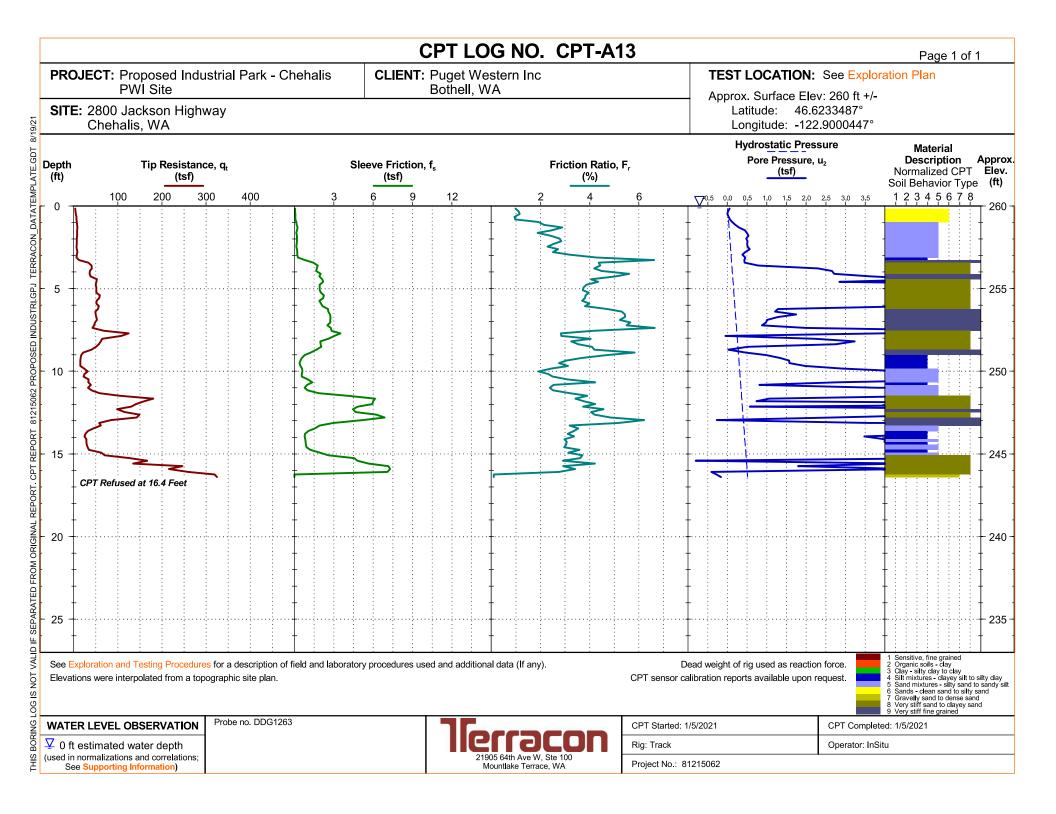


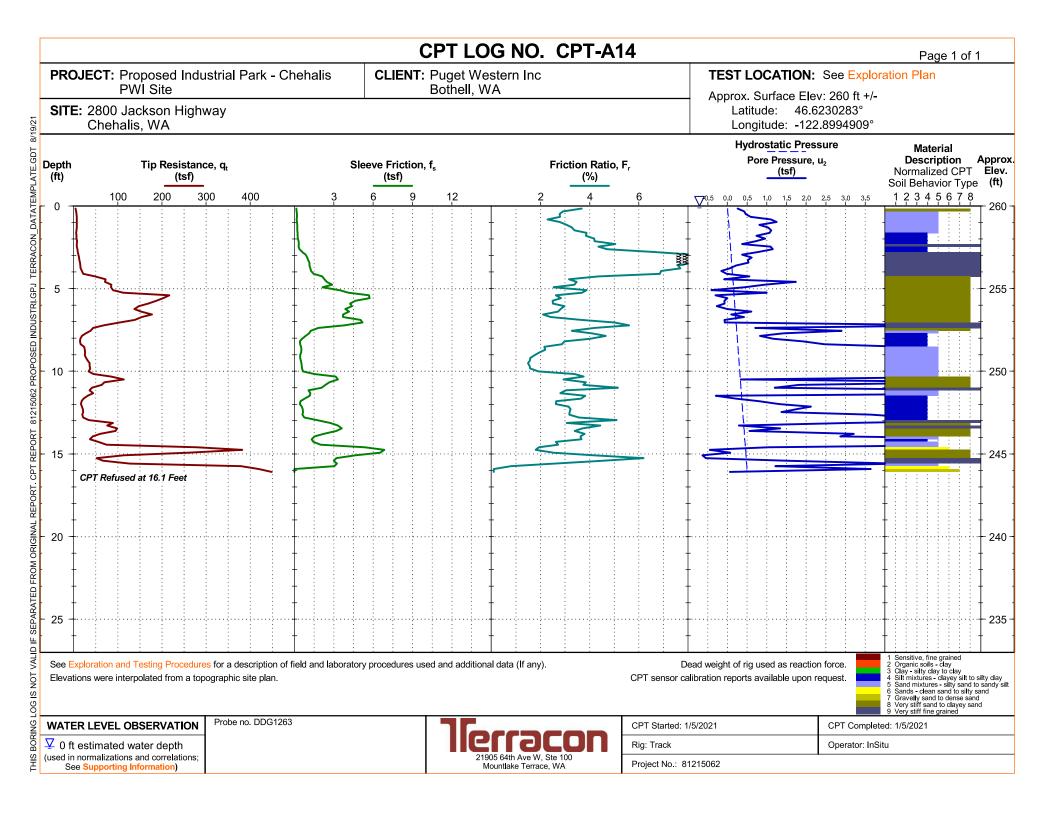


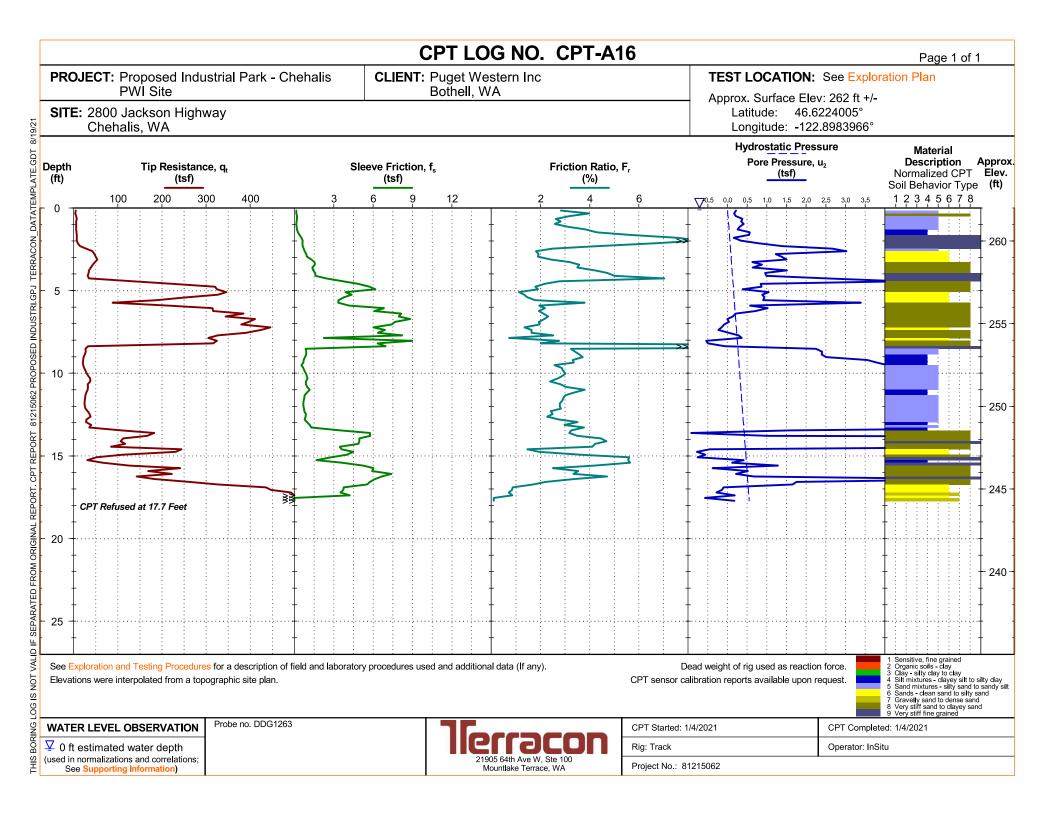
CPT LOG NO. CPT-A09														Page 2															
PRO	JECT: P		CLI	CLIENT: Puget Western Inc Bothell, WA										TEST LOCATION: See Exploration Plan															
SITE	P 2800 Ja Chehal		lighwa	у						Bothe	ell, VV	Α								Latit	ude:	4	6.62	: 252 24566 9021	58°		jacent	Test:	B-A09
Depth (ft)		Tip Resist (tsi		t			Sleeve	e Frictio (tsf)	on, f _s			I	Friction (ı Ratio, %)	F,					ostat ore Pro (1					No	Desci ormali:	terial ription ized CP avior Ty	Do Material	Description Bla (ft
T	100	200	300	400		3	6	g)	12		2		4	6		-0.8	5 0.0	0,5	1.0	1.5 2	2.0 2.	5 3.0	3.5			567	8 4	22
- 30 -					+ + +						+				• • • • • • • • • • • • • • • • • • •	,	-		* * * * * * * * * * * * * * * * * * *						+ + 				
- 35 -	- -				+ + + +						+ + +				• • • • • • • • • • • • • • • • • • •		-		*						+ + +				- 22
40 -	- -				+						+ + + +						+ - -		· · · · · · · · · · · · · · · · · · ·										- 21
+					+++++++++++++++++++++++++++++++++++++++						+ + +				4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		-		* * * * * * * * * * * * * *	, , , , , , , , , , , , , , , , , , ,	• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		• • • • • •			- 21
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	xploration and ions were inte		n a topogr	aphic site p	plan.		laboratory	y proced	ures us	sed and a	ditiona	l data (lf a	iny).			CPT se	D	ead v	veight	of rig	used	as rea	action	letails. force. quest.		1 Se 2 Or 3 Cla 4 Sil 5 Sa 6 Sa 7 Gr 8 Ve	ensitive, fine rganic soils lay - silty cla It mixtures - and mixtures ands - clean ravelly sand ery stiff sand ery stiff fine	ay to clay clayey si s - silty sa sand to s to dense d to claye	alty sand
	R LEVEL C			robe no. D	DG1394							٢٢٦				CPT Sta		1/7/20	21				\square		-	eted: 1/	7/2021		
(used in	estimated with the second seco	s and correlat	ions;								2190	05 64th Ave Duntlake Te	W, Ste 1	00		Rig: Tra Project		12150	062					Opera	ator: In	Situ			

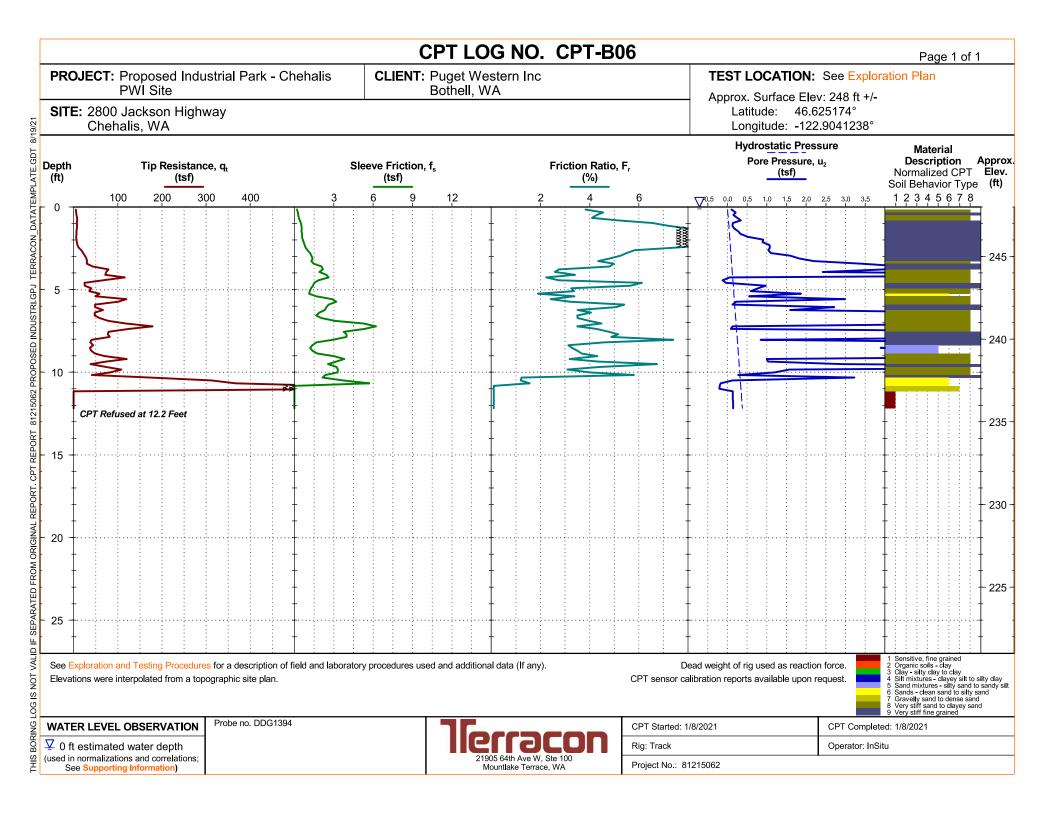


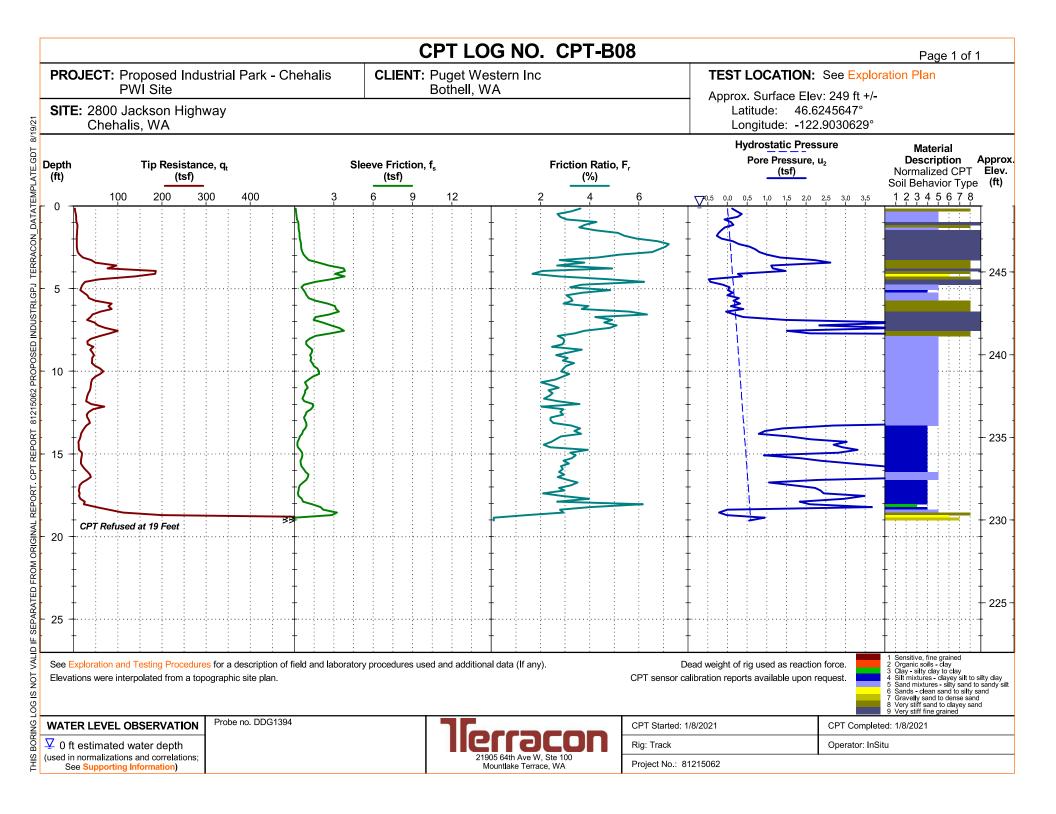


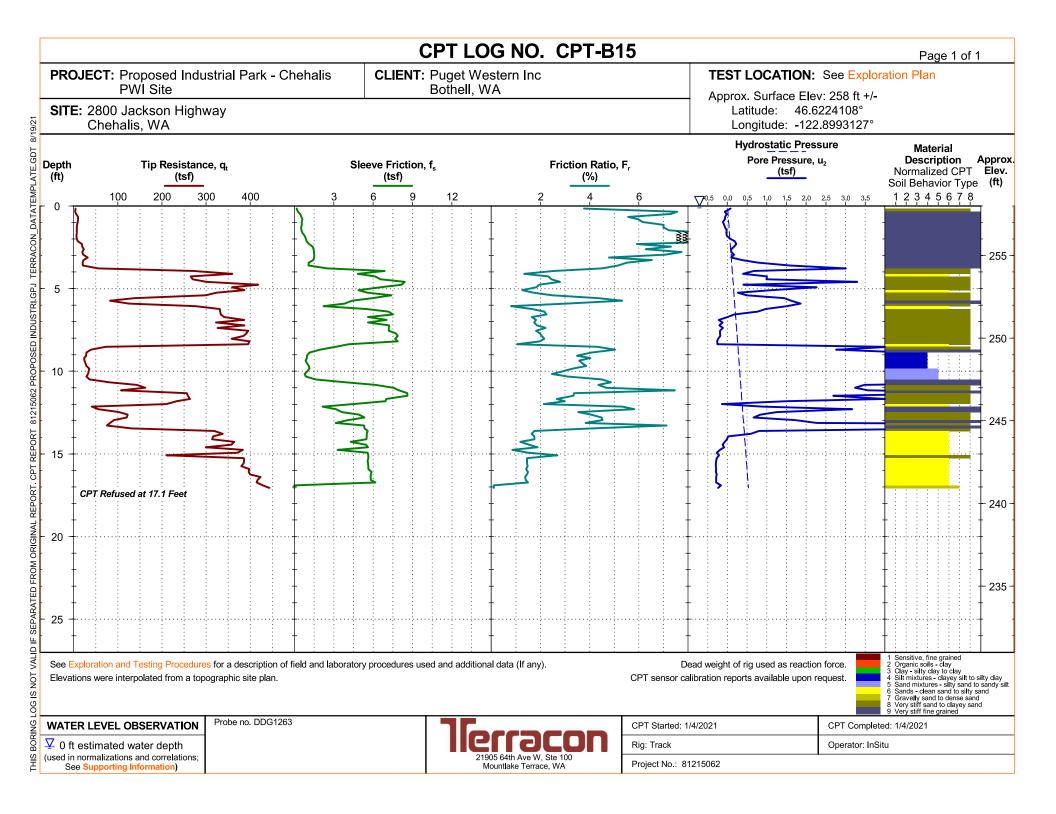


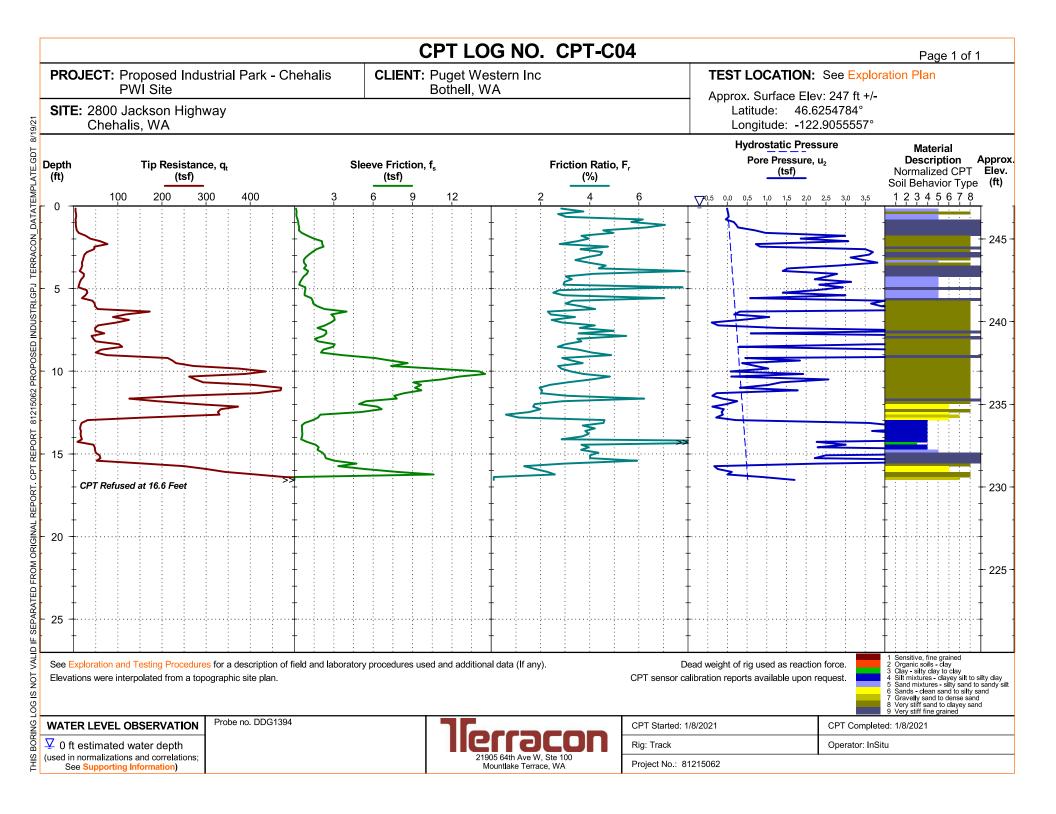


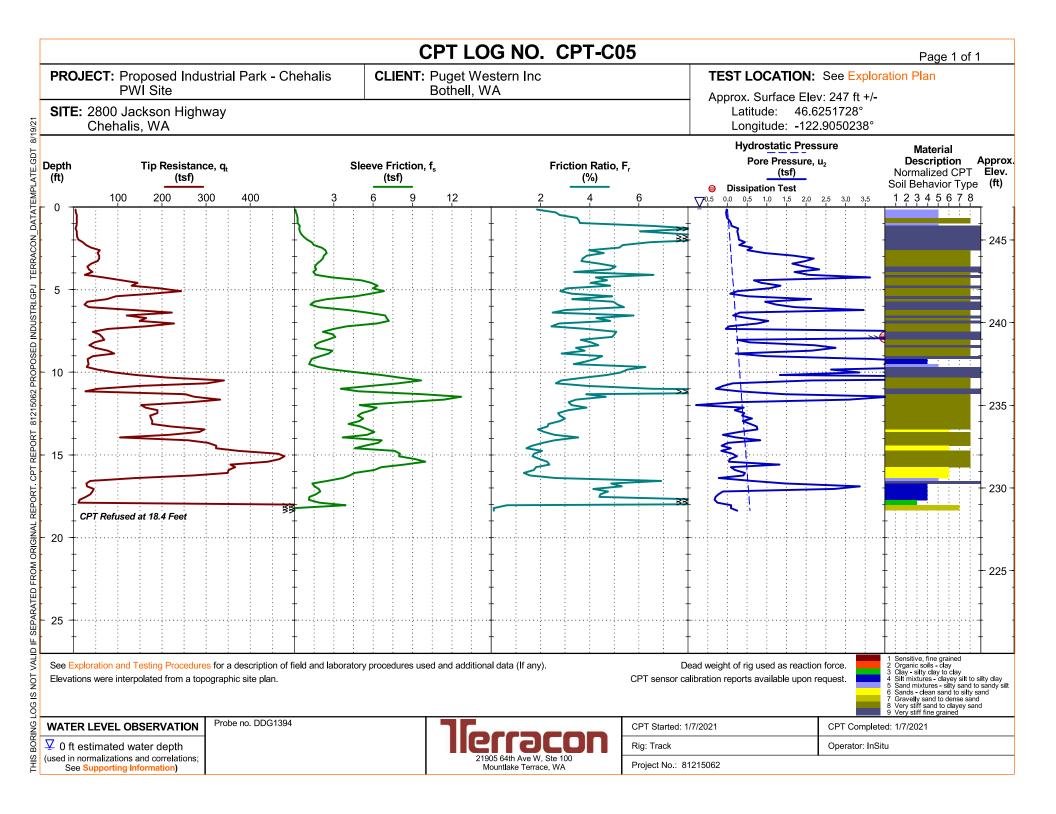


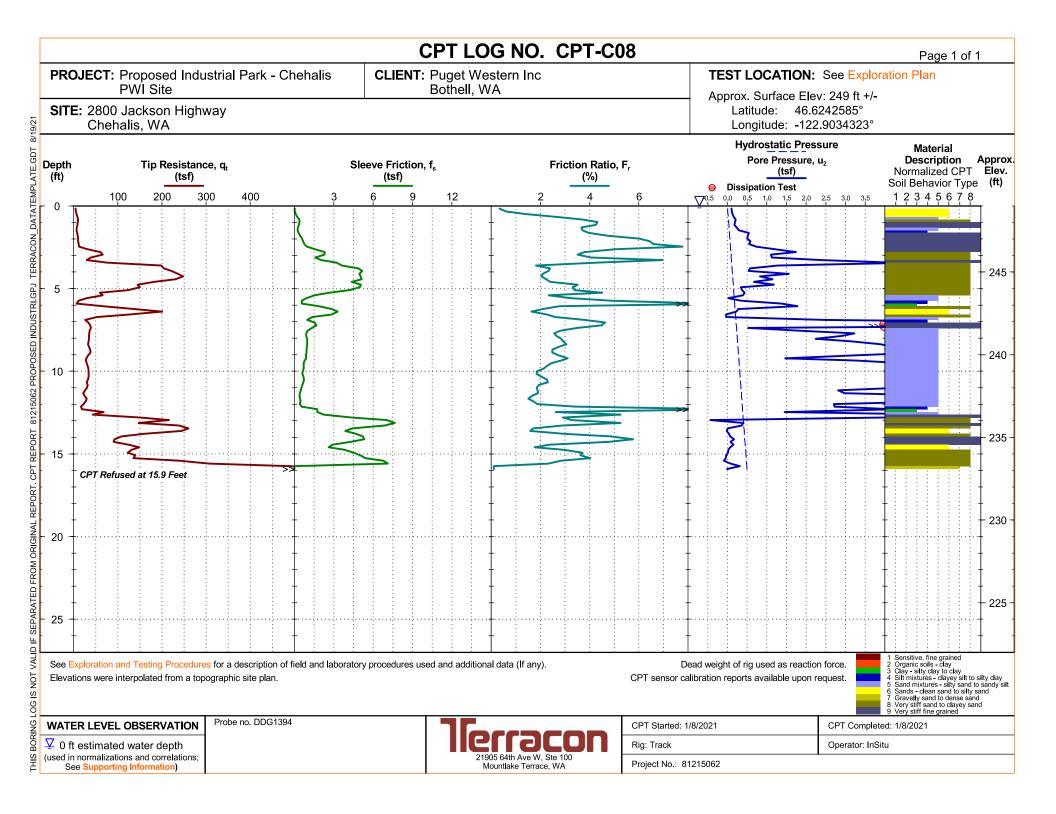


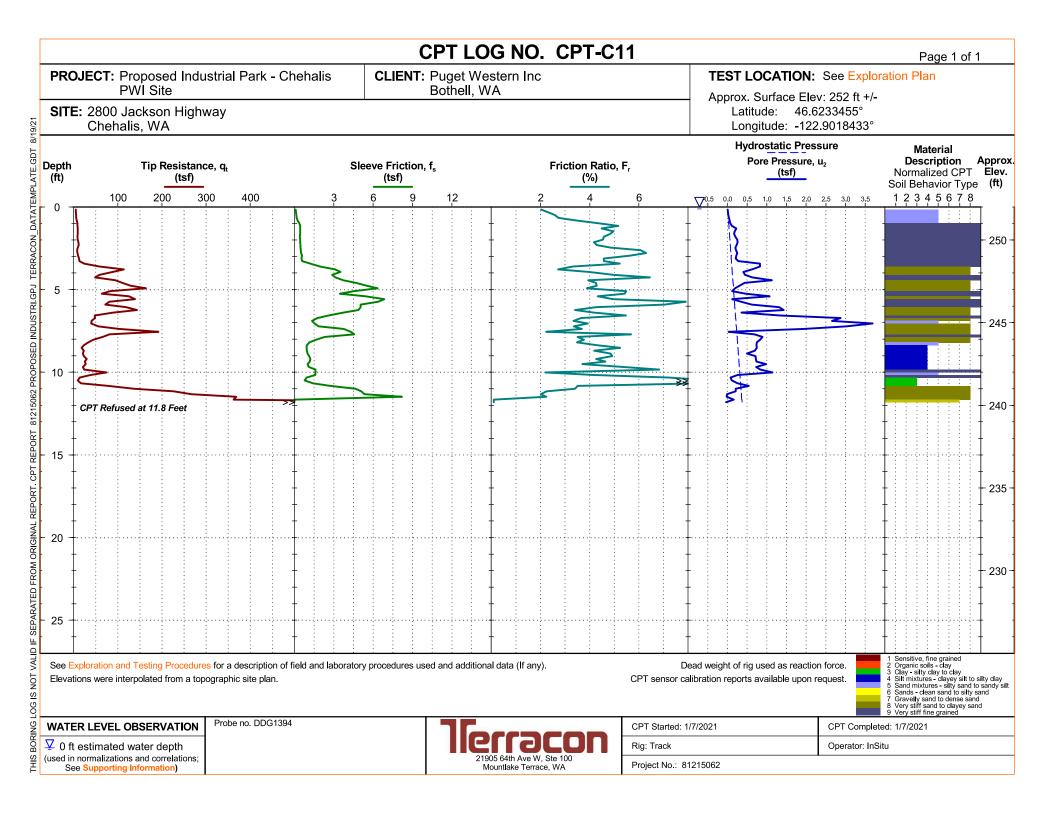


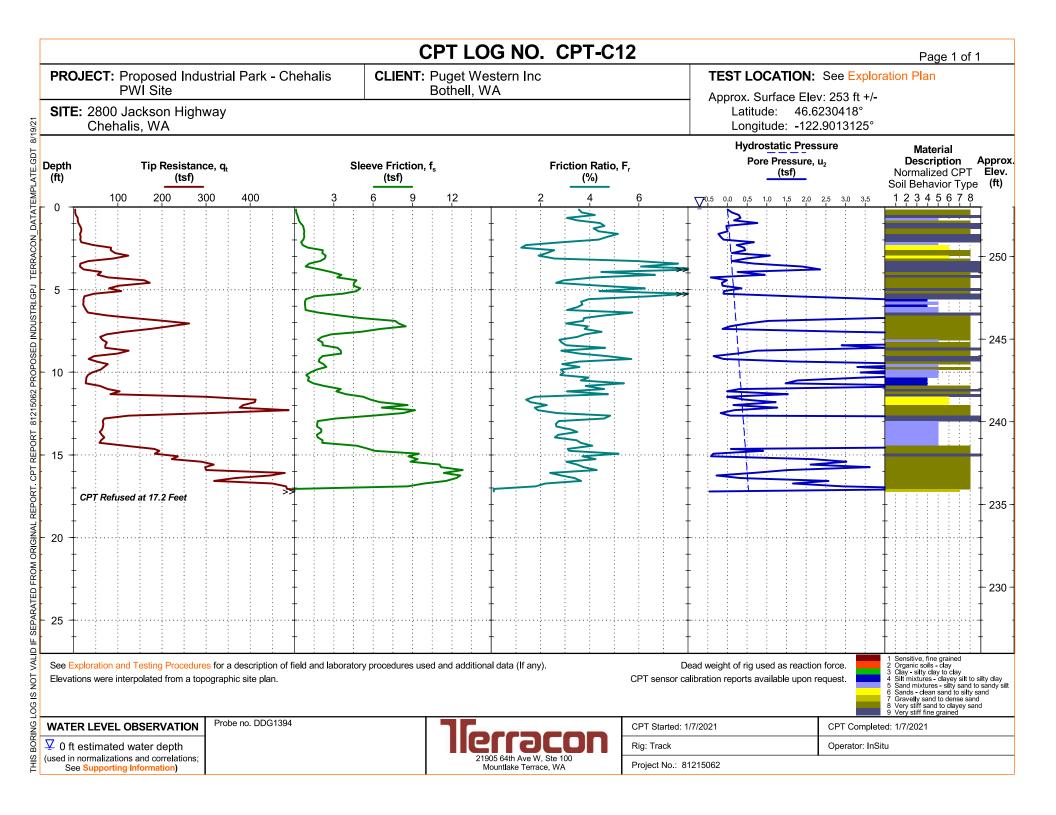


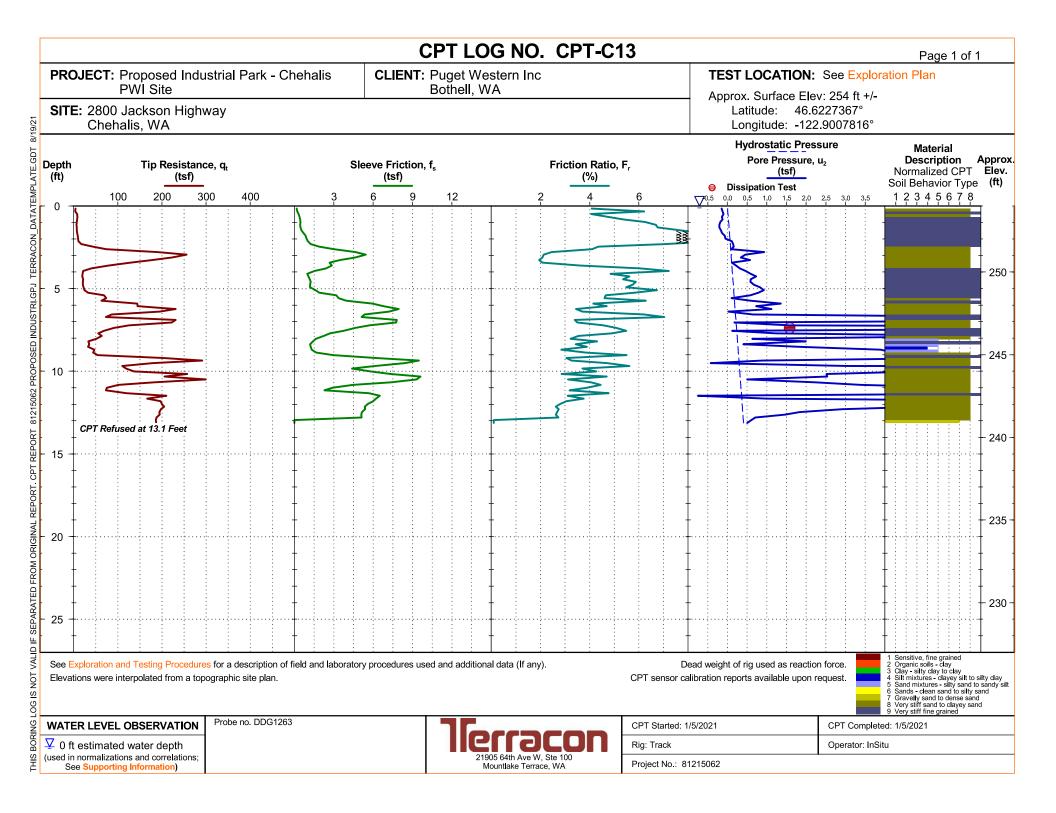


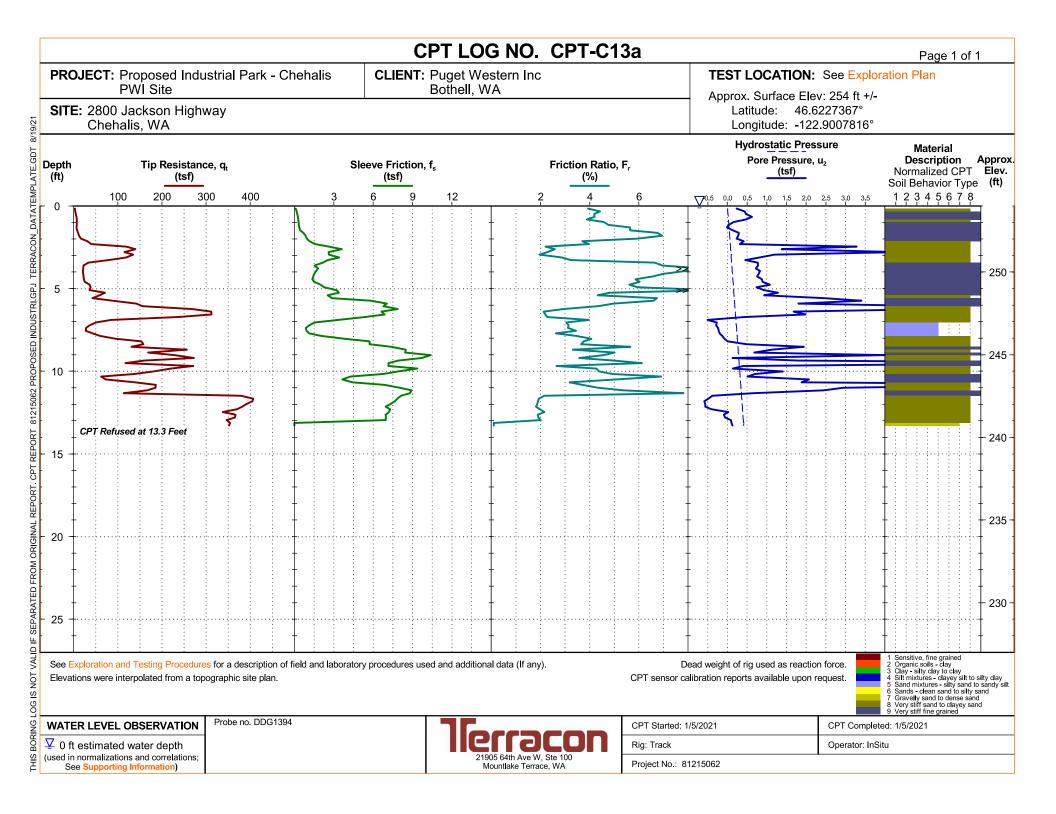


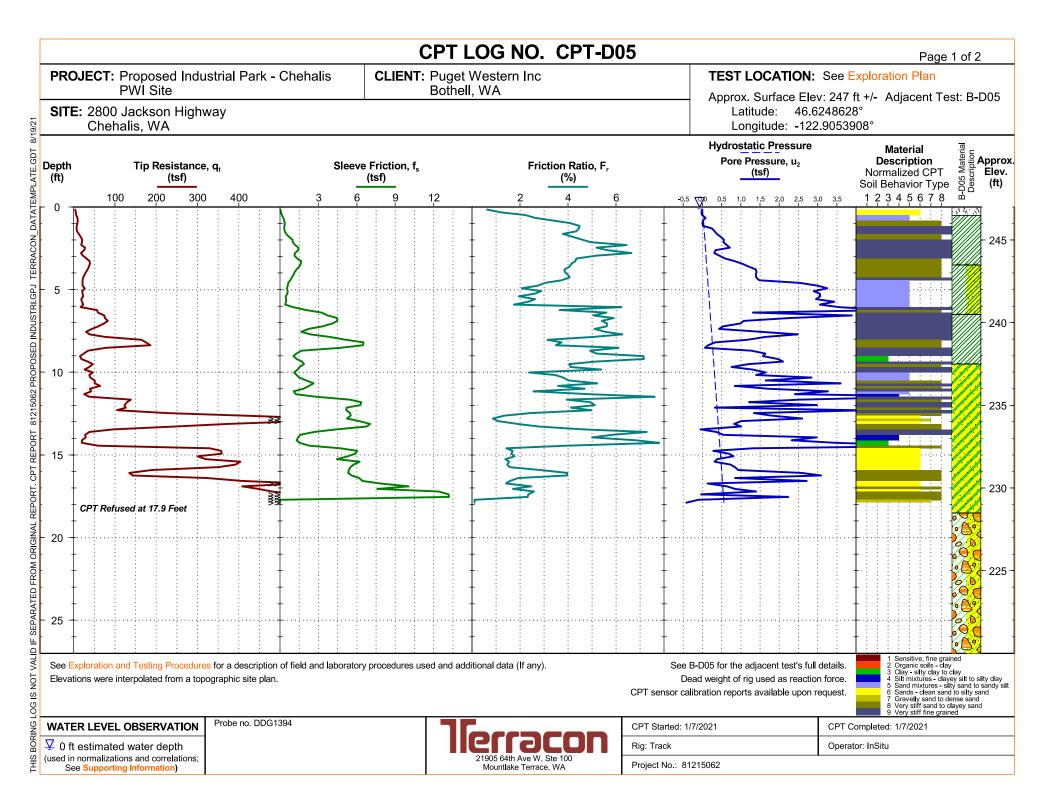




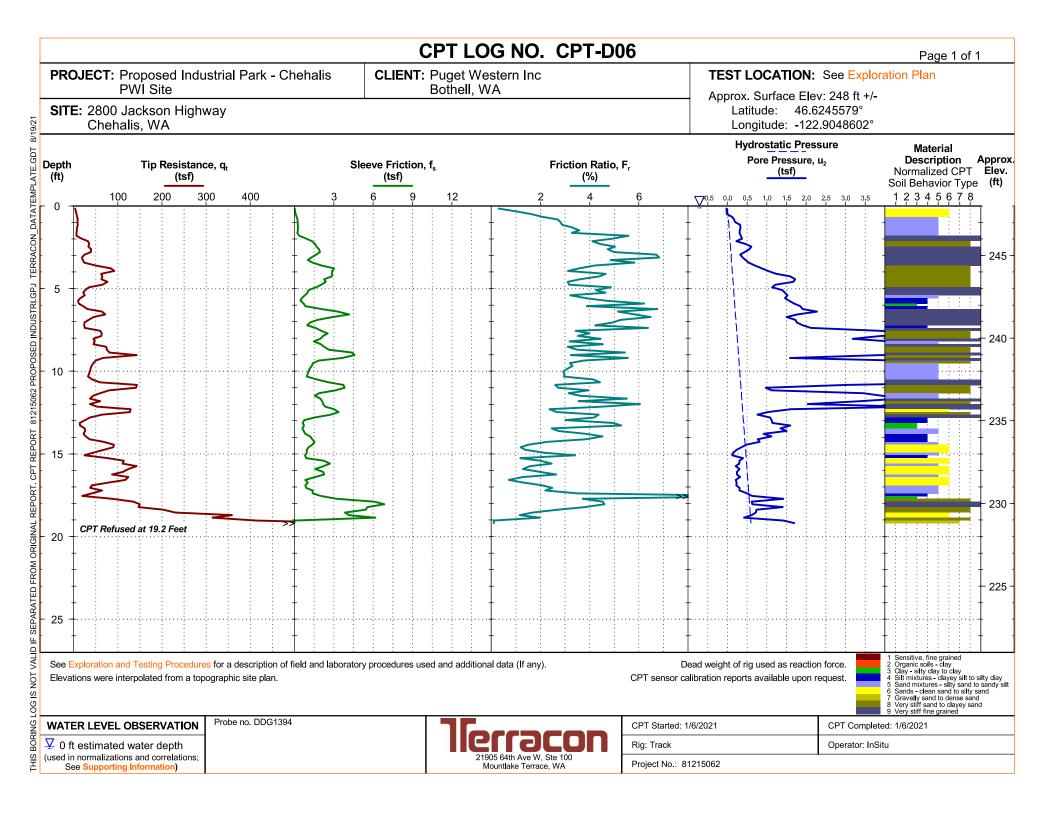


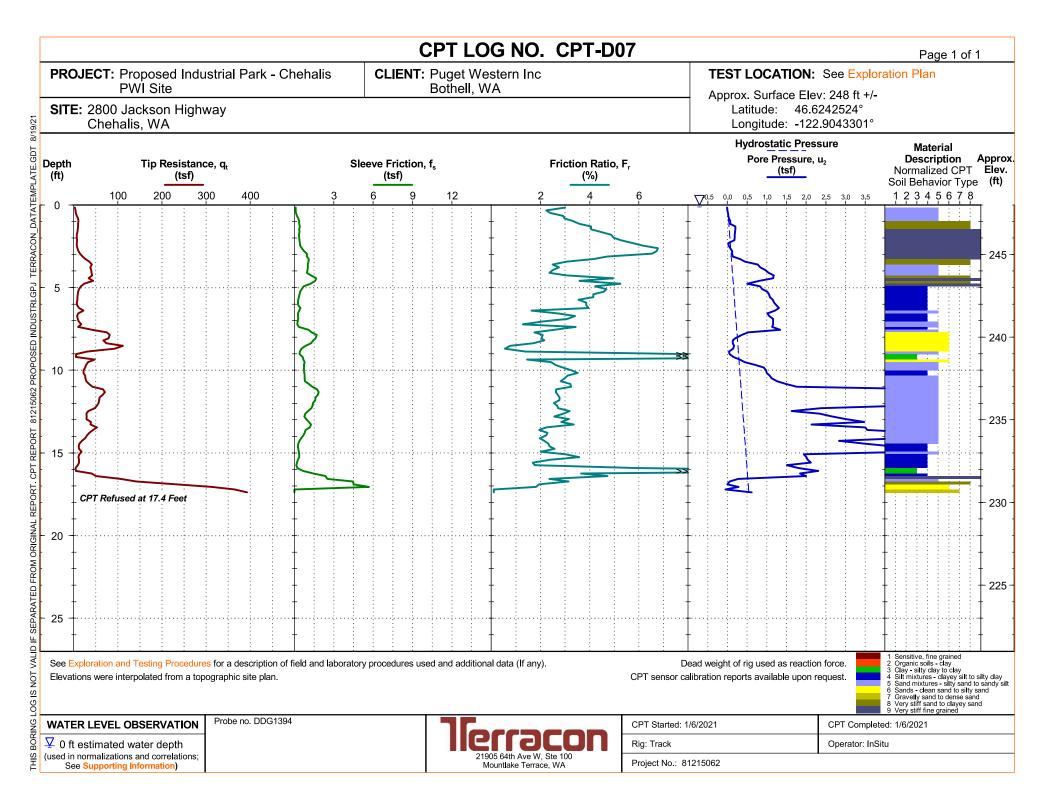


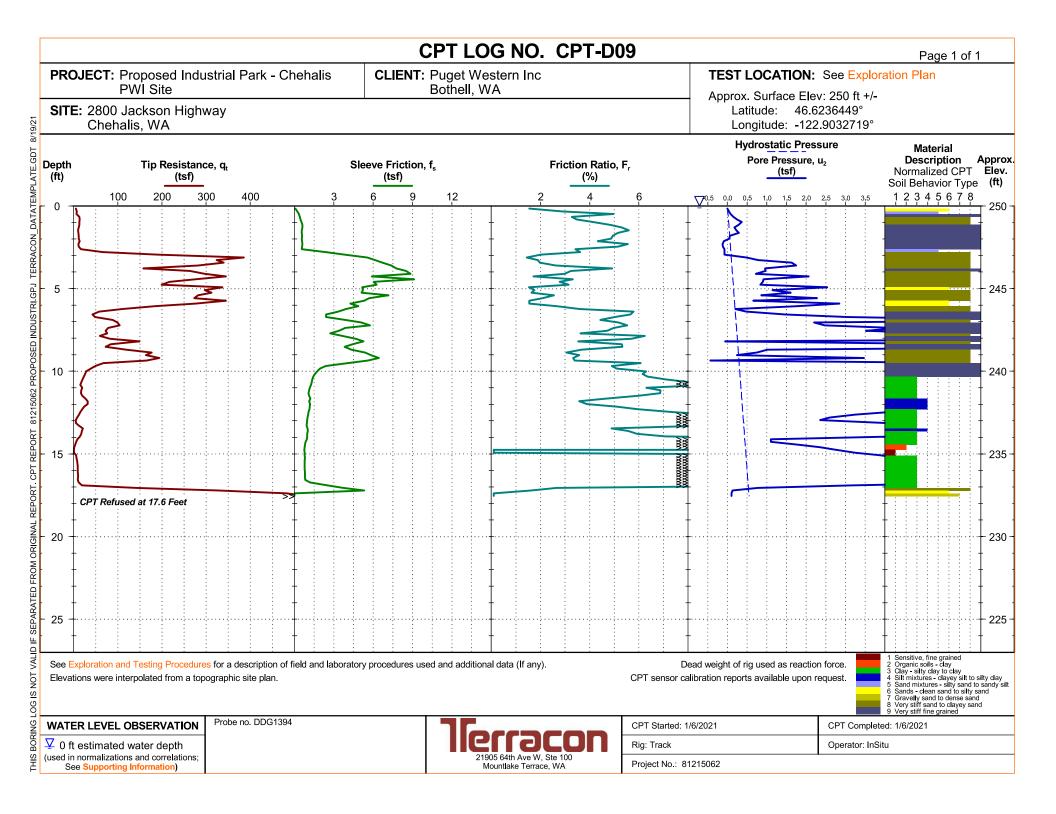


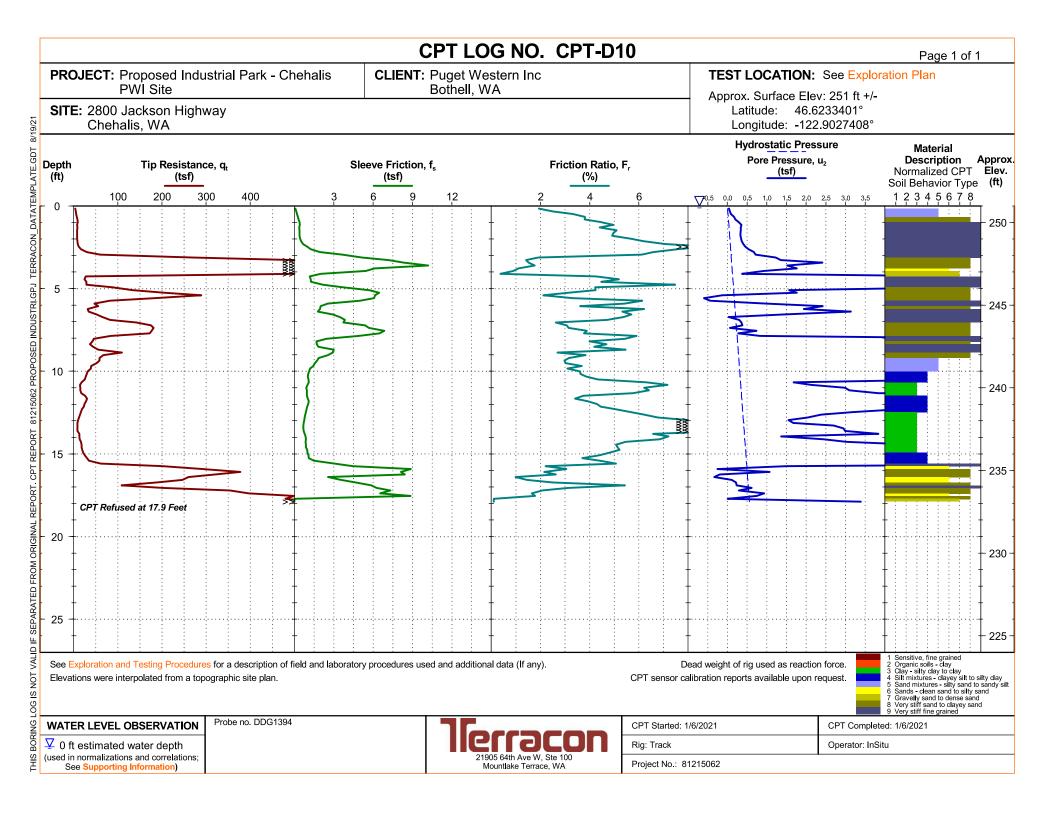


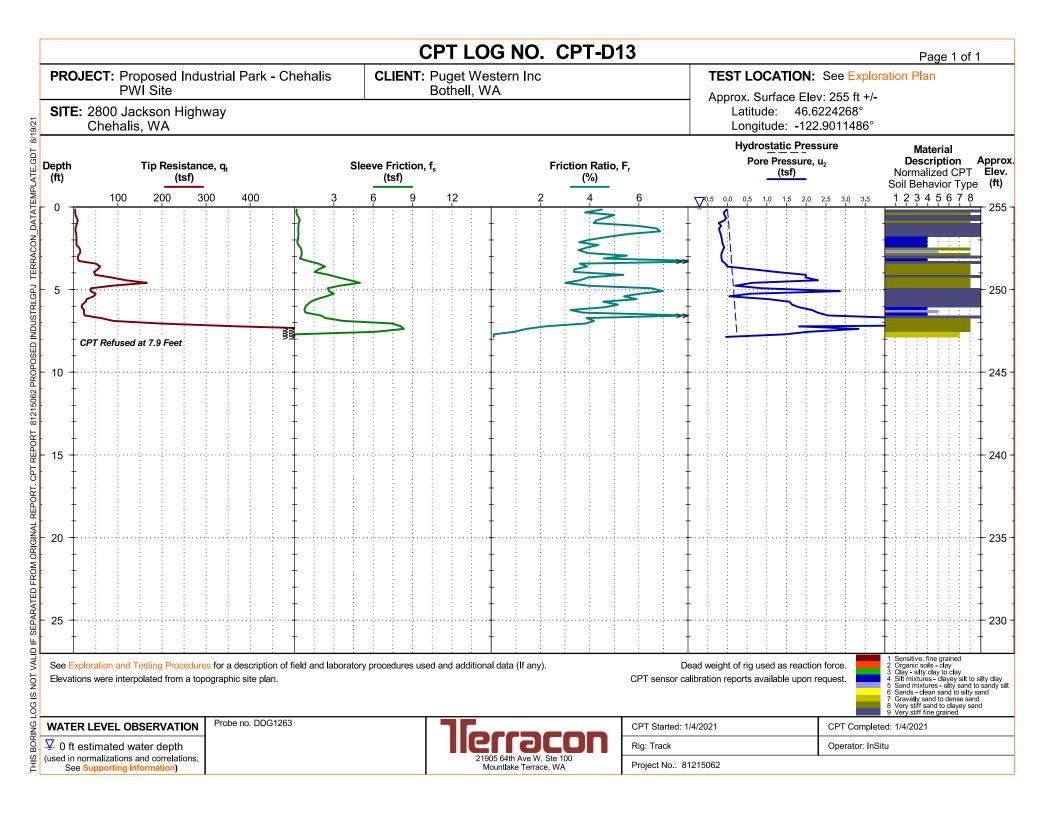
CPT LOG NO. CPT-D05														Page 2 of 2																	
PRO	JECT: P		Indust	rial Park	< - Ch	ehalis		CLIE	CLIENT: Puget Western Inc Bothell, WA										TEST LOCATION: See Exploration Plan Approx. Surface Elev: 247 ft +/- Adjacent Test: B-D05												
SITE	2800 Ja Chehal		Highwa	у						Bothe	ell, VV	Α					ŀ	l	Latit	ude:	46	.6248	47 ft 3628° 5390	D	djacent	Test:	B-D05				
Depth (ft)		Tip Resis (ts		t				Frictio (tsf)	n, f _s			Fri	iction Rat (%)	io, F _r			ŀ		re Pr	ic Pre essure tsf)	essur e, u ₂	9	,	Des Norma	laterial scription alized CF havior Ty	ידי <u>Σ</u>	lescription BIG (ft				
-	100	200	300	400		3	6	9		12		2	4	6		-0.5	0.0	0.5	1.0	1.5 2.0	0 2.5	3.0 3			4567		22 				
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	; ; (ploration and ons were inte		n a topogr	aphic site p	lan.	eld and la	boratory	rocedu	ires use	ed and a	dditiona	: : I data (If any	; <u>;</u>).	: :	: CPT se	De	ad we	eight	of rig	used a	: test's f as reac ble upo	tion for	ce.	1 2 3 4 5 6 7 8	Sensitive, finn Organic soils Clay - silty cla Silt mixtures Sand mixture Sands - clean Gravelly sand Very stiff san Very stiff fine	ay to clay - clayey sil s - silty sa sand to si d to dense d to clavey	ity sand sand				
	R LEVEL O			Probe no. DE	DG1394						6	611				arted: 1/	7/202	21							1/7/2021						
used in	estimated v normalizations e Supporting	s and correla	h tions;								2190	05 64th Ave W buntlake Terra	, Ste 100		Rig: Tra Project	ack No.: 81	21506	62				0	perator	r: InSitu							

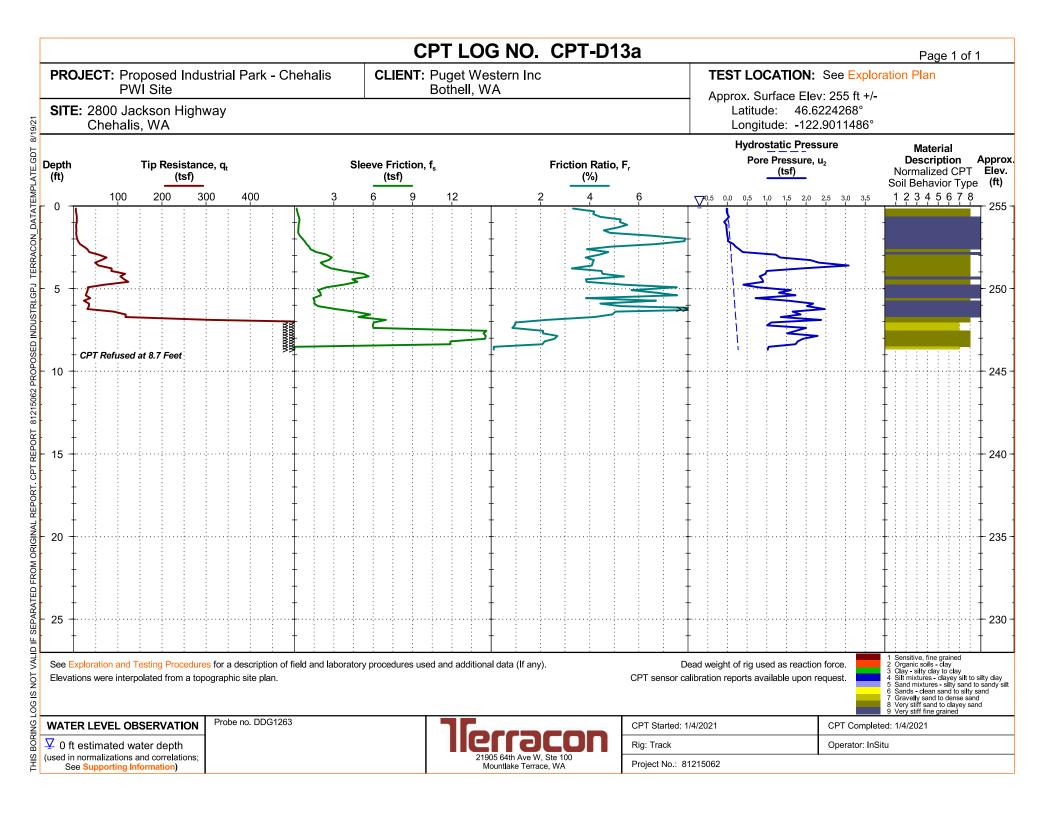


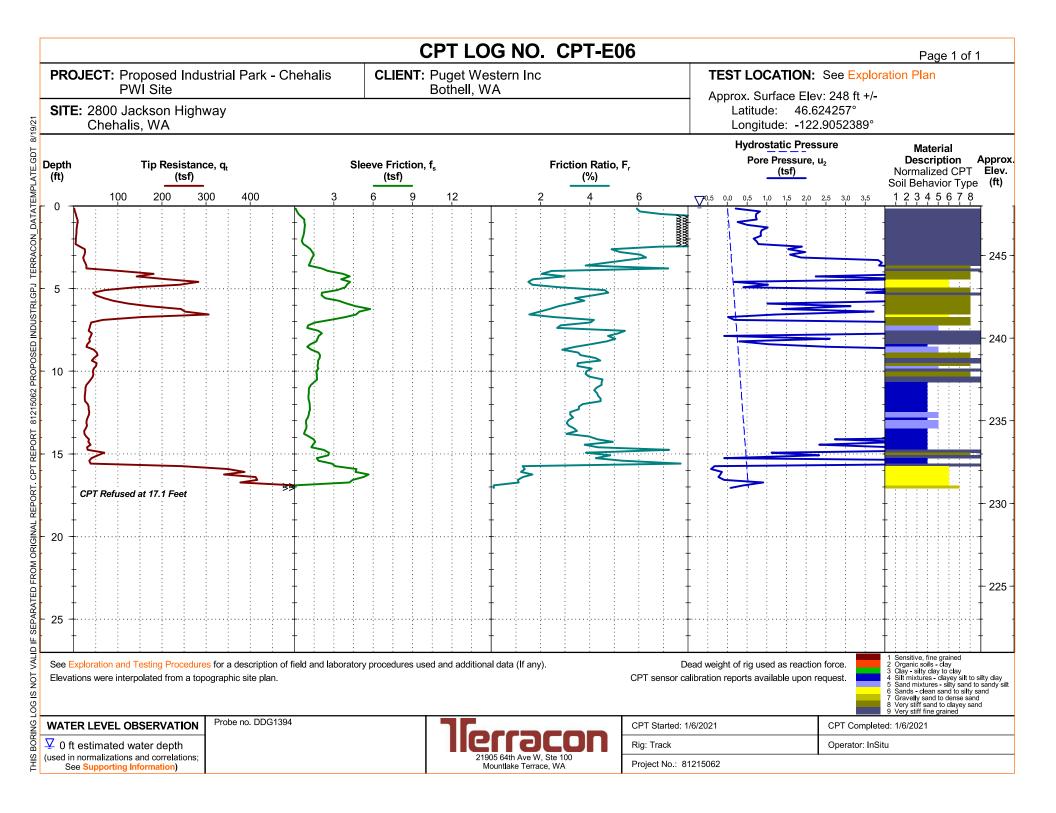


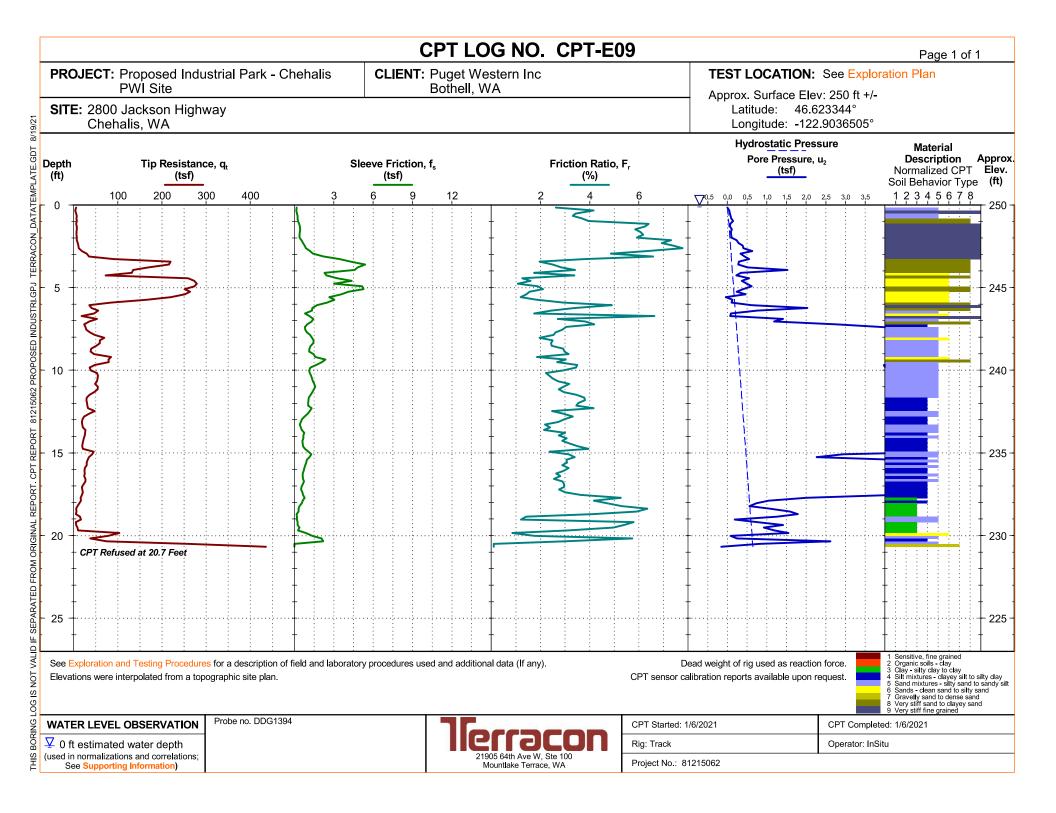


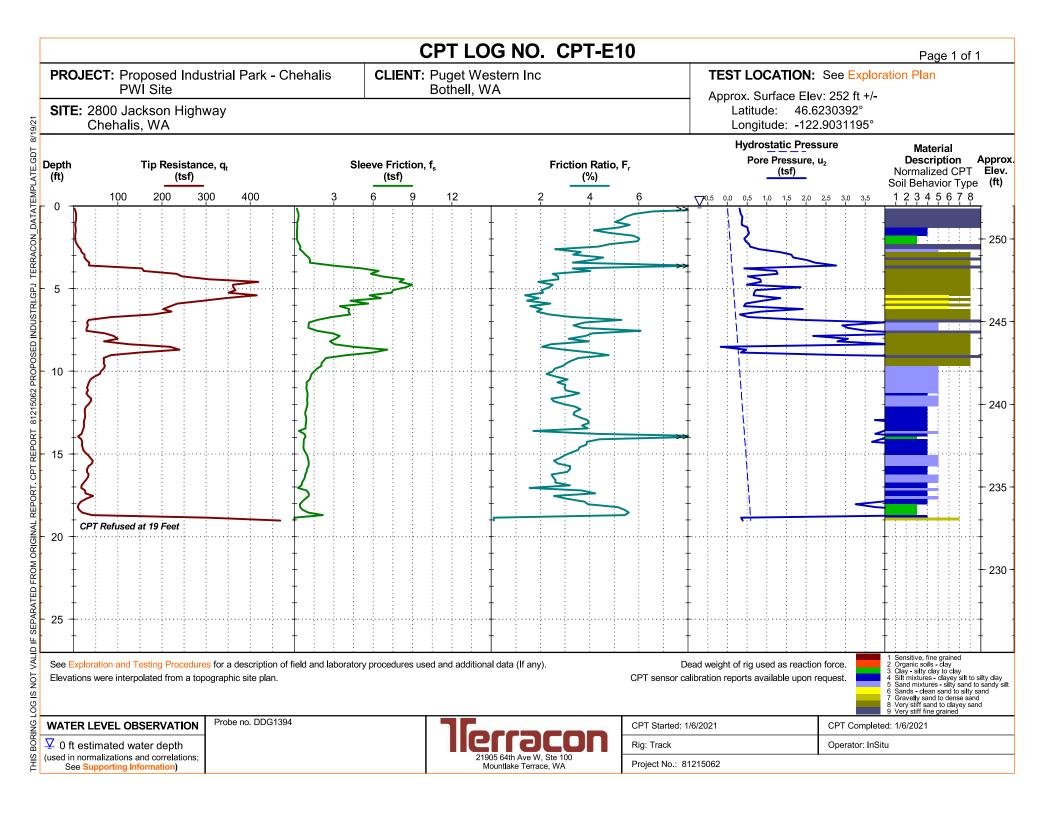


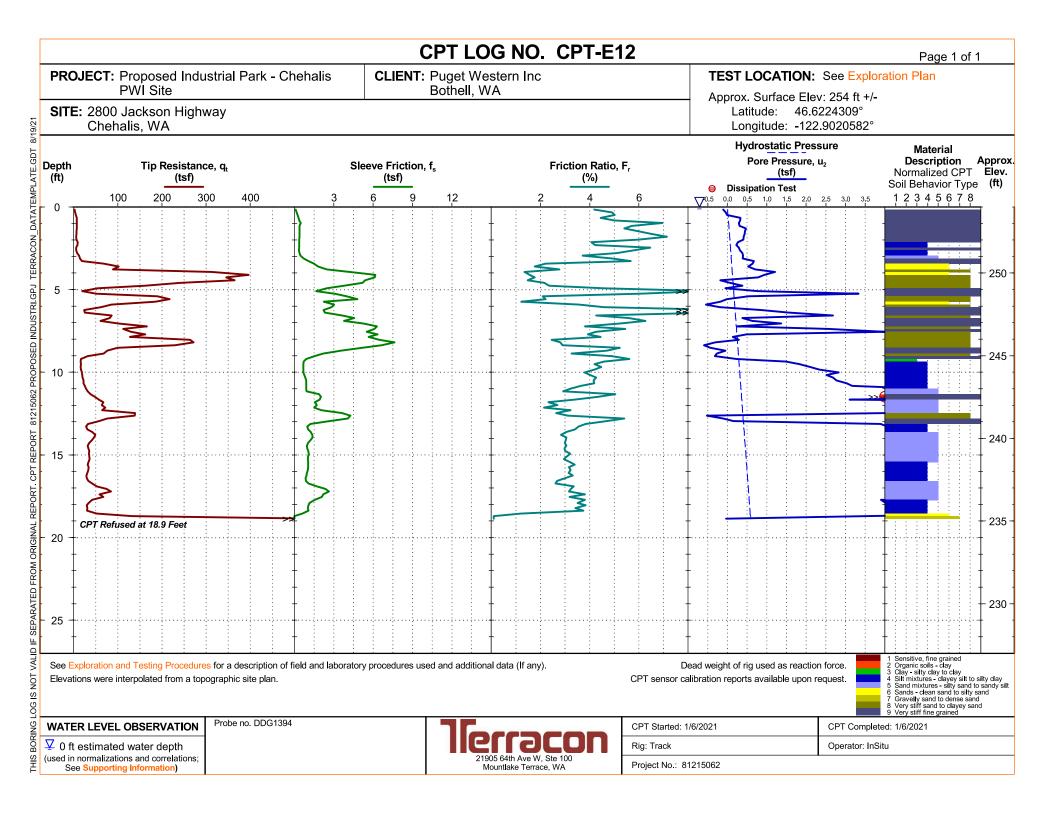


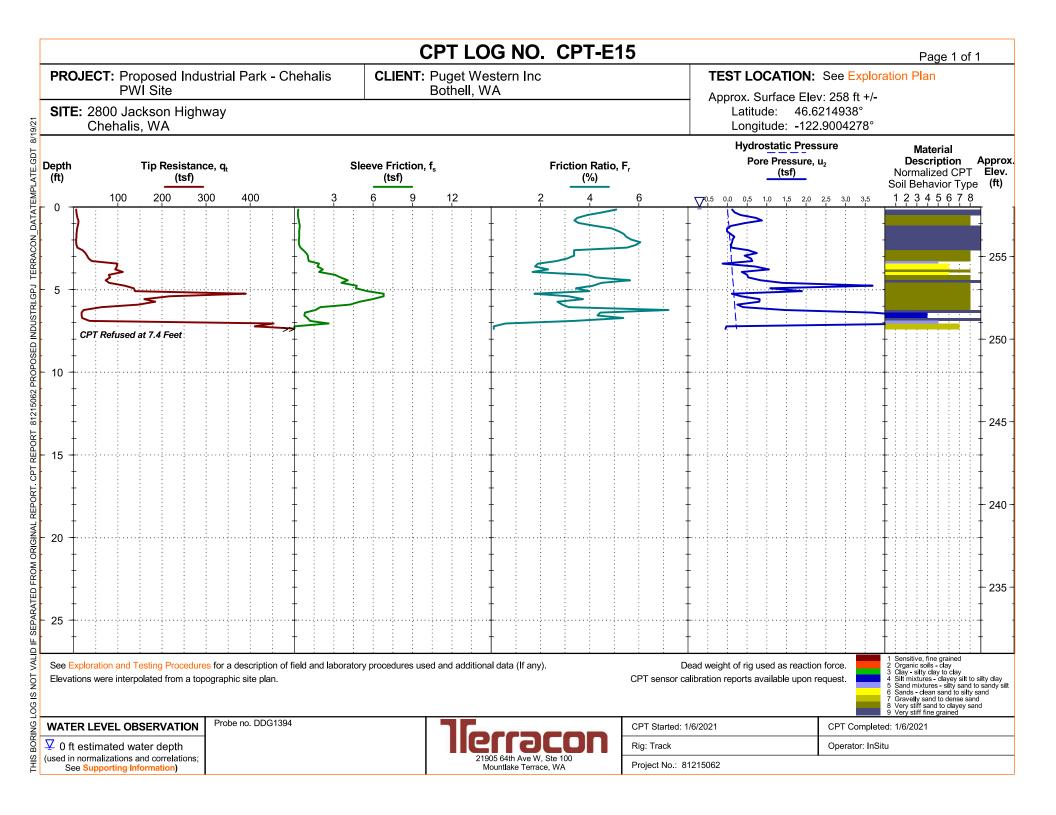


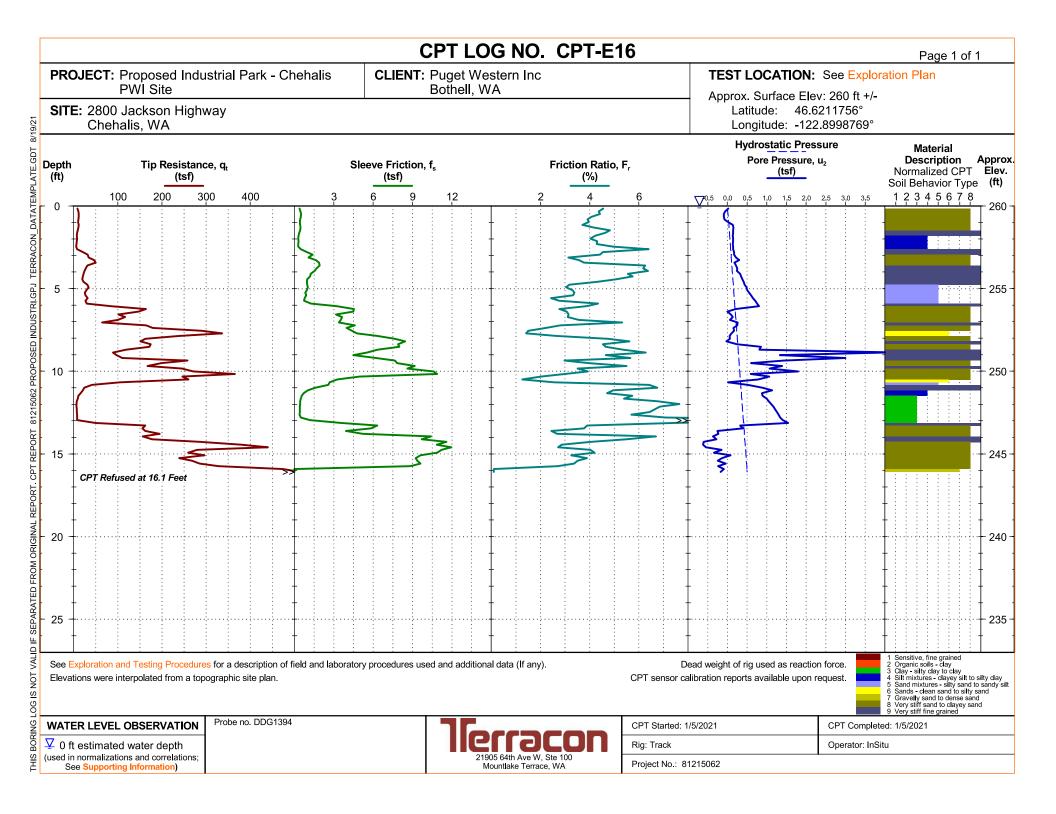














February 16, 2021 HWA Project No. 2012-045-23 Task 21

Terracon

21905 64th Avenue West, Suite 100 Mountlake Terrace, Washington 98043

Attention: Mr. Pete Palmerson, P.E.

Subject: Materials Laboratory Report Centralia Costco Client Project No. 81205225

Dear Mr. Palmerson;

In accordance with your request, HWA GeoSciences Inc. (HWA) performed laboratory testing for the above referenced project. Herein we present the results of our laboratory analyses, which are summarized on the attached reports. The laboratory testing program was performed in general accordance with your instructions and appropriate ASTM Standards as outlined below.

SAMPLE DESCRIPTION: The subject samples were delivered to our laboratory on January 11 by Terracon personnel. The samples were delivered in 2.8-inch diameter Shelby tubes and were designated with the exploration number and depth. Each sample was extruded, photographed, and classified for engineering purposes using visual-manual methods. The descriptions may be found on the attached Figures. Photographic Shelby tube logs appear on Figures 8 through 11.

LIQUID LIMIT, PLASTIC LIMIT, AND PLASTICITY INDEX OF SOILS (ATTERBERG LIMITS): Samples were tested using method ASTM D 4318, multi-point method. The results are reported on the attached Liquid Limit, Plastic Limit, and Plasticity Index report, Figure 2.

MOISTURE CONTENT, ASH, AND ORGANIC MATTER: Selected samples were tested in general accordance with method ASTM D 2974, using moisture content method 'A' (oven dried at 105° C) and ash content method 'C' (burned at 440° C). The test results are summarized in the attached Summary of Material Properties, Figure 1.

ONE DIMENSIONAL CONSOLIDATION PROPERTIES OF SOIL: The consolidation properties of selected soil samples were measured in general accordance with ASTM D 2435. Saturation was maintained by inundation of the sample throughout the test. The samples were subjected to increasing increments of total stress, the duration of which was selected to exceed the time required for completion of primary consolidation as defined in the Standard, Method B. Loads on sample B-B02A were maintained for a period of 24-hours to collect sufficient data for use in the estimation of secondary consolidation. Unloading of the samples was carried out incrementally. The test results are presented on the attached Consolidation Test Report, Figures 3 through 6. Secondary compression data is presented on Figures 7a through 7i.

CLOSURE: Experience has shown that test values on soil and other natural materials vary with each representative sample. As such, HWA has no knowledge as to the extent and quantity of material the tested samples may represent. HWA also makes no warranty as to how representative either the samples tested or the test results obtained are to actual field conditions. It is a well-established fact that sampling methods present varying degrees of disturbance that affect sample representativeness.

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No copy should be made of this report except in its entirety.

We appreciate the opportunity to provide laboratory testing services on this project. Should you have any questions or comments, or if we may be of further service, please call.

HWA GEOSCIENCES INC.

Daniel Walton Materials Laboratory Supervisor

Steven E. Greene, L.G., L.E.G. Principal Engineering Geologist Vice President

Attachments:

Figure 1Summary of Material PropertiesFigure 2Liquid Limit, Plastic Limit and Plasticity Index of SoilsFigures 3-7iConsolidation Test ReportFigures 8-11Shelby Tube Extrusion Log

		H			WITY		ATTERBERG LIMITS (%)					NO	
EXPLORATION DESIGNATION	TOP DEPTH (feet)	BOTTOM DEP1 (feet)	MOISTURE CONTENT (%)	ORGANIC CONTENT (%)	SPECIFIC GRA	LL	PL	PI	% GRAVEL	% SAND	% FINES	ASTM SOIL CLASSIFICATION	SAMPLE DESCRIPTION
B-B02A,	15.0	17.3	106.9	15.0		149	76	73				ОН	Dark grayish brown, organic SILT
B-E13,	2.0	4.2	35.7			75	32	43				СН	Light olive brown, fat CLAY
B-P03,	33.0	34.4	50.5			110	52	58				МН	Gray, elastic SILT
B-P06,	32.0	34.2	25.5			45	36	9				ML	Dark gray, sandy SILT

Notes: 1. This table summarizes information presented elsewhere in the report and should be used in conjunction with the report test, other graphs and tables, and the exploration logs. 2. The soil classifications in this table are based on ASTM D2487 and D2488 as applicable.



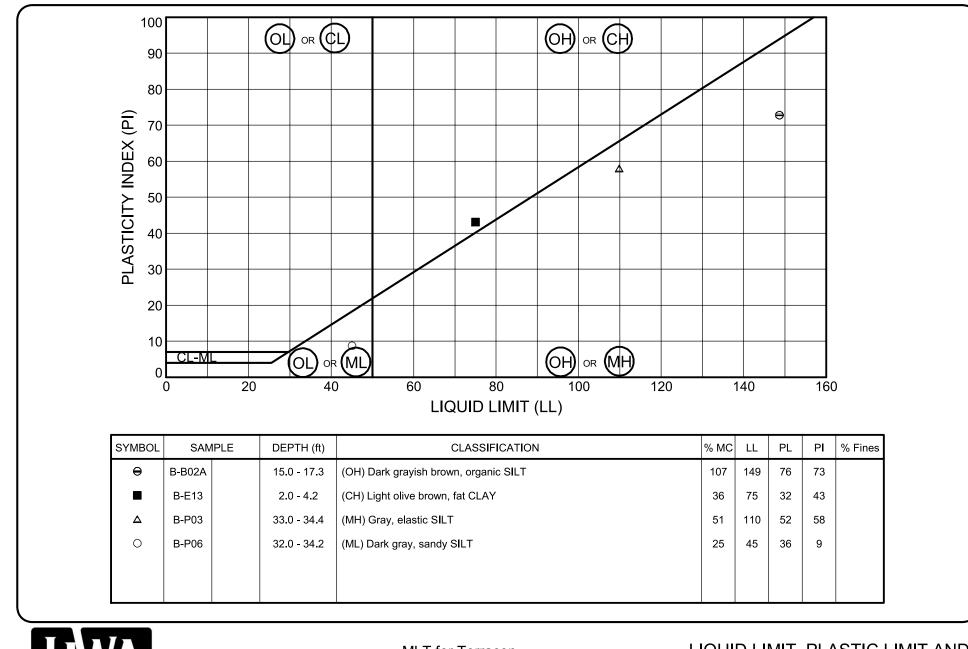
MLT for Terracon Centralia Costco Client Project No. 81205225

SUMMARY OF MATERIAL PROPERTIES

PAGE: 1 of 1

PROJECT NO.: 2012-045 T21 FIG

FIGURE: 1



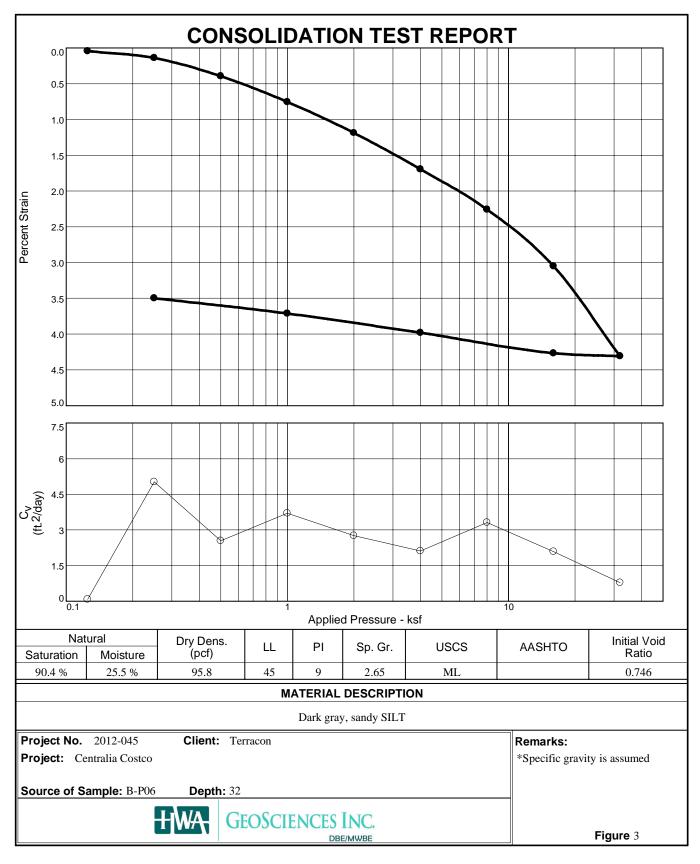


MLT for Terracon Centralia Costco Client Project No. 81205225 LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS METHOD ASTM D4318

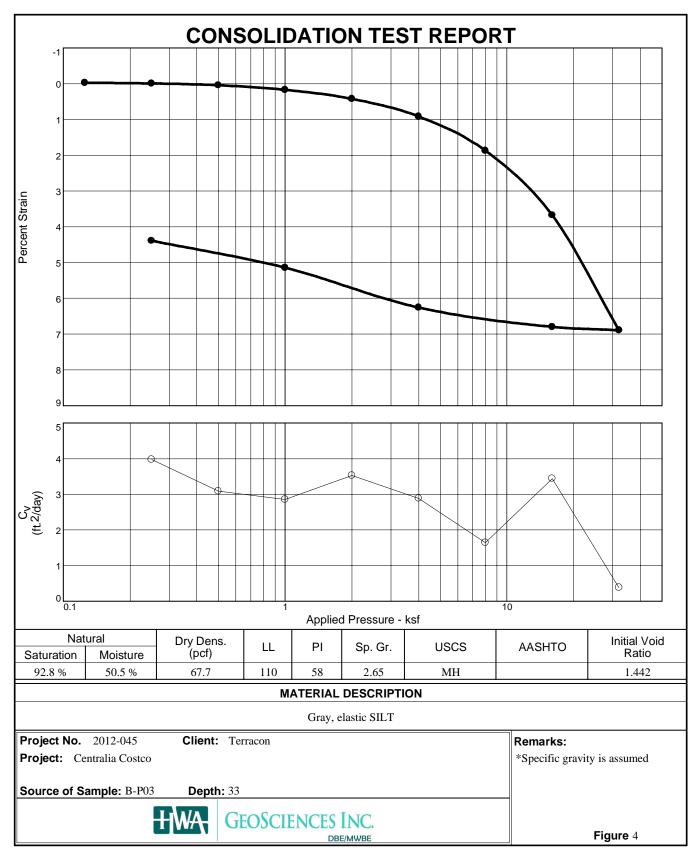
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HWAATTB ORG (LL TO 160) 2012-045 T21.GPJ 2/15/21

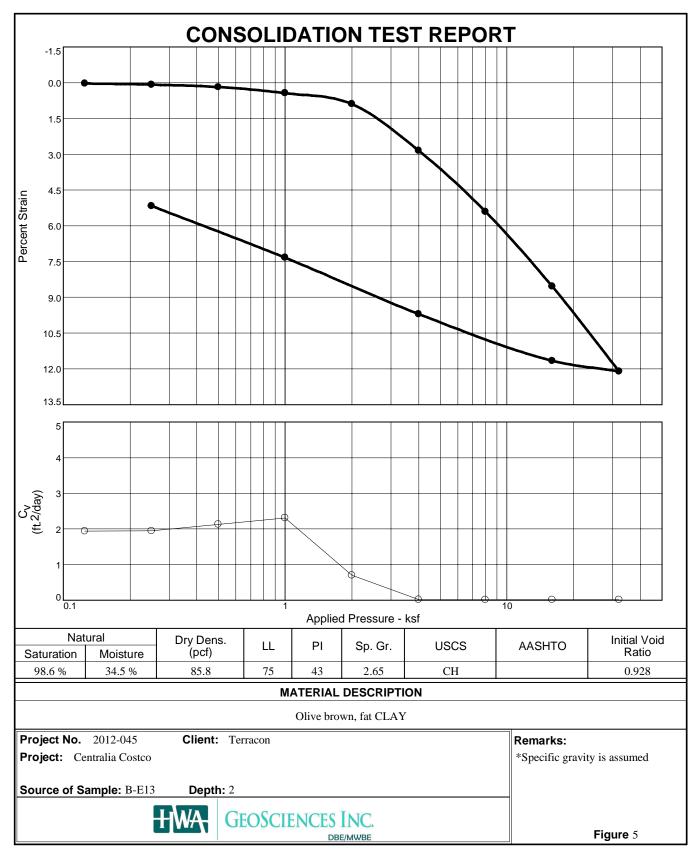
PROJECT NO.: 2012-045 T21 FIGURE:



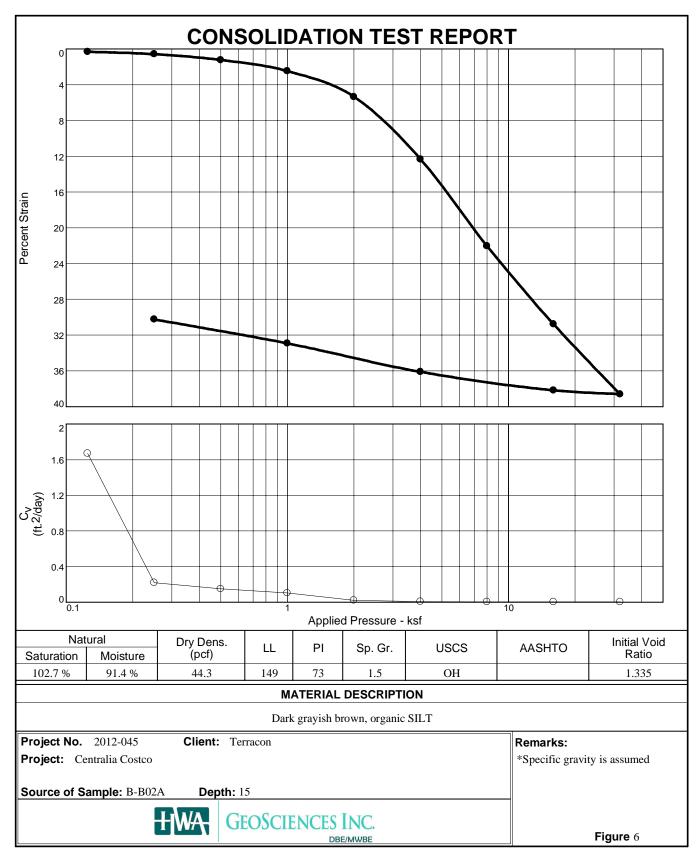
Checked By: SEG



Checked By: SEG

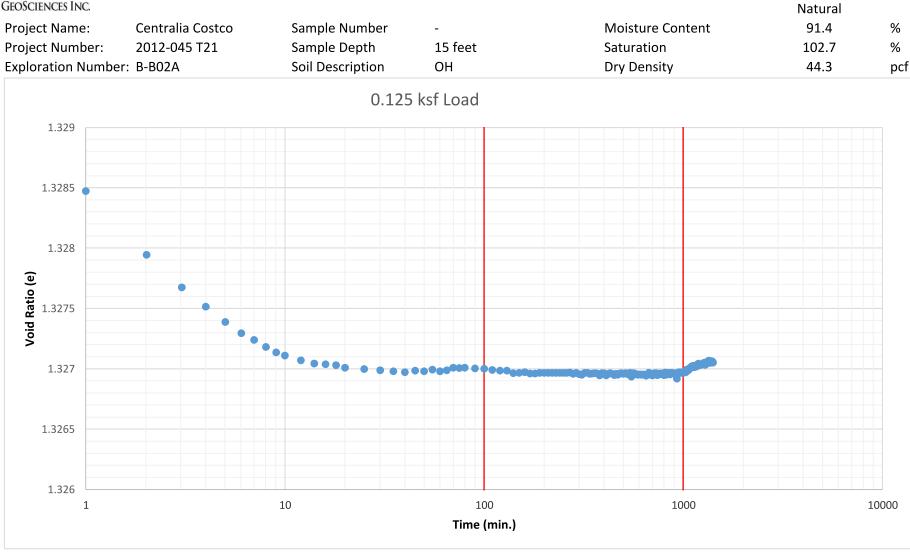


_ Checked By: SEG



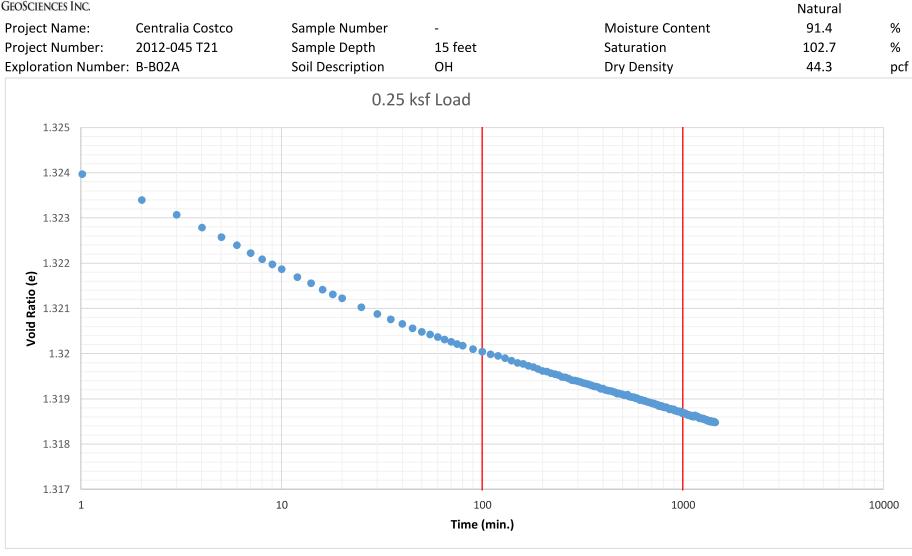
_ Checked By: SEG





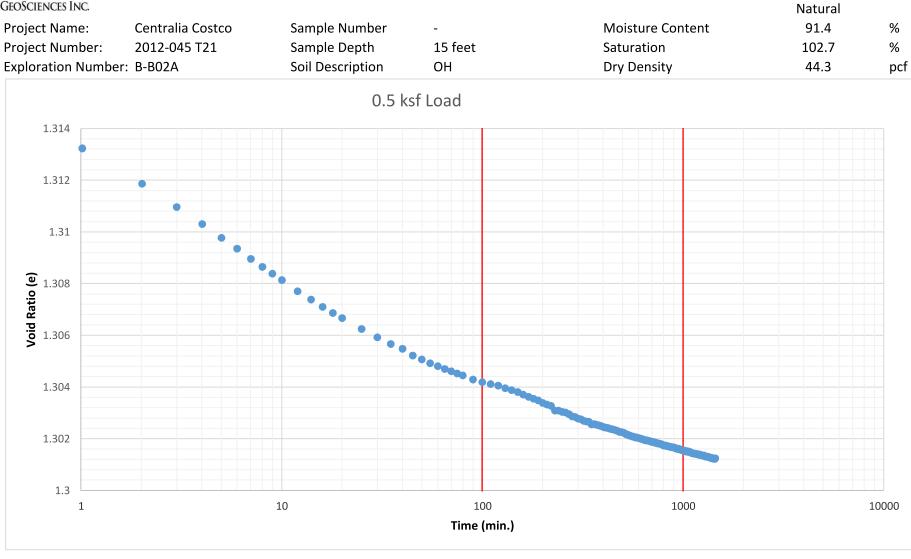
C _α =	1.3270	-	1.3270	=	0.0000





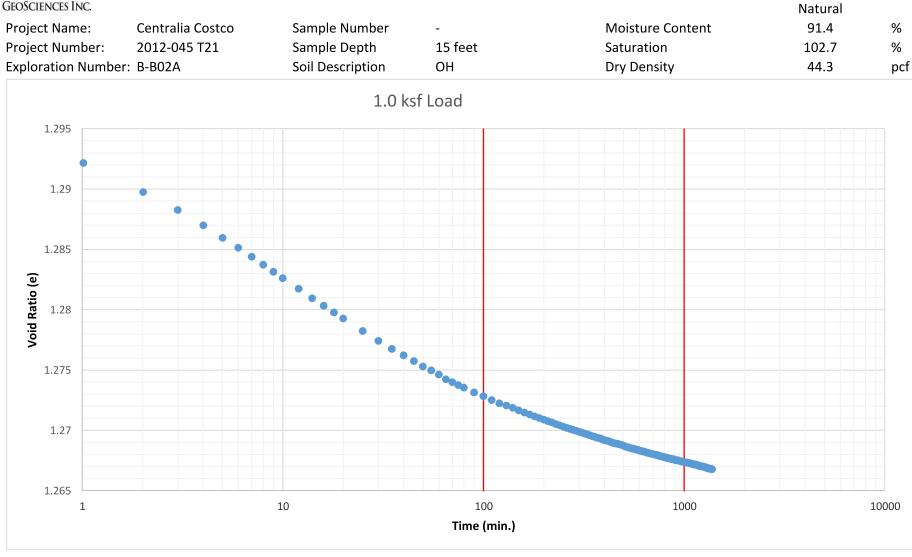






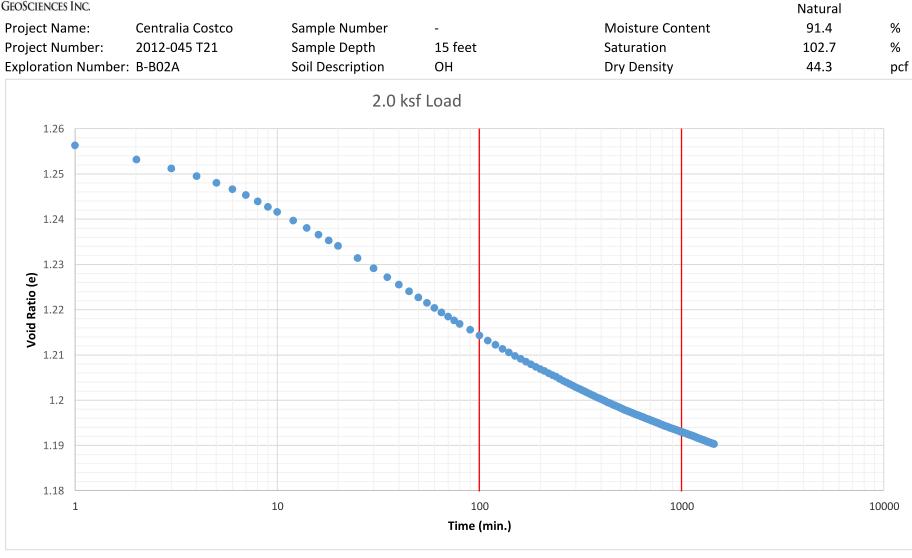
C _α =	1.3042	-	1.3016	=	0.0026





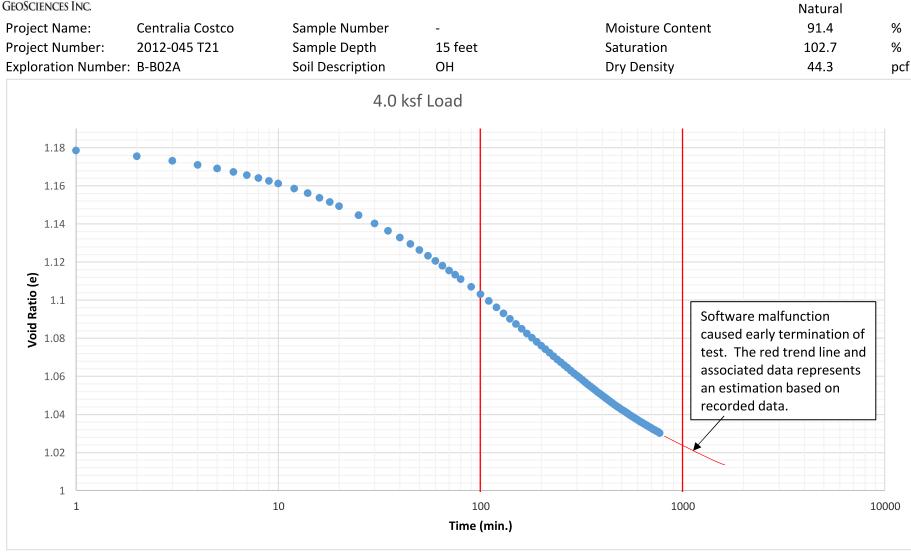






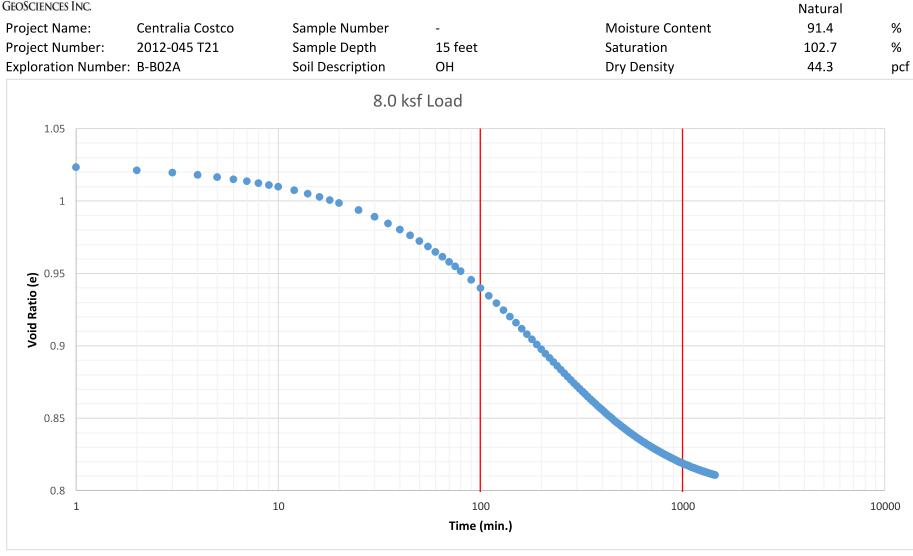
C -	4 94 49		4 4 0 2 0		0.004.0
L _α =	1.2143	-	1.1930	=	0.0213





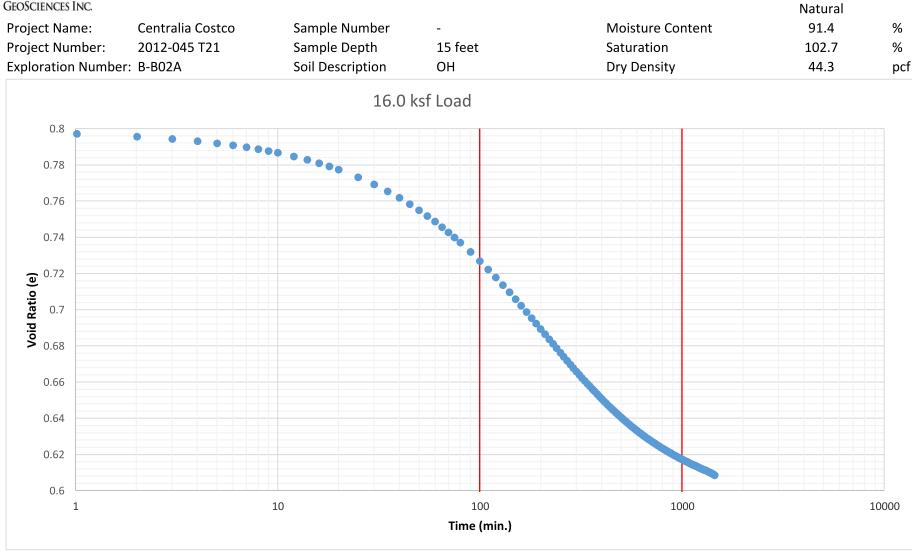
C _α = 1.1031	-	1.0240	=	0.0791	
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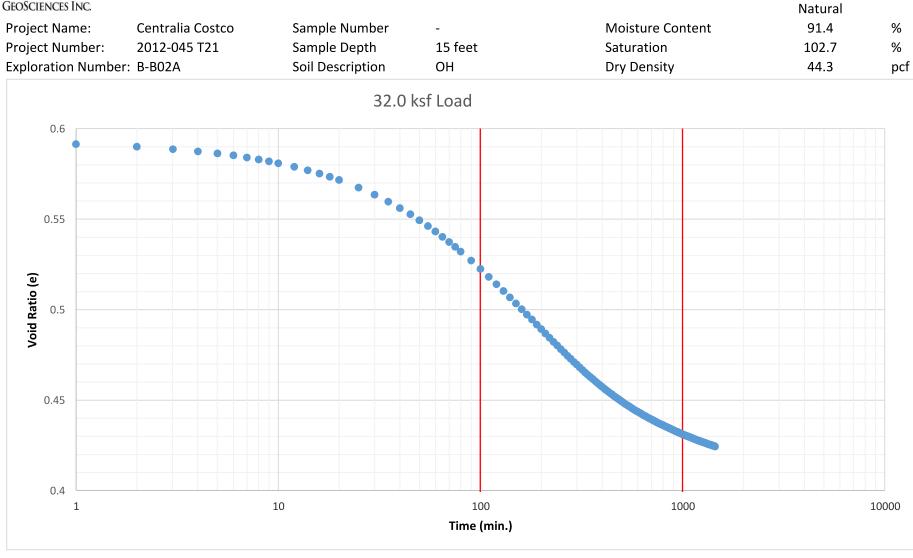
C _α =	0.9399	-	0.8188	=	0.1210	





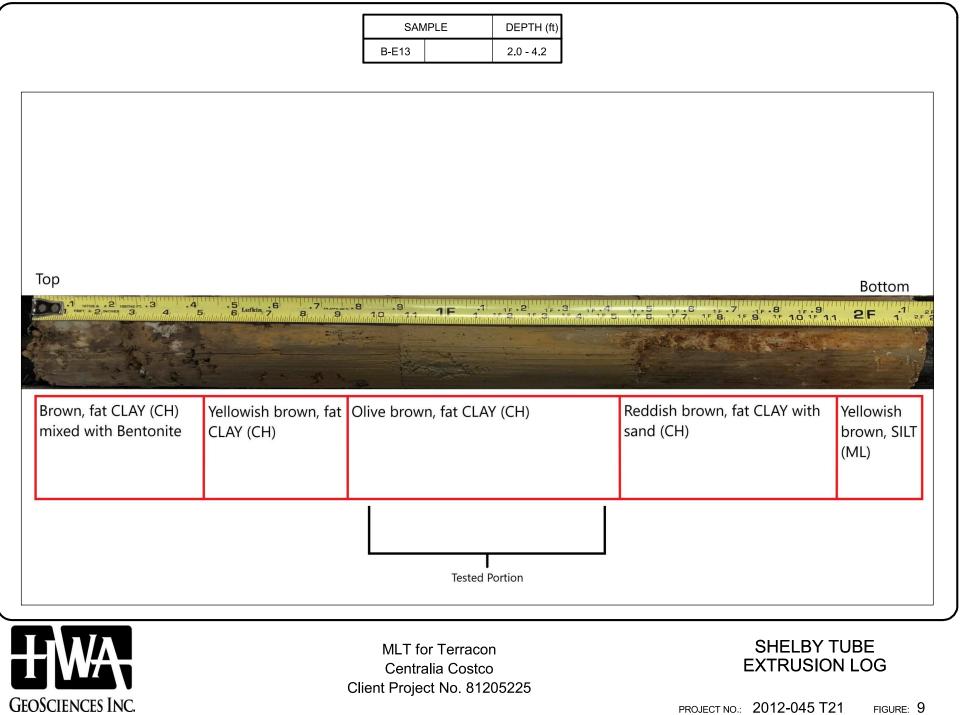




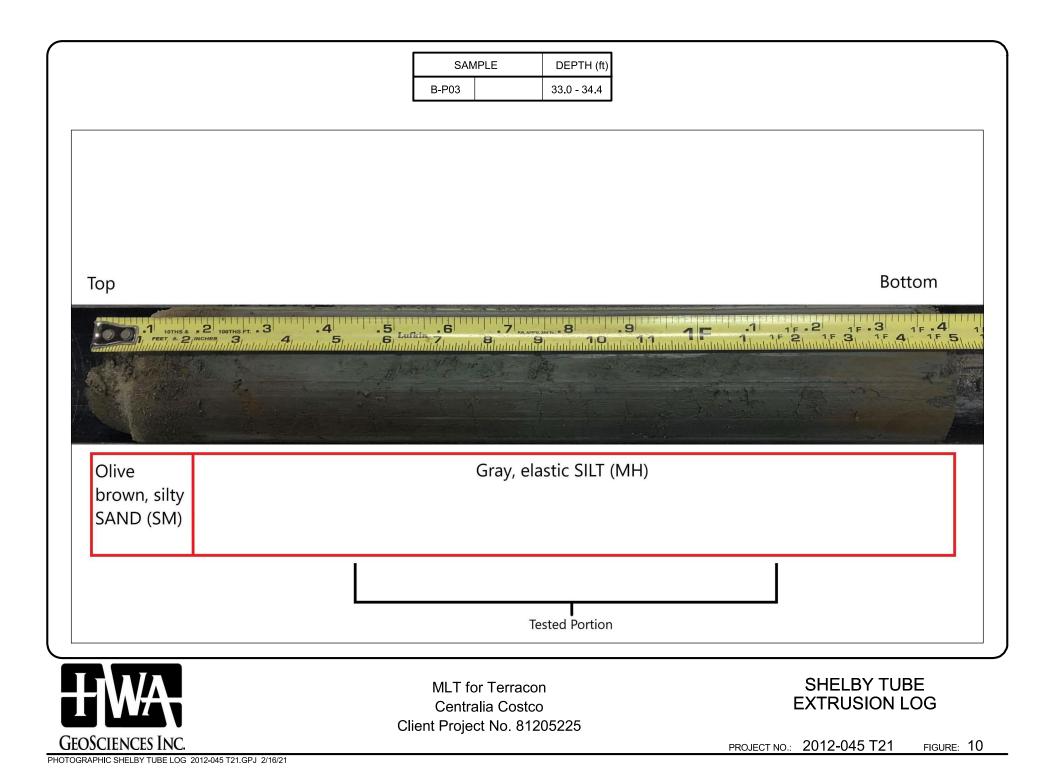


C _α =	0.5224	-	0.4311	=	0.0913

			SAM	IPLE DEP	TH (ft)		
			B-B02A	15.0 -			
-							
Тор							Bottom
	10THS & .2 100THS FT 3	-4 -5 Leften -6 -7	8 19	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 - 4 1 - 5 1 - 6 1 1 - 5 1 - 6 1 - 7 - 7 - 6	-7 1F-8 1F-9 2 3 1F 9 1F 10 1F 11 2	F 1 2F 2 2F 3 2F 4
				The work			
			- Angle Base				
		Grayish brown, SILT		rish brown, lean	clay (CL)		Dark grayish
(ML		with organics (ML)	brown, SILT				brown, organic SILT (OH)
			with				
			sand (ML)				
			1				
			grayish				Tested Destion
		browr with s	n, SILI and (ML)				Tested Portion
				or Terracon		SHE	LBY TUBE
	VA-			alia Costco			USION LOG
				ct No. 81205225	;		
GEOSCIEN	ICES INC.					PROJECT NO : 2012-	045 T21 FIGURE: 8



PHOTOGRAPHIC SHELBY TUBE LOG 2012-045 T21.GPJ 2/16/21



		SAMI	PLE	DEPTH (ft)		
		B-P06	3	2.0 - 34.2		
.1 Iatris . 2	الاست ، ع		1 15.2	13 1-4 15 16 63 1-64 1-55 16	15.7 15.8 15.9 1. 9 1. SF .1	26.2
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				1		
			and the second second second		And a second	
Dark gray, poorly	Dark gray, poorly graded SAND with SM)	silt (SP-	Dark gray, sandy SILT	Dark gray, silty SAND (SM)	Dark gray, sandy SILT (ML)	
graded			(ML)			
SAND (SP)						
						Dark gray, lean CLAY (CL)
					Tested Portion	y, lean C
						Jark gra
		MLT fo	r Terracon		SHELBY TUB	
WV Z		Centra	lia Costco	225	EXTRUSION LO	ЭG
CIENCES IN		ment Projec	t No. 81205	220	PROJECT NO.: 2012-045 T21	FIGURE: