GeoResources, LLC

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November 9, 2006

Ueland Tree Farm 7216 78th Avenue NW Gig Harbor, WA 98335

Attention: Mr. Mark Mauren

Preliminary Geological Report Mineral Resource Evaluation Ueland Tree Farms Kitsap County, Washington Job#: UelandTreeFarm.RG(r4)

INTRODUCTION AND SCOPE

This preliminary report summarizes the results of our geological evaluation regarding mineral resources on the Ueland Tree Farm property in Kitsap County, Washington. The site is approximately shown on the attached Site Vicinity Map, Figure 1. The initial phase of work was completed in accordance with our proposal dated April 24, 2006. The supplemental evaluation of the bedrock was completed in accordance with our proposal dated June 22, 2006.

EXPLORATION METHODS

The purpose of our services was to perform geologic mapping and a preliminary site investigation for potential mineral resources available on the Ueland Tree Farm. Our evaluation is to be used as a basis for an initial economic feasibility analysis for mining the mineral resources. Our site evaluation was directed at locating sources of sand and gravel, as well as quarry rock. We explored surface and subsurface conditions on the Uleland Tree Farm property over a period of 5 days in March, 2006. We returned to the site to complete a series of deeper rock corings on May 30, 2006 through June 1, 2006. A third round of explorations consisting of 25 rock cores drilled with a pneumatic air hammer drill was completed on October 2 and 3, 2006. Our exploration and testing program was comprised of the following elements:

- A visual surface reconnaissance of the site;
- Preliminary geologic mapping using the Geologic Map of the Wildcat Lake 7.5 Minute Quadrangle, Kitsap and Mason Counties, Washington by Haeussler and Clark, 2000.
- The excavation of 83 test-pits (TP-1 through TP-83) to depths of up to 20 feet at selected locations across the site;
- Advancing four rock corings to depths of 20 to 35 feet below the adjacent ground surface at selected locations across the site;
- Twenty five air-hammer cores (referred to as HC-1 through HC-25) drilled to depths of 72 to 80 feet at selected locations within portions of the site underlain by bedrock; and

A review of the Kitsap County zoning designations.

The actual number, locations, and depths of our explorations were selected in the field based on a review of the ortho-photographs, topographic survey, geologic maps, and observed site conditions by GeoResources personnel. Approximate exploration locations were determined by taping and pacing from features shown on the referenced ortho-photos and topographic maps provided by the Ueland Tree Farm, and are shown on the attached Site Plans, Figures 2a through 2c.

The explorations performed as part of this evaluation indicate conditions only at the specific locations and that actual condition in other locations could vary. The nature and extent of any such variations would not become evident until additional explorations are performed or until construction activities have begun.

Test Pits

Our test pits were excavated by using a track-hoe operated by a licensed earthwork contractor working for GeoResources, LLC. A geotechnical specialist visually logged the subsurface stratigraphy in the field and collected representative soil samples that were taken to our office for further evaluation. The encountered soils were visually classified in accordance with the system described in ASTM: D-2488 and as shown on the attached Soil Classification System, Figure 4. After each test pit was completed, it was backfilled with the excavated soils. Test Pit Logs are included at the end of this report.

Rock Corings

Our supplemental rock corings were advanced with triple-tube wire-line coring tools, using a truck-mounted drill rig operated by an independent drilling firm working under subcontract to GeoResources, LLC. A geologist from our firm continuously observed the corings, logged the subsurface conditions, and collected rock core samples. All samples were stored in waxed cardboard core boxes and later transported to our office and laboratory for further visual examination and testing. After each boring was completed, the borehole was backfilled with a mixture of bentonite chips and soil cuttings, and the surface was patched with asphalt or concrete (where appropriate).

All coring was performed using NX size equipment, which creates a 2.93-inch-diameter borehole and produces a 2.155-inch-diameter core sample. This coring technique involves inserting the smaller diameter coring tools through the outer casing and advancing the core barrel into the rock at the bottom of the casing until a 5-foot core run is completed or circulation of drilling fluid is lost. Once the run is stopped, the core barrel is removed from the casing with the wire-line, and the inner core sleeve, or split tube, is removed. The inner tube is then parted along lengthwise separations to allow viewing, logging, and packaging of the recovered rock core.

The enclosed rock core logs describe the vertical sequence of rock and materials encountered in each boring, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a rock contact was observed to be gradational, our logs indicate the average contact depth. Where a rock type changed between sample intervals, we inferred the contact depth. Our logs also graphically indicate the Rock Quality Designation (RQD), run length, run number, recovery percentage, and approximate depth of each core run, as well as any laboratory tests performed on these rock samples. If any groundwater was encountered in a borehole, the approximate groundwater depth is depicted on the boring log. Groundwater depth estimates are typically based on the wetted height on the drilling rods, and the water level measured in the borehole after the drilling tools

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have been extracted.

Air Hammer Cores

To augment the rock coring that was previously completed; we mobilized a track airrotary hammer type core drill that is used in drilling and blasting operations. The contractor that was used, MacCullum Rock Drilling, previously work on the site during drilling and blasting operations of the former rock quarry operations in the northeast corner of the site. The drill rig uses a combination of high pressure air and pneumatic percussion hammer to pulverize and remove the rock from the core. The cuttings consist of fine dust and small rock fragments (on the order of 5/8-inch crushed rock). A total of 26 "hammer cores" were drilled across the site (referred to as HC-1 through HC-25, and including HC-21a and HC-21b). Eleven of the cores (HC-1 through HC-11) were drilled in the upper rock source area "F"; nine cores were drilled in rock source area "E". The "hammer cores" were drilled to depths ranging from 60 to 84 feet below existing ground surface.

SITE CONDITIONS

Surface Conditions

The site consists of the north and east flanks of Green Mountain located in central Kitsap County near Bremerton, Washington. The site occupies portions of Township 24N, Range 1E, Sections 7, 18, 19 and Township 24N, R1W, Sections 12, 13, 24, and 25. The site generally consists of two main north-south trending valleys with moderate ridges and the east slope of Green Mountain. Side slopes for the central ridges are fairly moderate, while the slopes going up the east side of Green Mountain are considerably steeper. Elevations range from about 280 feet in the eastern portion of the property to about 1,080 feet western portion of the site near Green Mountain.

The site has been logged in various stages, with some areas cleared as recently as 2003 and other forested areas not cleared since 1943. Access across the site is from a network of improved dirt and gravel roads. Several streams cross the site; the largest stream is located in the western valley. There are also several wetlands and ponds, typically located in depressions across the site.

There are several small borrow areas where both sand and gravel and hard rock have been mined from the site to aid in construction of the existing on-site access roads.

Site Soils

The Soil Survey for Kitsap County (USDA Soil Conservation Service) has mapped the site soils to consist of multiple soil types. The mapped soil type number, name, erosion potential, and development limitations are listed below in Table 1.

TABLE 1 SCS Soil Survey Map Summary					
Mapped Soil Type	Soil Name and Slopes	Derived From	Classified Use as Construction Material		
1	Alderwood very gravelly sandy loam (0 to 6)	Glacial Till	Fair to Improbable		
2	Alderwood very gravelly sandy loam (6 to 15)	Glacial Till	Fair to Improbable		
3	Alderwood very gravelly sandy loam (15 to 30)	Glacial Till	Fair to Improbable		
10	Dystric Xerothents	Till / Outwash	Not Rated		
17	Harstine gravelly sandy loam (30 to 45)	Sandy Glacial Till	Poor to Improbable		
20	Indianola loamy sand (15 to 30)	Sandy Outwash	Poor to Probable		
25	Kilchis very gravelly sandy loam (15 to 30)	Basalt	Poor to Improbable		
26	Kilchis very gravelly sandy loam (30 to 70)	Basalt	Poor to Improbable		
32	McKenna gravelly loam (0 to 6)	Glacial Till	Poor to Improbable		
34	Neilton gravelly loamy sand (0 to 3)	Outwash	Good to Probable		
48	Schneider very gravelly loam (45 to 70)	Basalt	Poor to Improbable		

An excerpt of the SCS Map is included as Figure 3. As will be discussed below, our test pits excavated across the site generally confirmed the mapped SCS soil types. Some exceptions were noted, especially in the vicinity of test pits TP-51, TP-52, and TP-53 where we encountered a sandy recessional outwash, more indicative of the Indianola loamy sand, in an area mapped as Alderwood soils derived from glacial till. Additionally, in the east central portion of the property, some of the areas mapped as being underlain by the Alderwood soils (type 2 and 3 soils) near the areas underlain the Kilchis soils (type 25 and 26 soils) may only consists of a thin veneer of glacial till mantling bedrock.

Site Geology

According to *Geologic Map of the Wildcat Lake 7.5 Minute Quadrangle, Kitsap and Mason Counties, Washington* by Haeussler and Clark, 2000, the area around the site is underlain by a combination of glacial soils and bedrock. The reference map, however, does not include the entire parcel, so the mapped stratigraphy is inferred based on the soil and rock conditions encountered in our explorations.

The existing topography, as well as the surficial and shallow subsurface soils in the area, is the result of the most recent Vashon stade of the Fraser glaciation that occurred between about 16,000 and 17,400 years ago, and weathering and erosion that has occurred since. Encountered glacial soil types include recessional outwash and glacial till. The Vashon glacial till consists of a heterogeneous mixture of clay, silt, sand, and gravel that was deposited at the base of the prehistoric continental glacial ice mass and was subsequently over-ridden. As such, the till exhibits high strength and low compressibility characteristics. The recessional outwash deposits consists of graded deposits of sand and gravel that was deposited by meltwater streams and rivers emanating from the retreating continental ice mass. The upper portion of the till has been weathered to a medium dense condition.

The primary types of bedrock mapped in the vicinity of the site include the Crescent Formation massive basalt flows (Tcb) and Submarine basalt and volcaniclastic rocks (Tcbs). These middle Eocene age rocks (46 to 50 million years ago) consist of aerial and submarine. The younger and overlying massive basalt flows (Tcb) are considered to be aerial basalt flows that are more than 180-meters thick while the older submarine complex (Tcbs) consists of basalt interbedded with sandstone, siltstone, tuffs, and breccia. According to Haeussler and others, (2000), aeromagnetic and gravity data over the Green and Gold Mountain, indicate that

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highly magnetic and dense rocks are located within a few kilometers of the surface, inferring that a deeper ultramafic rock complex maybe present under the mountains.

Groundwater Conditions

Groundwater seepage was encountered in a number of our test pits at the time of digging. Based on the mapped stratigraphy and inferred subsurface conditions it is our opinion that the encountered groundwater was indicative of a perched groundwater condition. Perched groundwater develops when the vertical infiltration of soils through a shallow, more permeable soil is slowed by a deeper, less permeable horizon during periods of heavy or sustained precipitation. Groundwater was also encountered at depth within several of our deeper rock cores. We interpret the deeper groundwater to be associated with fracture or joint patterns within the bedrock. Groundwater conditions may vary with changes in site utilizations, or seasonally with precipitation.

CONCLUSIONS AND RECOMMENDATIONS

General

Based on the results of our site reconnaissance, subsurface exploration program, and review of published information development of both a sand and gravel borrow source and hard rock quarry appears feasible on the site.

Aggregate Material

The northern potion of the property, along the main access road, appears to be underlain by recessional outwash material that grades from clean poorly sorted sand to a clean well sorted sandy gravel. This material was encountered in test pits TP-1, TP-2, TP-3, TP-81, TP-82, and TP-83. We estimate that there is about 600,000 cubic yards of sand and gravel in this area (denoted as area A on the attached site plan). This main sand and gravel source is bounded by a stream to the west, and the property line to the north and east, so it may not be feasible to mine all of the available resource. With minimal preparation, the material would likely be suitable for as all-weather structural fill. Using a screening and sorting operation, this material could also provide select materials that would include clean sand for use as pipe bedding or in masonry applications, as well as a variety of gravel products such as pea gravel to drain rock.

A considerably thinner layer of clean, well sorted gravel was encountered in the topographically lower elevations of the north central portion of the site. Test pits TP-15, TP-16, TP-17, and TP-18 encountered this gravel deposit. Depths were limited to about 13 to 17 feet due to underlying glacial till and rapid perched groundwater seepage atop the till. We anticipate that the gravel extends from the test pits east to the stream that comprises the west boundary of the initially discussed area. We anticipate that the volume of material in this area could be as much as 650,000 cubic yards. This area, denoted as area "B", is also shown on Figure 2a.

Further south of area "A", our explorations indicate a moderate deposit of clean sand with trace gravel. Like the above described area "A", this area could provide a source of bedding material, sand filter material, masonry material, and general borrow, or possibly select fill. This source is bounded by the property line to the east and a stream to the west. This location (bracketed by Test Pits TP-51, TP-52, TP-53, and TP-54) appears to be slightly smaller than the area described above. We anticipate that the volume of material in this area could be as much as 550,000 cubic yards. This area, denoted as area "C", is also shown on Figure 2b.

The remainder of the northern portion of the site is generally underlain by dense to very dense glacial till. The till can be used for general borrow material, but placement of this material is limited to periods of extended dry weather.

Quarry Rock

Bedrock was encountered at shallow depths under the southern portion of the two lower ridges and along the upper portions of Green Mountain. Rock was typically encountered between 2 to 6 feet below ground surface. At most locations, the rock was covered by a layer of topsoil or forest duff and a residual soil derived by in-situ weathering of the original bedrock. At some locations, the rock was overlain by a thin veneer of glacial till or outwash. Underlying the residual soils, our test pits generally encountered highly to moderately weathered, very weak to weak basalt that was easily ripable with our trackhoe and could be broken by hand. At depths of about 4 to 8 feet below ground surface, the rock became significantly less weathered and increased in strength from moderately weak to moderately strong. Our test pits generally encountered refusal in this layer, although the rock still appeared jointed.

It appeared that the some bedrock encountered in the central portion of the site, or at the mid-level elevations along the northeast flank of Green Mountain consists of very weathered, weak siltstone and sandstone (marine sedimentary rocks) that are less dense; more highly weathered, and less economically valuable than the igneous (basalt) rock deposits.

The location where rock was encountered tended to abut the south and west property lines. Typical set-backs for mining operations require a 50-foot buffer or setback. Excavation faces can be made at inclinations near vertical. Assuming the outer weathered layer is a uniform thickness similar to those encountered in our test pits, it does appear that an abundant supply of rock is available for mining from the site. We generally outlined potential rock sources on the attached Site Plans, Figures 2b and 2c.

Contingent upon the depth of weathering and joint pattern within the underlying rock, the moderately weak to moderately strong basalt could be used for aggregates including crushed rock, quarry spalls, rip rap, and possibly landscaping or rockery rock. Evidence of strong, fresh rock was observed at several locations across the site including the stream channel in the south east corner of the site where larger, angular rocks were visible in the channel and several massive (non-jointed or weathered) outcrops that were observed in the southern portion of the site.

The rock that we encountered underlying the site is similar to the rock currently being mined at the existing hard rock quarry atop the ridge on the east side of Kitsap Lake and the former rock quarry along Highway 3 near Gorst. Based on historic performance, some of the basalt in the Puget Sound are prone to rapid degradation and wear when exposed. The old Black River quarry in Renton mined submarine basalts that tended to degrade and resulted in numerous failed rockeries owing to accelerated weathering.

Rock Quality

Two samples of rock collected from coring C-1 (upland rock source) and C-4 (lower, eastern rock source) were tested for durability and compressive strengths. The rock samples from coring C-1 has compressive strengths of up to 1,200 psi (pounds per square inch) and a durability "D" value of 25 and 27 percent. The relatively low compressive strength is the result of the sample breaking along a vein of secondary mineralization with the rock. Samples from C-4 have a compressive strength op up to 19,000 psi and a "D" value of 28 to 32 percent. According to the WSDOT Standard Specification for Road, Bridge and Municipal Construction manual, rock to be crushed and used for ballast should have a minimum "D" value of 15

percent; crushed rock base course of 15 percent; and crushed rock top course of 25 percent. Based on these results, it appears that the rock does appear competent and suitable to be quarried for various types of crushed rock aggregates.

Without sampling and testing rock from other quarry sources, it is not feasible to characterize the rock on the site to other quarries in Kitsap County. However, based on visual observations of the rock compared to rock from other quarry sites, the rock at the site appears similar to other sources. The rock encountered in our corings did appear more competent and less weathered than the existing rock quarry on the Tree Farm property.

Based on our observations of the cuttings from the "hammer cores" and a discussion with the drilling operator, it appeared that most of the rock in the 26 cores would require blasting to be completed in order to facilitate excavation. The upper shallow rock did appear to be soft in some areas, but in general, the drill operated stated that the rock was of considerably better quality than the original rock quarry site. Cuttings from the rock were collected and screened, and the larger fragments were used to create the attached core logs.

Rock Quantities

Our coring indicated that the rock sources located near the top of the western portion of the site (corings C-1 and C-3), generally encountered hard, but fractured, basalt. Drilling fluid was often lost in the fractured zones resulting in very short runs. Coring C-1 was drilled to a depth of about 20 feet, with a measured RQD of 0. Coring C-3 was drilled to a depth of 30 feet, with a RQD of about 10 percent. Coring C-2, drilled further up the slope appeared to encounter soft marine sedimentary rocks to the full depth explored of about 25 feet. A fourth coring, C-4, was drilled in the eastern portion of the site, in the area denoted as area "D" on the site plan. Rock coring C-4 also encountered hard but fractured basalt. This coring was drilled to a depth of about 30 feet and had a RQD of about 25 to 30 percent. An area that we did not advance any rock corings in, but that had very hard bedrock was encountered in several test pits, including test pits TP-71 and TP-72 is shown on the site plan as area "E". We understand that the environmental issues pertaining to the stream that flows between areas "D" and "E" may make it so that area "E" could not be used as a quarry site.

The fractured rock in corings C-1, C-2, and C-4 while not appearing massive, did appear hard, sound, and durable. Based on the "hammer cores", the rock appeared more massive and competent than observed in the four rock corings. As previously stated, rock samples submitted for testing did exceed the WSDOT limits for degradation as stated above.

Based on rough estimates of areas where the various corings were drilled, we estimate that the lower area, where the apparently more intact rock was observed, would have an source volume of about of 10 to 15 million tons of rock. We estimate that the area further to the south, area "E", would have about 6 to 8 millions tons of rock, if excavation extended down to a bottom elevation of about 650 feet. The upper rock quarry area (area "F") had more fractures zones, but has a potential for a deeper quarry, would have a source of about half of the amount as estimated in area "E". This area is shown on the attached Site Plan, Figure 2c, as area "F".

Our general assumptions of loss due to fractures and weathered zones generally estimated about 20 to 30 percent waste in each location. The attached core logs generally confirmed that assumption. Some of the rock cores had no discernable fractured zones or areas of chemically weathered rock. However, many of the cores did have isolated 2 to 10 foot zones of weathered rock (based on colorization and drilling resistance) that we infer to be noticeably weaker or less durable rock. However, the areas of fresh, strong to very strong rock were encountered in each of our corings, and should be viable sources of multiple types of crushed aggregate, including crushed base course, ballast, quarry spalls, riprap, and

LIMITATIONS

We have prepared this report for use by Ueland Tree Farm and other members of the design team, for use in the design of a portion of this project. The data used in preparing this report and this report should be provided to prospective contractors for their bidding or estimating purposes only. Our report, conclusions and interpretations are based on data from others and limited site reconnaissance, and should not be construed as a warranty of the subsurface conditions.



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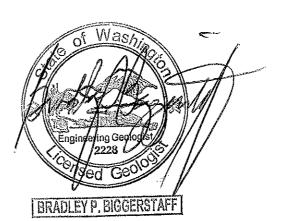
We trust that this letter is sufficient for your current needs. Please do not hesitate to call with any additional comments or questions. We will also be willing to meet with you to discuss the findings of our initial site assessment.

Respectfully submitted, GeoResources, LLC

Keith S. Schembs, LEG Associate



Brad P. Biggerstaff, LEG Principal



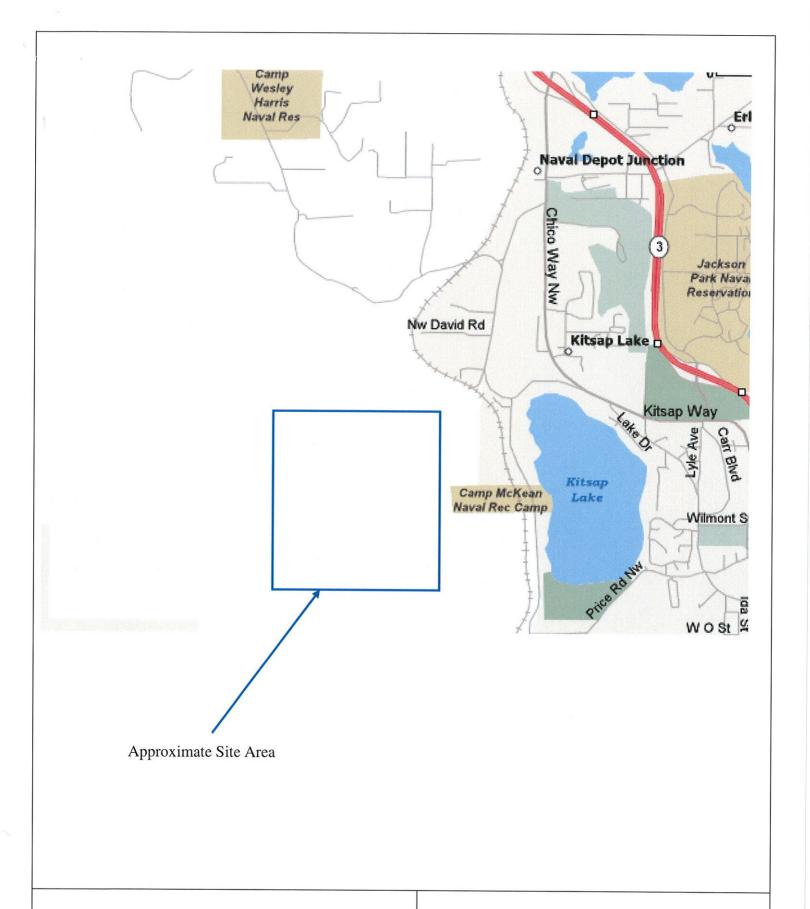
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Attachments: Figure 1 - Site Vicinity Map

Figure 2a - Site Plan - North Section
Figure 2b - Site Plan - Central Section
Figure 2c - Site Plan - South Section
Figure 3 - USDA SCS Soils Map
Figure 4 - Soil Classification System

Test Pit Logs Rock Core Logs Air Hammer Logs Laboratory Test Results

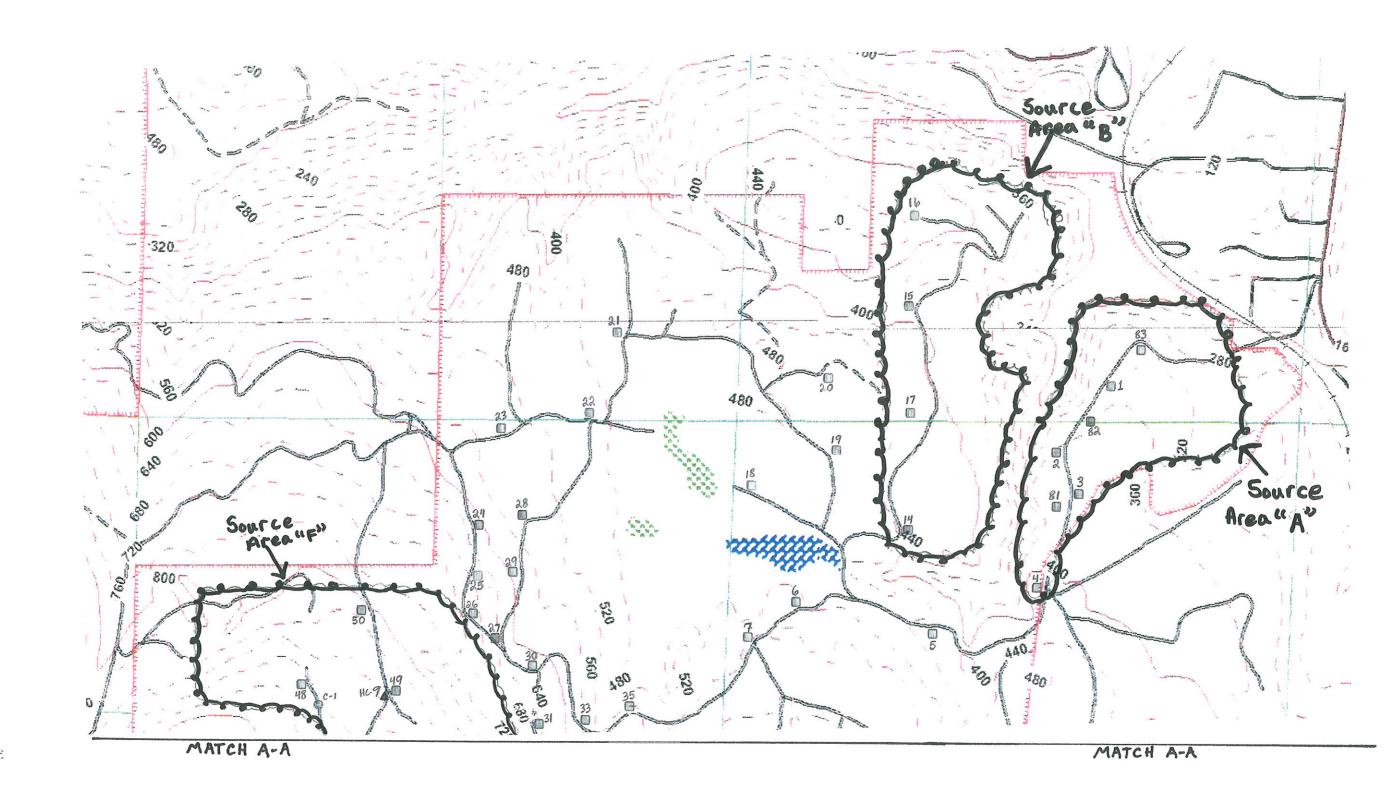


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Figure 1: Site Location Map



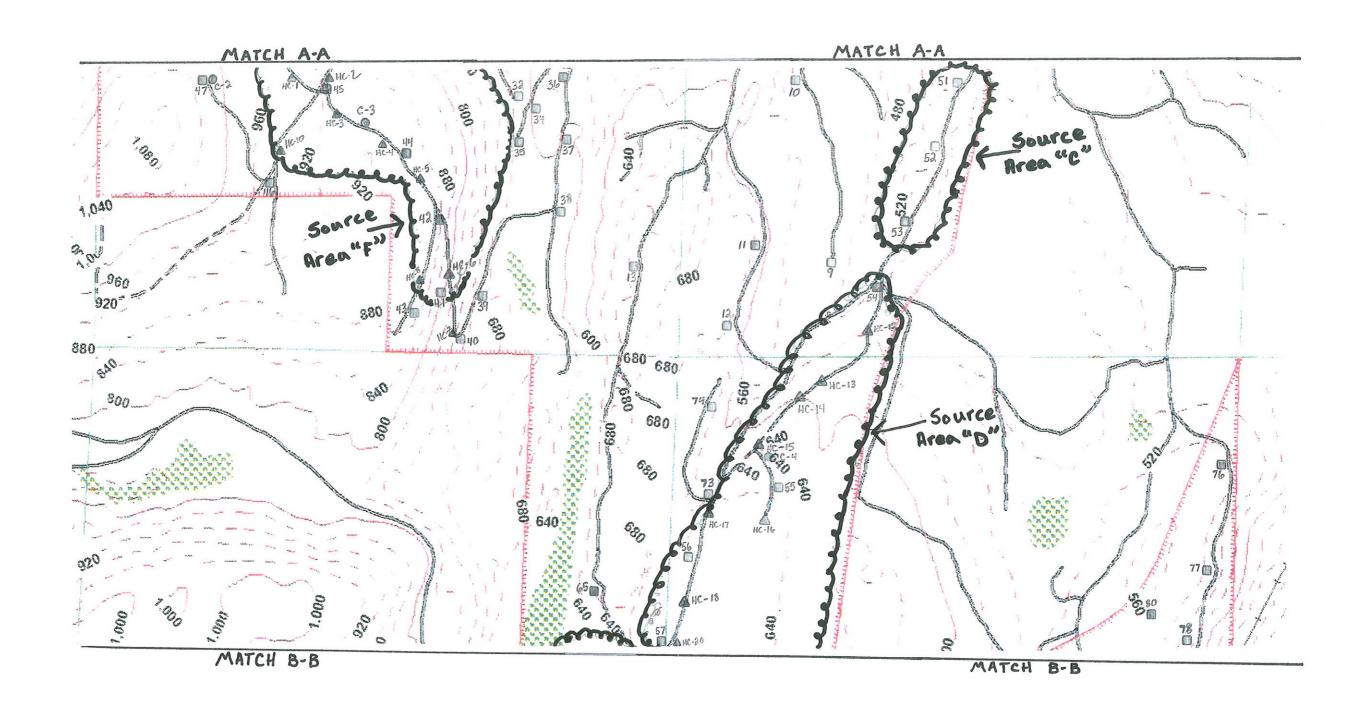
NUMBER AND APPROXIMATE LOCATION OF CORING C-4 • NUMBER AND APPROXIMATE LOCATION OF HAMMER/CORE HC-25 ■

NOT TO SCALE

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5007 Pacific Highway East, Suite 20 Fife, Washington 98424 Ph: 253-896-1011 Fax: 253-896-2633 FIGURE 2a - Site Plan (North Portion)

Project: Ueland Tree Farm – Kitsap Property Location: Kitsap County, Washington Client: Mr. Mark Mauren





NUMBER AND APPROXIMATE LOCATION OF CORING C-4 • NUMBER AND APPROXIMATE LOCATION OF HAMMER/CORE HC-25 ■

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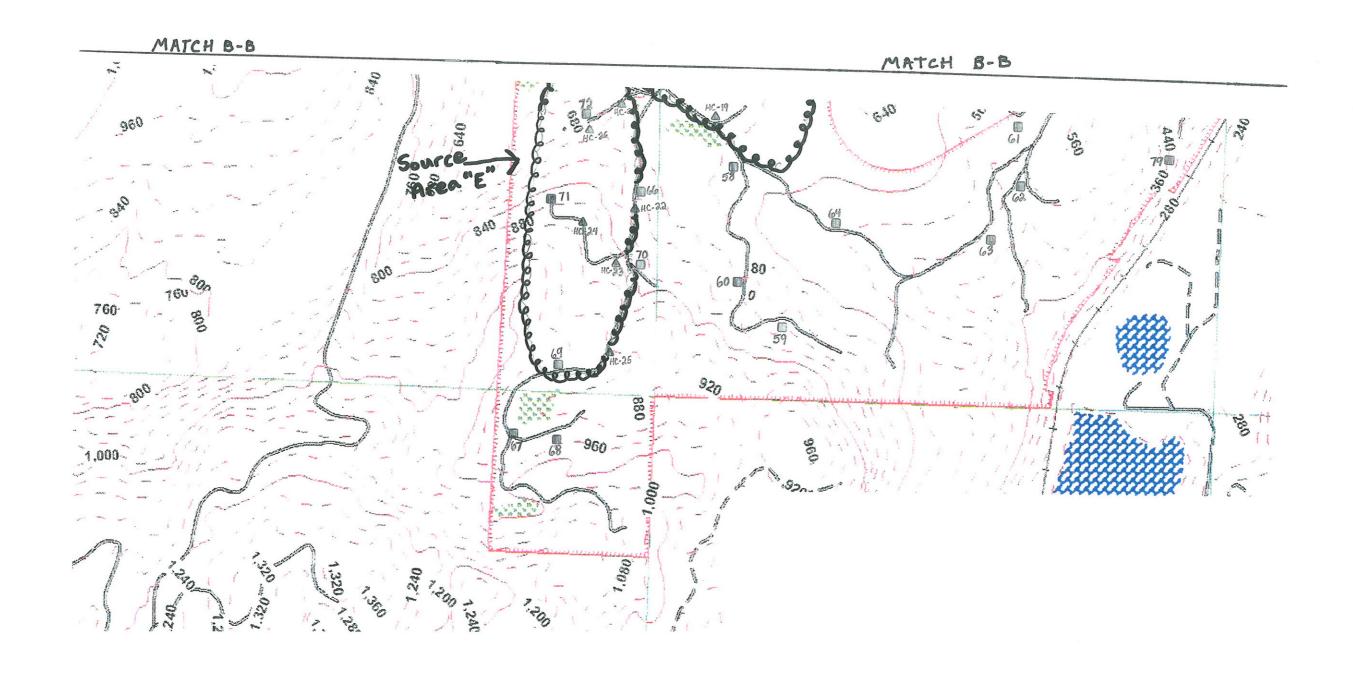
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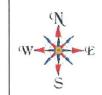
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FIGURE 2b - Site Plan (Central Portion)

Project: Ueland Tree Farm – Kitsap Property Location: Kitsap County, Washington Client: Mr. Mark Mauren





NUMBER AND APPROXIMATE LOCATION OF CORING C-4 • NUMBER AND APPROXIMATE LOCATION OF HAMMER/CORE HC-25 ■

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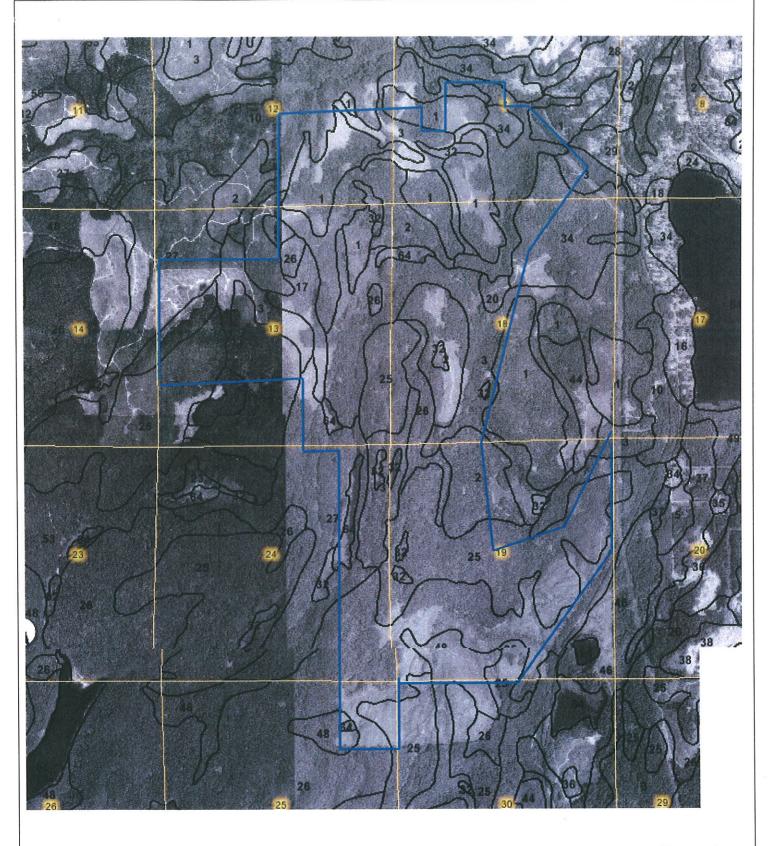
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FIGURE 2c - Site Plan (South Portion)

Project: Ueland Tree Farm – Kitsap Property Location: Kitsap County, Washington Client: Mr. Mark Mauren



Not to scale

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Figure 3: USDA SCS Map

SOIL CLASSIFICATION SYSTEM

MA	JOR DIVISIONS		GROUP SYMBOL	GROUP NAME
	GRAVEL	CLEAN GRAVEL	GW	WELL-GRADED GRAVEL, FINE TO COARSE GRAVEL
COARSE GRAINED	More than 50%		GP	POORLY-GRADED GRAVEL
SOILS	Of Coarse Fraction Retained on	GRAVEL WITH FINES	GM	SILTY GRAVEL
	No. 4 Sieve	VV11111111VEO	GC	CLAYEY GRAVEL
More than 50%	SAND	CLEAN SAND	SW	WELL-GRADED SAND, FINE TO COARSE SAND
Retained on No. 200 Sieve			SP	POORLY-GRADED SAND
	More than 50% Of Coarse Fraction Passes	SAND WITH FINES	SM	SILTY SAND
	No. 4 Sieve		sc	CLAYEY SAND
	SILT AND CLAY	INORGANIC	ML	SILT
FINE GRAINED			CL	CLAY
SOILS	Liquid Limit Less than 50	ORGANIC	OL.	ORGANIC SILT, ORGANIC CLAY
	SILT AND CLAY	INORGANIC	MH	SILT OF HIGH PLASTICITY, ELASTIC SILT
More than 50% Passes No. 200 Sieve			CH	CLAY OF HIGH PLASTICITY, FAT CLAY
110. 200 01000	Liquid Limit 50 or more	ORGANIC	ОН	ORGANIC CLAY, ORGANIC SILT
HIG	HIGHLY ORGANIC SOILS			PEAT

NOTES:

- Field classification is based on visual examination of soil in general accordance with ASTM D2488-90.
- Soil classification using laboratory tests is based on ASTM D2487-90.
- Description of soil density or consistency are based on interpretation of blow count data, visual appearance of soils, and or test data.

SOIL MOISTURE MODIFIERS:

Dry- Absence of moisture, dry to the touch

Moist- Damp, but no visible water

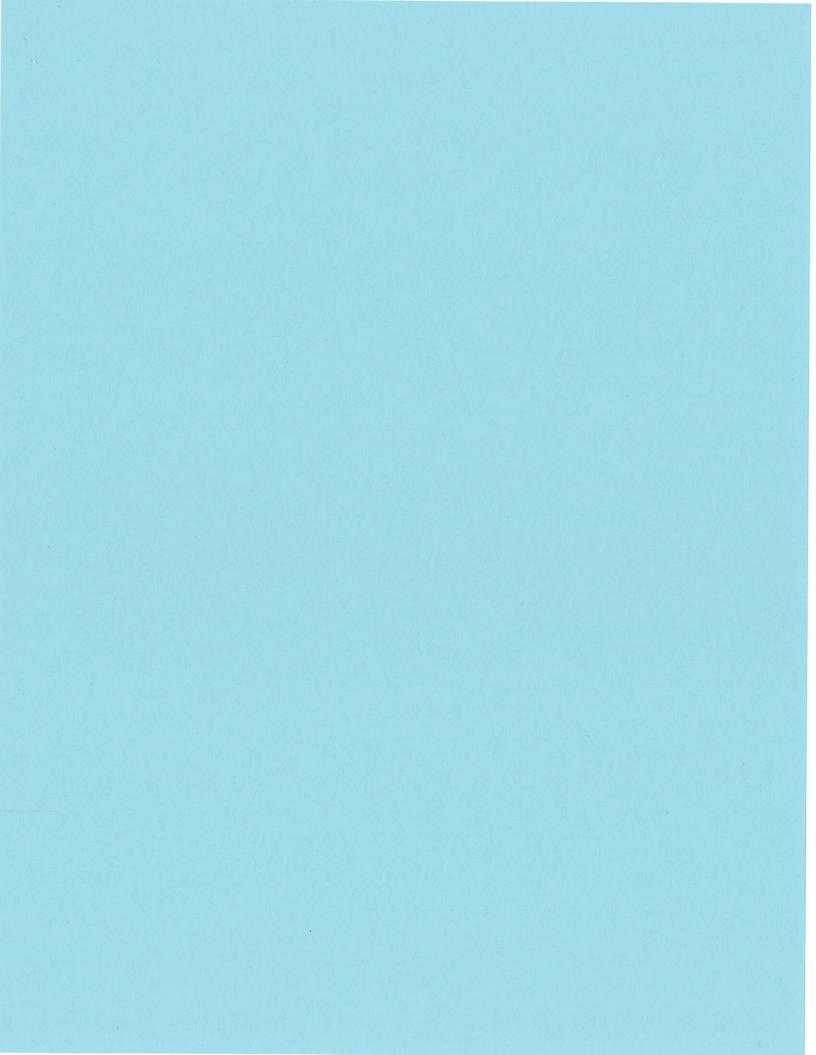
Wet- Visible free water or saturated, usually soil is

obtained from below water table

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Phone: 253-896-1011 Fax: 253-896-2633 Figure 4: Soil Classification System



TEST PIT LOGS UELAND TREE FARM KITSAP COUNTY, WASHINGTON

TEST PIT 1 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 2.5	SP	Org-brn SAND w/ minor gravel, silt, occ organic (loose to med dense, moist)
2.5 - 8.0	SP	Brn fine to med SAND w/ gravel, occ cobble (med dense, moist) (Outwash)
8.0 - 13.0	SP	Brn med to coarse SAND w/ gravel, occ cobble (med dense, moist) (Outwash)
		Severe caving observed at 8 to 13 feet
		No groundwater seepage observed

TEST PIT 2 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 1.0		Topsoil/Forest duff
1.0 - 2.0	SM	Org-brn silty SAND w/ gravel, organics (loose to med, moist)
2.0 - 7.5	SP	Brn med SAND w/ gravel, occ cobble (med dense, moist) (Outwash)
7.5 - 19.0	SP	Brn gry SAND w/ minor gravel, occ gravel lenses (dense, moist) (Outwash)
		Minor caving observed Groundwater seepage observed at 18 feet

TEST PIT 3 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 1.5	SM	Org-brn silty SAND w/ gravel, organics (med dense, moist)
1.5 - 6.5	SP	Brn SAND w/ gravel (med, damp)
6.5 - 7.5	SP	Brn silt w/ SAND, occ gravel, cobble (dense, wet)
7.5 - 9.0	SM	Gry silty SAND w/ gravel (very dense, moist) (Glacial Till)
		No caving observed
		Minor groundwater seepage observed at 6 to 8 feet

TEST PIT 4 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 ~ 0.5		Topsoil/Forest duff
0.5 - 10.5	SP	Brn SAND w/ gravel, occ cobble (Outwash)
		No caving observed
		No groundwater seepage observed

TEST PIT 5 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 1.5	SM	Org-brn silty SAND w/ gravel, organics (loose to med dense, moist)
1.5 - 5.5	SP	Brn SAND w/ gravel, occ cobble (med dense to dense, moist)
5.5 - 8.5	SP	Gry SAND w/ gravel (very dense, moist) (Glacial Till)
8.5 - 10.0		Medium soft, highly weathered BASALT
		No caving observed
		Minor groundwater seepage observed at 4.5 to 5.5 feet

TEST PIT 6 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 2.5	SM	Org-gry silty SAND w/ gravel (med dense to dense, moist) (Weathered till)
2.5 - 12.0	SM	Gry silty SAND w/ gravel (very dense, moist) (Glacial Till)
		No caving observed
		No groundwater seepage observed

TEST PIT 7 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 6.5	SM	Org-red silty SAND w/ rock, gravel (med dense to dense, moist)
6.5 - 8.5		Medium soft, highly weathered BASALT
8.5 - 9.0		Hard, slightly weathered, BASALT
		No caving observed
		No groundwater seepage observed

TEST PIT 8 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 3.5	SP	Org-red SAND w/ silt, occ gravel, organics (loose to med dense, moist)
3.5 - 12.0	SP	Org-brn fine-med SAND w/ occ gravel (med dense to dense, moist)
12.0 - 13.0	SM	Gry silty SAND w/ gravel (very dense, moist) (Glacial Till)
13.0 - 15.0		Medium soft, highly weathered BASALT
		No caving observed
		No groundwater seepage observed

TEST PIT 9 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 6.0	GP	Some Bedrock (fill) w/ silt and SAND (dense, moist)
6.0 - 9.0		Medium soft, highly weathered BEDROCK
		No caving observed No groundwater seepage observed

TEST PIT 10 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 2.5	GP	Medium soft, highly weathered BEDROCK w/ silty SAND infilling
2.5 - 6.0		Hard, fractured BEDROCK
		No caving observed No groundwater seepage observed

TEST PIT 11 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 4.0	GP	Weathered bedrock silty SAND w/ gravel, cobble (med dense, moist)
4.0 - 6.0	GP	Medium soft, highly weathered BEDROCK w/ silty SAND infilling (very dense, moist)
6.0 - 8.0		Hard, fractured BEDROCK
		No caving observed No groundwater seepage observed

TEST PIT 12 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 4.0	SM	Brn silty SAND w/ gravel, cobble (med dense to dense, moist) (Bedrock fill)
4.0 - 7.0	GP	Brn medium soft, highly weathered BEDROCK w/ silty SAND infilling (very dense, moist)
7.0 ~ 8.0		Hard, fractured BEDROCK w/ silty SAND infilling
		No caving observed No groundwater seepage observed

TEST PIT 13 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 ~ 2.0	SM	Rd-brn silty SAND (med dense to dense, moist)
2.0 - 4.5	GP	Rd-brn silty SAND, w/ 2 to 4-inch weathered angular rock (med dense to dense, moist)
4.5 - 6.5		Hard, fractured BEDROCK w/ silty SAND infilling
		No caving observed No groundwater seepage observed

TEST PIT 14 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Sod/Topsoil Sod/Topsoil
0.3 - 6.0	SP	Brn gravelly SAND w/ cobble, occ boulder (med dense, moist). Iron stained at
		5.5 to 6 feet
6.0 - 7.0	SM	Gry silty SAND w/ gravel (very dense, moist) (Glacial Till)
		No caving observed No groundwater seepage observed

TEST PIT 15 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Sod/Topsoil
0.5 - 1.0	SM	Org-brn silty SAND w/ gravel (dense, moist)
1.0 - 2.5	SP	Brn SAND w/ gravel, minor silt, occ cobble, organics (roots)
2.5 - 7.0	GP	Brn sandy GRAVEL w/ cobble, occ boulder (dense, moist) (Outwash)
7.0 - 15.0	SP	Gry-brn fine to med SAND w/ minor gravel, coarse SAND lenses at 12 inches
15.0 - 19.0	SP	Gry-brn med to coarse SAND w/ gravel (Outwash)
		No caving observed
		No groundwater seepage observed

TEST PIT 16 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Sod/Topsoil
0.3 - 13.0	SP	Gry-brn gravelly SAND w/ occ cobble (dense, moist)
13.0 - 17.0	SP	Brn gravelly SAND w/ minor silt, occ cobble (very dense, moist to damp)
		(Glacial Till)

TEST PIT 17 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Sod/Forest duff
0.3 - 9.0	SP	Brn-gry gravelly SAND grading to sandy gravel w/cobble (dense, moist)
9.0	SM	Lt gry silty gravelly SAND (very dense, moist) (Glacial Till)
		No caving observed No groundwater seepage observed

TEST PIT 18 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.5	SM	Lt yellow-brn dense to med silty SAND w/ gravel, organics (loose to med dense, moist)
3.5 - 10.0	SM	Lt gry silty gravelly SAND w/ cobble (very dense, moist) (Glacial till)
7.5 - 19.0	SP	Brn gry silt SAND w/ minor gravel, occ gravel lenses (dense, moist) (Glacial Till)
		No caving observed No groundwater seepage observed

TEST PIT 19 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.2		Forest duff
0.2 - 2.0	SM	Lt org-brn silty SAND w/ gravel (med dense, moist) (Weathered till)
2.0 - 5.0		Lt gry silty gravelly SAND w/ minor cobble (very dense, moist) (Glacial till)
		No caving observed
		No groundwater seepage observed

TEST PIT 20 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 1.5	SM	Lt yellow-brn silty gravelly SAND w/ minor cobble (loose to med dense, moist) (Weathered till)
1.5 - 4.0	SM	Lt gry silty gravelly SAND w/ some cobble (very dense, moist) (Glacial till)
		No caving observed
		No groundwater seepage observed

TEST PIT 21 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Forest duff
0.3 - 1.5	SM	Lt org-brn silty gravelly SAND (med dense, moist) (Weathered Till)
1.5 - 6.5	SM	Lt gry silty gravelly SAND w/ minor cobble (dense becoming very dense, moist) (Glacial Till)
		No caving observed Groundwater seepage observed at 1.2 to 1.5 feet

TEST PIT 22 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SM	Org-brn silty gravelly SAND (med dense, moist) (Weathered Till)
3.0 - 9.5		Gry sandy gravel/gravelly SAND w/ silt (dense, wet) (Sandy Glacial Till)
		No caving observed Groundwater seepage observed at 2.75 to 3.25 feet

TEST PIT 23 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 2.5	SM	Org-brn silty gravelly SAND (med dense, moist) (Weathered Till)
2.5 - 9.0	SM	Gry silty gravelly SAND (dense to very dense, moist) (Glacial Till)
		No caving observed Slight groundwater seepage observed at 2.25 to 2.5 feet

TEST PIT 24 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 2.5	SM	Org-brn silty gravelly SAND (med dense, moist) (Weathered Till)
2.5 - 9.0	SM	Gry silty gravelly SAND (dense to very dense, moist) (Glacial Till)
		No caving observed Slight groundwater seepage observed at 2.25 to 2.5 feet

TEST PIT 25 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 1.5	ML	Drk gry sandy SILT w/ roots
1.5 - 3.5	GP	Weathered BEDROCK - highly fractured, soft, weathered
3.5	GP	BEDROCK - moderately fractured, moderately hard, black w/ white phenocryst
		No caving observed No groundwater seepage observed

TEST PIT 26 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Sod/Topsoil
0.5 - 3.0	SM	Lt yellow-brn silty gravelly SAND (med dense, moist) (Weathered Till)
3.0 - 6.5	SM	Gry silty gravelly SAND (med dense, moist) (Glacial Till)
6.5 - 7.0	GP	Weathered BEDROCK – soft, fractured

TEST PIT 27 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 6.5		Road fill
6.5 - 8.0	SM	Org-brn silty gravelly SAND (med dense, moist) (Weathered Till)
8.0 - 10.0	GM	Gry silty sandy GRAVEL (dense to very dense, moist) (Glacial Till)
		Moderate caving observed at 3 to 6 feet No groundwater seepage observed

TEST PIT 28 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil
0.5 - 2.0	SM	Lt org-brn silty SAND w/ some gravel (med dense, moist)
2.0 - 9.0	GM	Lt gry silty sandy GRAVEL (very dense, moist) (Glacial Till)
		No caving observed No groundwater seepage observed

TEST PIT 29 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SM	Org-brn silty SAND w/ some gravel, roots (med dense, moist) (Weathered Till)
3.0 - 8.5	GM	Gry silty sandy GRAVEL (dense to very dense, moist) (Glacial Till)
		No caving observed
		Groundwater seepage observed at 2.5 feet

TEST PIT 30 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SM	Org-brn silty SAND w/ some gravel, roots (med dense, moist) (Weathered Till)
3.0 - 6.5	GM	Gry silty sandy GRAVEL (dense to very dense, moist) (Glacial till)
6.5 - 9.5	GP	Weathered BEDROCK - highly fractured, moderately soft basalt bedrock
		No caving observed No groundwater seepage observed

TEST PIT 31 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3	•	Forest duff
0.3 - 3.0	GP	Brn coarse sandy GRAVEL, w/ trace silt (med dense, moist)
3.0 - 12.5	GM	Gry silty sandy GRAVEL (dense to very dense, moist) (Glacial Till)
		Caving observed at 4 to 8 feet Heavy groundwater seepage observed at 8 feet

TEST PIT 32 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Forest duff
0.3 - 11.0	GP	Brn coarse sandy GRAVEL, w/ trace silt (med dense, moist)
		Caving observed at 10 to 11 feet
		Heavy groundwater seepage observed at 10 to 11 feet

TEST PIT 33 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Forest duff
0.3 - 11.0	GP	Brn coarse sandy GRAVEL, w/ trace silt (med dense, moist)
		NY
		No caving observed
		No groundwater seepage observed

TEST PIT 34 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.7		Forest duff
0.7 - 8.0	GP	Lt yellow-tan sandy GRAVEL w/ silt (med dense, moist)
8.0 - 14.0	GM	Gry silty sandy GRAVEL (dense, moist) (Glacial till)
		No caving observed No groundwater seepage observed

TEST PIT 35 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 2.0	GM	Org-brn silty GRAVEL w/ angular rock
2.0 - 5.0	GP	Weathered BEDROCK - fractured moderately hard basalt
5.0 - 7.0	GP	BEDROCK - Moderately weathered, fractured moderately hard basalt
		No caving observed No groundwater seepage observed

TEST PIT 36 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 2.0	GP	Org-brn sandy GRAVEL w/ some silt
2.0 - 7.0	GM	Gry silty sandy GRAVEL (dense, moist) (Glacial till)
7.0 - 8.0	GP	Weathered BEDROCK - Moderately weathered, fractured, moderately sound basalt
		No caving observed Groundwater seepage observed at 7 to 7.5 feet

TEST PIT 37 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SM	Lt org-brn silty gravelly SAND w/ cobble (med dense, moist)
3.0 - 10.0	SM	Gry silty gravelly SAND w/ cobble (very dense, moist) (Glacial Till)
		No caving observed Groundwater seepage observed at 2.5 to 3 feet

TEST PIT 38 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SM	Lt org-brn silty gravelly SAND w/ cobble (med dense, moist)
3.0 - 10.0	SM	Gry silty gravelly SAND w/ cobble (very dense, moist) (Glacial Till)
		No caving observed Groundwater seepage observed at 2.5 to 3 feet

TEST PIT 39 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 3.0		Road fill
3.0 - 6.0	SM	Gry silty gravelly SAND w/ cobble (very dense, moist) (Glacial till)
6.0 - 7.0	GP	Moderately weathered, fractured, moderately sound basalt
		No caving observed No groundwater seepage observed

TEST PIT 40 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 2.0		Road fill
2.0 - 7.0	GM	Lt brn silty sandy GRAVELI w/ cobble, angular rock (med dense, moist) (Colluvium)
7.0 - 9.0	GP	BEDROCK - Weathered, fractured, moderately soft basalt
		No caving observed
		No groundwater seepage observed

TEST PIT 41 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Road fill
0.5 - 4.0	GP	BEDROCK - Weathered, fractured, moderately soft basalt
		No caving observed
		No groundwater seepage observed

TEST PIT 42 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 2.0	SM	Org-brn silty gravelly SAND w/ weathered bedrock (med dense, moist)
2.0 - 7.0	GP	BEDROCK - Weathered, fractured, moderately soft basalt
		No caving observed No groundwater seepage observed

TEST PIT 43 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 2.0		Road fill
2.0 - 6.0	GP	BEDROCK - Weathered, fractured, moderately soft basalt
6.0 - 7.0	GP	BEDROCK - Slightly weathered, fractured, moderately soft basalt
		No caving observed
		No groundwater seepage observed

TEST PIT 44 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 2.0	SM	Org-brn silty gravelly SAND w/ weathered 2 to 6-inch pieces of angular rock 2 to 6-inch (med dense, moist)
2.0 - 7.0	GP	BEDROCK - Weathered, fractured, moderately soft basalt
		No caving observed No groundwater seepage observed

TEST PIT 45 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5	_	Forest duff
0.5 - 4.0	SM	Org-brn silty gravelly SAND w/ weathered bedrock (med dense, moist)
4.0 - 9.0	GP	BEDROCK - Weathered, fractured, moderately soft basalt
		No caving observed
		No groundwater seepage observed

TEST PIT 46 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0		Colluvium
3.0 - 5.0	GP	Drk redish-blk slightly weathered soft bedrock
5.0 - 8.0	GP	Weathered BEDROCK - Highly weathered, fractured bedrock
8.0 - 9.5	GP	BEDROCK - Hard, fractured basalt bedrock
		No caving observed
		No groundwater seepage observed

TEST PIT 47 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil
0.5 - 2.0	SM	Lt org-brn silty gravelly SAND
2.0 - 3.0	GP	Rd-blk BEDROCK - moderately weathered, fractured, soft
3.0 - 7.0	GP	BEDROCK - fractured, weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 48 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 2.0	GP	Rd-blk BEDROCK – moderately weathered, fractured, soft
2.0 - 2.5	GP	BEDROCK - fractured, weathered bedrock, hard

TEST PIT 49 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.5	SM	Gry silty gravelly SAND w/ cobble (very dense, moist) (Glacial till)
3.5 - 7.0	GP	Rd-blk BEDROCK – moderately weathered, fractured, soft
7.0	GP	BEDROCK - fractured, weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 50 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.5	SM	Gry silty gravelly SAND w/ cobble (very dense, moist) (Glacial till)
3.5 - 7.0	GP	Rd-blk BEDROCK - moderately weathered, fractured, soft
7.0	GP	BEDROCK - fractured, weathered bedrock, hard

No caving observed No groundwater seepage observed

TEST PIT 51 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil
0.5 - 2.0	SM	Lt org-brn silty fine to med SAND, trace roots
2.0 - 10.0	SM	Lt gry silty fine to med SAND, minor gravel (med dense, moist) (Outwash)
10.0 - 13.0	SP	Gry fine to med SAND w/ some silt, gravel (med dense to dense, moist) (Glacial Till?)
		No caving observed No groundwater seepage observed

TEST PIT 52 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SP	Org-brn fine to med SAND w/ some silt (loose, moist)
3.0 - 9.0	SP	Lt yellow brn-gry fine to med SAND w/ minor silt (loose to med dense, moist) (Outwash)
9.0 - 14.0	SP	Drk gry med to coarse SAND w/ scattered pebbles (loose, moist) (Outwash)
		Slight caving observed at 9 to 14 feet No groundwater seepage observed

TEST PIT 53 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest duff
0.5 - 3.0	SP	Lt yellow-brn fine to med SAND w/ some silt (Outwash)
3.0 - 14.0	SP	Drk gry med to coarse SAND, minor gravel (Outwash)
		No caving observed Slight groundwater seepage observed at 12 feet

TEST PIT 54 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5	·	Forest duff
0.5 - 4.0	SP	Lt yellow-brn fine to med SAND w/ some silt (Outwash)
4.0 - 15.0	SP	Drk gry med to coarse SAND, minor gravel (Outwash)
		No caving observed Slight groundwater seepage observed at 12 feet

TEST PIT 55 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 3.5	SM	Red-brn silty SAND w/ gravel, occ cobble, occ organics (med dense- dense, moist) (Weathered bedrock)
3.5 - 6.5	GP	Brn fractured bedrock w/ minor silt/SAND (med dense-dense, moist) (Fill?)
6.5 - 9.0	GP	BEDROCK - highly fractured, weathered bedrock, hard
		(1 ½-6 in fragments)
		No caving observed
		No groundwater seepage observed

TEST PIT 56 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Topsoil/Forest duff
0.3 - 4.0	GP	Red-brn sandy gravel w/ silt, gravel, occ coble (med dense-dense, moist)
		(Weathered bedrock/Residual Soil)
4.0 - 9.0	GP	Rd-blk Weathered BEDROCK – highly weathered, fractured, soft
9.0 - 10.5		BEDROCK - fractured, weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 57 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.1 - 0.0		Topsoil/Forest duff
1.0 - 2.0		Brn sand & gravel (Fill) (Crushed rock) (dense, moist)
2.0 - 4.5	SM	Red-brn silty SAND w/ minor fractured rock (med dense, wet)
4.5 - 9.5	GP	Brn Weathered BEDROCK - highly weathered, fractured, soft
9.5 - 11.5	GP	Purple-brn BEDROCK - fractured, weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 58 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 1.0		Topsoil/Forest duff
1.0 - 2.0	GP	Brn sand & gravel (Fill) (Crushed rock) (dense, moist)
2.0 - 4.5	GP	Red-brn silty SAND w/ minor fractured rock (med dense, wet)
4.5 - 9.5		Brn Weathered BEDROCK - highly weathered, fractured, soft
9.5 - 11.5		Purple-brn BEDROCK - fractured, weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 59 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 1.5	SM	Red-brn silty SAND w/ rock, occ organics (med dense-dense, moist)
1.5 - 2.5	GP	Purple-brn Weathered BEDROCK - highly weathered, fractured, soft
2.5 - 10.5		Purple-brn BEDROCK - fractured, weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 60 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5 0.5 - 6.5 6.5 - 8.5	SM	Sod/Forest duff/Slash Red-brn silty SAND w/ rock (weathered) (med dense-dense, moist) Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 61 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 ~ 0.5	_	Topsoil/Forest duff
0.5 - 4.5	GM	Red-brn Weathered BEDROCK - highly weathered, fractured, soft
4.5 - 6.5		Red-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 62 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 6.0	GM	Red-brn Weathered BEDROCK – highly weathered, fractured, soft
6.0 - 8.5		Red-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed
		No groundwater seepage observed

TEST PIT 63 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 4.0	GM	Fill-bedrock
4.0 - 7.0	GM	Red-brn Weathered BEDROCK - highly weathered, fractured, soft
7.0 - 10.0		Red-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 64 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Topsoil/Forest duff
0.3 - 3.0	SM	Red-brn silty SAND w/ gravel, occ cobble (bedrock) (loose-med dense, moist)
3.0 ~ 6.0	GP	Brn Weathered BEDROCK - highly weathered, fractured, soft w/ silt
		infilling
6.0 - 7.0		Red-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed
		Minor groundwater seepage observed at 5 to 6 feet

TEST PIT 65 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 5.0	SM	Red-brn silty SAND w/ gravel, cobble, occ bedrock (loose-med dense, moist)
5.0 - 9.0		Red-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 66 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.3		Sod/Topsoil
0.3 - 4.0	SM	Red-brn silty SAND w/ gravel, cobble (loose-med dense, moist-wet)
4.0 - 16.5		Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard w/ silt infiling
		No caving observed Minor groundwater seepage observed at 3 to 4 feet

TEST PIT 67 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 4.0		Fill
4.0 - 10.0	GM	Weathered BEDROCK - highly weathered, fractured, soft
		No caving observed
		No groundwater seepage observed

TEST PIT 68 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 8.5		BEDROCK - fractured, slightly weathered bedrock, hard
		• ,
		No caving observed
		No groundwater seepage observed

TEST PIT 69 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.4		Sod/Topsoil
0.4 - 3.0	SM	Brn silty SAND w/ gravel, rock (med dense, moist)
3.0 - 5.5	GM	Red-brn Weathered BEDROCK - highly weathered, fractured, soft
5.5 - 8.5	GP	Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 70 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 3.0	SM/GM	Red-brn silty weathered bedrock (dense, moist)
3.0 - 7.5	GP	Purple-brn Weathered BEDROCK - highly weathered, fractured, medium hard
7.5 - 11.0	GP	Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 71 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 3.0	SM/GM	Red-brn silty weathered bedrock (dense, moist)
3.0 - 7.5	GP	Purple-brn Weathered BEDROCK - highly weathered, fractured, medium hard
7.5 - 11.0	GP	Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 72 - Approximate location is shown on attached site plan.

Depth (It.)	Soil Type	Description
0.0 - 3.0	SM/GM	Red-brn silty weathered bedrock (dense, moist)
3.0 - 7.5	GP	Purple-brn Weathered BEDROCK - highly weathered, fractured, medium hard
7.5 - 11.0	GP	Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
	`	No caving observed No groundwater seepage observed

TEST PIT 73 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest Duff
0.5 - 2.5		Lght org-brn silty SAND w/ sub-angular rock fragments (highly weathered rock)
2.5 - 5.5		Org-brn Weathered BEDROCK - highly weathered, fractured, medium hard
5.5 - 9.0		Org-brn BEDROCK - fractured, slightly weathered bedrock, hard. Breaks into 2
		to 4-inch quarry spall type fragments
		No caving observed
	`	No groundwater seepage observed

TEST PIT 74 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Forest Duff
0.5 - 2.0		Org-brn Weathered BEDROCK – highly weathered, fractured, medium hard
2.0 - 6.5		Org-brn BEDROCK - fractured, slightly weathered bedrock, hard. Refusal.
		No caving observed No groundwater seepage observed

TEST PIT 75 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description	
0.0 - 0.5		Forest Duff	
0.5 - 3.0		Org-brn BEDROCK	- fractured, slightly weathered bedrock, very hard. Refusal
		No caving observed	
	`	No groundwater seep	age observed

TEST PIT 76 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 3.0	SM/GM	Red-brn silty weathered bedrock (dense, moist)
0.2 - 3.0		Org-brn Weathered BEDROCK – highly weathered, fractured, soft with vesicles and infilling
3.0 - 7.5		Org-brn Weathered BEDROCK - highly weathered, fractured, medium hard
	`	No caving observed No groundwater seepage observed

TEST PIT 77 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description	
0.0 - 0.5		Forest Duff	***************************************
0.5 - 2.0		Org-brn BEDROCK - highly weathered, fractured, very hard.	
		No caving observed No groundwater seepage observed	

TEST PIT 78 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 3.0 3.0 - 7.5	GP	Red-brn silty weathered bedrock (dense, moist) Purple-brn Weathered BEDROCK – highly weathered, fractured, medium hard
7.5 - 11.0	GP	Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
		No caving observed No groundwater seepage observed

TEST PIT 79 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5	SM/GM	Red-brn silty weathered bedrock (dense, moist)
0.5 - 11.0		Rd-tan clayey SILT w/ angular gravel (med dense, wet) (Residual Rock)
11.0 - 12.0		Org-brn BEDROCK – highly weathered, fractured, very hard.
	`	No caving observed No groundwater seepage observed

TEST PIT 80 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 3.0	SM/GM	Red-brn silty weathered bedrock (dense, moist)
3.0 - 7.5	GP	Purple-brn Weathered BEDROCK - highly weathered, fractured, medium hard
7.5 - 11.0	GP	Purple-brn BEDROCK - fractured, slightly weathered bedrock, hard
	`	No caving observed No groundwater seepage observed

TEST PIT 81 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5	- "	Topsoil/Forest duff
0.5 - 2.5	SP	Org-brn SAND w/ minor gravel, silt, occ organic (loose to med dense, moist)
2.5 - 8.0	SP	Brn fine to med SAND w/ gravel, occ cobble (med dense, moist) (Outwash)
8.0 - 13.0	SP	Brn med to coarse SAND w/ gravel, occ cobble (med dense, moist) (Outwash)
		No caving observed No groundwater seepage observed

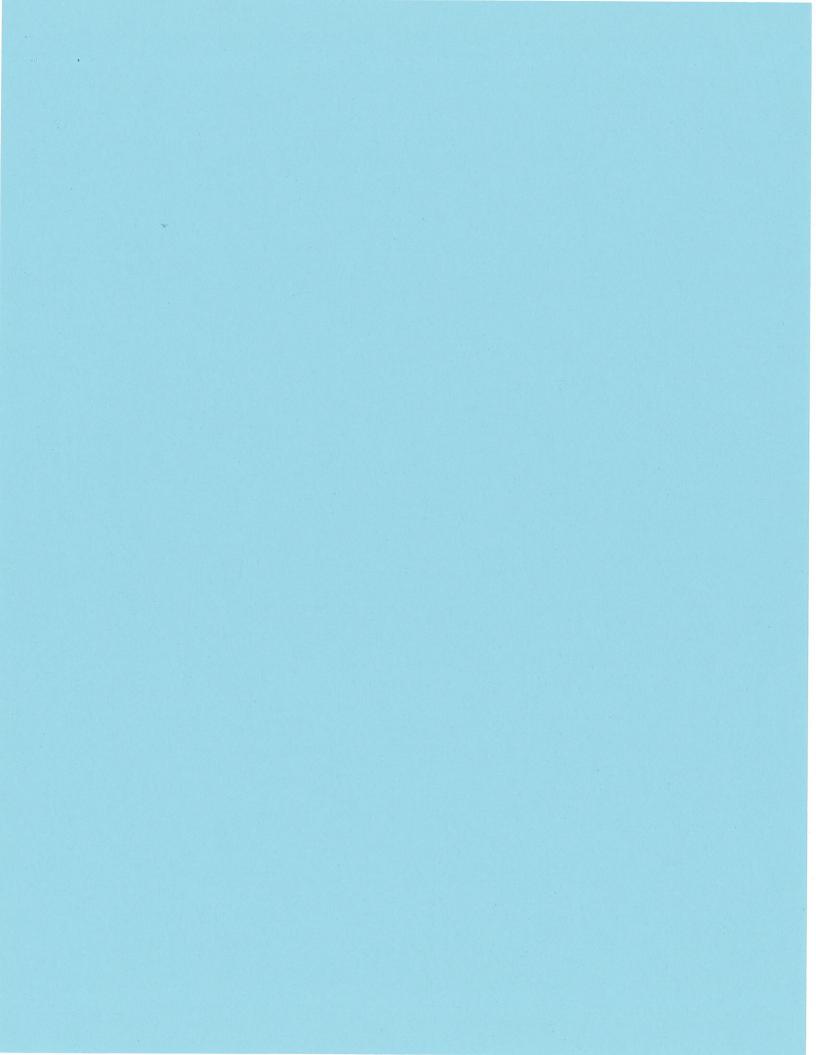
TEST PIT 82 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 2.5	SP	Org-brn SAND w/ minor gravel, silt, occ organic (loose to med dense, moist)
2.5 - 7.0	SP	Brn med to coarse SAND w/ gravel, occ cobble (med dense, moist) (Outwash)
7.0 - 12.0	SP	Brn fine to med SAND occ grave, cobble (med dense, moist) (Outwash)
		No caving observed No groundwater seepage observed

TEST PIT 83 - Approximate location is shown on attached site plan.

Depth (ft.)	Soil Type	Description
0.0 - 0.5		Topsoil/Forest duff
0.5 - 2.5	SP	Org-brn SAND w/ minor gravel, silt, occ organic (loose to med dense, moist)
2.5 - 15.0	SP	Brn fine to med SAND occ grave, cobble (med dense, moist) (Outwash)
		No caving observed No groundwater seepage observed

Excavated on: March 1, 2, 3, 29, & 30 Logged by: BPB/KSS



GeoResources, LLC

OWNER	ier Iark Mauren				JOB NUMBER MaurenM.UelandTreeFarm				BORING NUMBER	
	Mauren				enM.Uel	andTreeFa	rm	C-1		
PROJECT	nd Tree Fa	4489		LOCATION				DATE		
Uela	nu rree ra	fm		Kitsar	County	/		5-30-	06	
						-				
Depth (feet)		Sample Descr	iption		Run #	RQD / Recovery	Notes		Testing	
0	Tops	soil over loose, brown	silty sand with grav	⁄el						
5										
							Set surface casing t	o 7 ft		
	Moderat	ely weathered, very w	eak to weak, browr	n/gray			_			
	basal	with excessive fracture	es and highly joint	ed.						
	Fra	ctures infilled with clay	and mineralization	า						
10				:	R-1	0 / 40%				
	Become	es medium strong to st	rong, less fractures	s and						
	Becomes medium strong to strong, less fracture jointing, more massive				R-2	25 / 38%				
15		,								
					R-3	0 / 100%				
					R-4	0 / 100%				
20					R-5	18 /				
						100%				
							Curitohod book to an			
<u> </u>							Switched back to ca			
							advanced casing to	20 leet		
25	Moderate	ely weathered, strong,	gray basalt with fra	ctures						
		and joint			R-6	0 / 100%				
	Corina te			lose of						
	Coring terminated at 27 feet due to fra									
*************	CITCUIATION									
30										
	f Drill Rig:	Holocene Drilling, Core Dr		Approxi	mate Fl	vation:			L	
	f Sampler:	1101000110 211111119; 0010 21					Keith Schembs			
1 ype 0	i Jampiei:			Logged	υy.		Reith Schemos			
	Pag	ge: 1 of 2								
1			L						J	

OWNER		**************************************	JOB NUMBER				BORING NU	IMBER	
Mark	Mauren			Maure	enM.Uel	andTreeFa	rm	C-2	
PROJECT				LOCATION				DATE	
Uelai	nd Tree Fa	rm			County	,		5-30-6	16
***************************************	***************************************			·				0 00 0	
									1
Depth (feet)		Sample Desci	iption		Run	RQD /	Notes		Testing
					#	Recovery			
0	To	psoil over loose, brow	n clayey silty sand						
5									
							Set surface casing	to 10 ft	
10	Highly w	eathered, extremely w	oak to vory woak	brown					
10						0 / 00/			
		claystone (marine sedi		ged by	R-1	0/0%			
	C	cuttings in drilling fluid	only, no recovery		:				
					п 0	0 / 00/			
***************************************					R-2	0/0%			
15									
					R-3	0 / 0%			
					n-3	0/0%			
20									
							Out that a selection of the selection		
							Switched back to ca		
							advanced casing to	30 feet	
25									
30									
	i naili ni	Helesene Duller - O - D	11	A					
	Drill Rig:	Holocene Drilling, Core Dr	11	Approxi		vation:			
Type of	Sampler:			Logged	Ву:		Keith Schembs		
	Page: 1 of 2								

OWNER			JOB NUMBER					BORING NU	MOCO
	Mauren					andTreeFa	ırm	C-2	MDEH
PROJECT		***************************************		LOCATION	311111.001	ana noor o		DATE	
Uela	nd Tree Fa	ırm		Kitsar	County	1		5-30-0	າຣ
				<u> </u>				3-30-0	70

Depth (feet)		Sample Descr	ription		Run	RQD /	Notes		Testing
					#	Recovery			
30		No recovery, lost	circulation		R-4	0/0%			
					11.7	07070			
	Coring te	rminated at 32 feet du	e to fracturing and	lose of			-		
	·	circulation							
35									
-00									
40									
45									
45									
50									
—									
55									
									_
								Ì	
								ł	
60								ł	
	f Drill Rig:	Holocene Drilling, Core Dr	ill	Approxi	mate Ele	vation:			
Type of	f Sampler:			Logged	Ву:		Keith Schembs		
	Page: 2 of 2								

OWNER			JOB NUMBER MaurenM. UelandTreeFa				BORING NUMBER		IMBÉR
	Mauren				enM.Uela	andTreeFa	rm	C-3	
PROJECT	nd Tree Fai	rm		LOCATION Kitear	County	i		DATE	
OCIAI		1111		randap	County	***************************************		5-31-0	00
-							<u> </u>		T
Depth (feet)		Sample Descri	ption		Run #	RQD / Recovery	Notes		Testing
0	T _O	psoil over loose, browi	n clavey silty sand			<u> </u>			
	10	poon over 10000, brown	Tolayoy Silty Garia						
5	Modera	ately weathered, weak	to strong, light gra	v to					
		gray basalt (logged by					Set surface casing	to 40 ft	
	, ,	only)					due to highly fractu		
		-,					nature of rock, drille		
							continually lost circu		
10							in fractures and war		
							good seal prior to c	oring.	
15									
				:					
20									
20									
25									
30									
				,					
<u> </u>	f Drill Rig:	Holocene Drilling, Core Dri	<u>[</u>		imate Ele	evation:			
Type of	f Sampler:			Logged	Ву:		Keith Schembs		
	Page: 1 of 2								

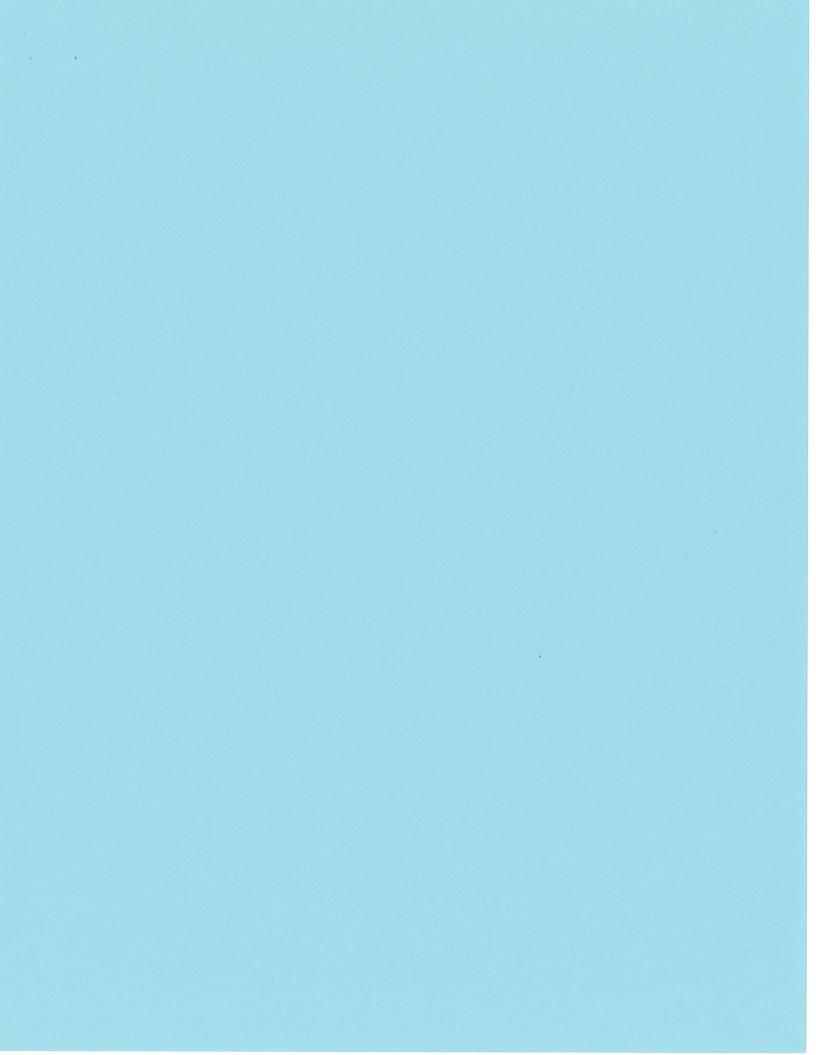
OWNER				ЈОВ NUMBER MaurenM.UelandTreeFarm					MBER
	Mauren				enM.Uel	andTreeFa	rm	C-3	
PROJECT	nd Tree Fa			LOCATION				DATE	
Uelai	no ree ra	rm		Kitsap	County			5-31-0	06
						,	,		
Depth (feet)		Sample Descr	iption		Run #	RQD / Recovery	Notes		Testing
30						***************************************			
35									
40	Coring te	rminated at 40 feet du	e to fracturing and	lose of			Kept loosing circula	tion,	
		circulation					abandoned coring		
							location, moved to lo	ower	
							area.		
45									
50									
55									
$\vdash \vdash \vdash$									
<u></u>									
60									
Type of	f Drill Rig:	Holocene Drilling, Core Dr	ill	Approxi	mate Ele	vation:			
Type of	f Sampler:			Logged	Ву:		Keith Schembs		
	Pa	ge: 2 of 2							

OWNER	****************	**************************************	JOB NUMBER				BORING NUMBER		BER
Mark	Mauren			Maure	nM.Uel	andTreeFa	rm	C-4	
PROJECT				LOCATION				DATE	
Uelai	nd Tree Fa	rm		Kitsap	County	/		6-1-06	
Depth (feet)		Sample Descri	ption		Run #	RQD / Recovery	Notes		Testing
0	-	Topsoil over loose, bro	wn sandy gravel						
		,							
5									
	Moderate	ely weathered, strong,	gray highly fracture	ed and					
	moderate	jointed ba		74 4116					
		jointou bu	ban						
					R-1	0 / 40%			
10									
10									
				-					
15	Recome	es more massive, with	crystallization infilli	n infilling in	2 35 / 90%				
	Decome	joints	orystanization infini	i iriiiliirig iri					
		Joints							
					R-3	40 /			
20					m-3	100%			

					R-4	10 / 70%			
25		Mara highly fr	acturad			0 / 0000			
·		More highly fr	acidi c u		R-5	0 / 80%			
				}					
					R-6	0 / 60%			
30									
	f Drill Rig:	Holocene Drilling, Core Dri	H	Approxi	mata El				
		Holocene Dilling, Core Di	181						
1 ype o	f Sampler:			Logged	By:		Brad Biggerstaff		
	Pa	ge: 1 of 2							
			<u> </u>						

GeoResources, LLC

OWNER			JOB NUMBER				BORING NU	MBER	
	Mauren			Maure	nM.Uel	andTreeFa	rm	C-4	
PROJECT				LOCATION	_			DATE	
Uelai	nd Tree Fa	rm		Kitsap	County	1		6-1-06	3
Depth					Run	RQD /		***************************************	
(feet)		Sample Descr	iption		#	Recovery	Notes		Testing
30								· · · · · · · · · · · · · · · · · · ·	
	Moderate	ely weathered, strong,	aray hiahly fractur	hae he	R-7	0 / 50%			
	Moderate	jointed basalt (a		cu anu	D 0	0 / 500/			
		Jointed Dasait (c	as above)		R-8	0 / 50%			
					R-9	0/0%			
					R-10	0/0%			
35	Terr	minated at 35 feet due	to lose of circulation	on					
40									
45									
40									
50									
									1
Ò									
55									
									1
				i					
				:					
60									
ļ	f Drill Rig:	Holocene Drilling, Core Dr	ill	Approxi	mate Ele	vation:			
Type o	f Sampler:			Logged	Ву:		Brad Biggerstaff		
	Page: 2 of 2								



OWNER			JOB NUMBER BORING NUM						
Mark	Mauren			Maure	nM.Uel	andTreeFa	ırm	HC-1	
PROJECT				LOCATION	_			DATE	
Uelar	nd Tree Fa	rm		Kitsap	County	<u> </u>		10-2-06	
Depth (feet)		Sample Descri	ption		Run #		Notes	Test	ing
0		Topsoil							
		Overburden – Tan		***************************************					
			,						
					R-1			-	
	Oli	ve green medium stror	ng to strong basalt						
10	O.	vo groom modium stroi	ig to ottorig baoait						
10				ŀ					
	1 1! - !- !		and all all and an area	!					
	Highly w	reathered, v. weak to w		asait,	R-2				
		with infilli							
20	Fre	sh, light gray strong to	very strong basalt						
	Highly	weathered, v. weak to	weak, reddish bro	wn	R-3				
30		basalt, with ir	nfilling		11-0				
				ļ					
40									
					R-4			***************************************	·····

				ŀ					
50	Eve	sch light grav etrong to	vary etrona hacal			Engares	ared water at EO #		
30	F16	esh, light gray strong to	very shong basall			Encounte	ered water at 50 ft		
					R-5			-	
		· · · · · · · · · · · · · · · · · · ·							
Туре о	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	mate Ele	evation:	NA		
Туре о	f Sampler:			Logged	Ву:		Keith Schembs		·
				L			. L		
	Pa	ge: 1 of 2							
	 ,	-							

OWNER				JOB NUMBER				BORING NUM	1BER
Mark	Mauren			Maure	nM.Uela	andTreeFa	arm	HC-1	
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fai	rm		Kitsap	County			10-2-0	6

Depth					Run		***************************************		
(feet)		Sample Descri	ption		#		Notes		Testing
60	Fre	sh, light gray strong to	very strong basali	t					
	, , ,	on, ngin giay onong to	vory ourong bacan	`				-	
								-	
					R-6			-	
								_	
70								_	
					R-7				
					11-7			ľ	
80									
								-	
	Termina	ted at 84 feet below e	xisting ground su	urface		***************************************			
90									
100									
100									
110									
120									
Type of	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	mate Ele	vation:	NA		
Type of	f Sampler:			Logged	Ву:		Keith Schembs		
Page: 2 of 2			_						

OWNER					JOB NUMBER BORI				
Mark	Mauren			Maure	nM.Uel	andTreeFa	ırm	HC-2	
PROJECT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			LOCATION				DATE	\dashv
	nd Tree Fai	rm		Kitsap	County	/		10-2-06	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			l	······································			1 .0 00	\dashv
				T		I		<u> </u>	\dashv
Depth		Sample Descri	ption		Run		Notes	Testin	al
(feet)			1		#				٦
0		Overburden – Brow	n gravelly silt						٦
			,						
					R-1				
	Highly	weathered, weak to m	edium strong, red	dish					
		brown bas	salt						П
10									╗
		dorataly woothored at	rong block boods			-			
	IVIO	derately weathered, st	rong, black, basan	١					
					пο				
	Fre	sh, light gray strong to	verv strong basal	t	R-2				
20		on, ng, ng, a, granj on ong to	, , , , , , , , , , , , , , , , , , ,						
				_		ļ		ļ	_
30					R-3]			ᅱ
									\dashv
									_
						Water at	36 feet		
		Fractured a	zone						
	Fre	sh, light gray strong to	verv strong basal	t					
40		, , , , , ,	, ,					·	\neg
40					R-4				
				-		1			\neg
50									
50								<u> </u>	
	***				R-5				
	Mode	erately weathered, stro	ng to medium stro	ng,	0				
		purple-gray	basalt						\neg
	Fre	esh, light gray strong to		t				 	_
Type o	f Drill Rig:	MacCullum Rock Drilling A	-,,,	Approxi	nate Flo	evation:	NA		-
<u> </u>	f Sampler:	Waddanan Floor Brining /		Logged			Keith Schembs		
1 ype 0	· Jampiei ·			oggcu	- y·		TOTAL CONCENDS		
	Đa	ge: 1 of 2							
	ra	ye. 1 01 2							
<u></u>			L						



OWNER	1				JOB NUMBER BORING NUMBER				BER
Mark	Mauren			Maure	nM.Uela	andTreeF	arm	HC-2	
PROJECT				LOCATION	_	***************************************		DATE	
Uelar	nd Tree Fai	m		Kitsap	County			10-2-06	3
Depth		Sample Descri	ntion		Run		Notes].	Testing
(feet)					#				g
60	Fre	sh, light gray strong to	very strong basa	it					
	Mode	rately weathered, stror purple-gray b		ng,	R-6			-	
70	Fre	sh, light gray strong to	very strong basa	lt					
					R-7				
80								_	
								-	
	Termina	ted at 84 feet below e	xisting ground s	urface					
90									
400									
100									
				1					
110									
110									
									•
120									
Туре о	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi		vation:	NA		
Type o	f Sampler:			Logged	Ву:		Keith Schembs / Cal C	Olmstead	
Page: 2 of 2									

OWNER				JOB NUMBE			BORING NUMBE	ER
Mark	Mauren			Maure	nM.UelandTree	Farm	HC-3	
PROJECT	T			LOCATION	0		DATE	
Uelar	nd Tree Fa	ff)		Kitsap	County		10-2-06	
Depth (feet)		Sample Descr	iption		Run #	Notes	Te	esting
0		Overburden – Brow	n gravelly silt					
	Highly	weathered, v. weak b	rown rock with infil	ling	R-1			
10	Modera	itely weathered, weak green bas	•	olive				
	Fre	esh, light gray strong to	very strong basal	t				
20					R-2			
20								
		veathered, med strong						
30	Fre	esh, light gray strong to	very strong basal	t	R-3			
				-				
40					R-4			
	Mod w	veathered, med strong	, purple-gray fractu	ıred				
50	Fre	esh, light gray strong to	very strong basal	t				
					R-5			
		1.4 O. W V		T				
-	Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	nate Elevation:	NA	*****	
Type of	Type of Sampler: Log				Ву:	Keith Schembs		
Page: 1 of 2								

GeoResources, LLC

OWNER Mark	ark Mauren				JOB NUMBER BORIN MaurenM.UelandTreeFarm Hi				
PROJECT	Madron			LOCATION	WI.OOIGI IG	11001 41	111	DATE	
	nd Tree Fa	rm		Kitsap C	County			10-2-0	06
				L					
Depth (feet)		Sample Descr	iption		Run #		Notes		Testing
60	Fre	sh, light gray strong to	very strong basal	t					
					R-6				
					11-0				
70									
					R-7				
80									
00									
	Termina	ted at 84 feet below e	xisting ground s	urface					

90									
400									
100									
		•							
110									
120									
	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxim		ion:	NA		
Туре о	f Sampler:		· · · · · · · · · · · · · · · · · · ·	Logged B	y:		Keith Schembs / 0	Cal Olmstead	
	Pa	ge: 2 of 2							

owner Mark	Mauren			јов мимвен Maurei	ов мимвея MaurenM.UelandTreeFarm				
PROJECT Uelar	nd Tree Fa	rm		LOCATION Kitsap	County		10-2-06		
Depth (feet)		Sample Descr	ription		Run #	Notes	Testing		
0		Overburden – Brow	n gravelly silt						
	Modera	tely weathered, weak t gray roo		purple R-1					
10									
20	Fresh, light gray strong to very strong basalt				R-2				
30					R-3				
40	Highly v	weathered, weak, brow	n rock with clay inf	illing	R-4				
50	Fre	esh, light gray strong to	very strong basalt						
		and the west are also because	ro vody všth -1	:::::	R-5				
Type of	Hignly \ Drill Rig:	weathered, weak, brow MacCullum Rock Drilling A			nate Elevation:	NA			
	Type of Sampler:			Logged E		Keith Schembs			
	Pa	ge: 1 of 2							

GeoResources, LLC

OWNER				JOB NUMBER	BORING NUMBER			
Mark	Mauren				nM.UelandTree	Farm	HC-4	
PROJECT	-1 "" F" -			LOCATION	0		DATE	
Uelar	nd Tree Fai	rm		Kitsap	County		10-2-06	
				·····				
Depth		Sample Descr	iption		Run	Notes	Testing	
(feet)					#			
60		veathered, weak, brow						
	Fre	sh, light gray strong to	very strong basa	lt				
					R-6			
70								
	Highly v	veathered, weak, brow	n rock with clay ir	filling				
	Fre	sh, light gray strong to	very strong basa	lt	D 7			
					R-7			
80								
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	Termina	ted at 84 feet below 6	existing ground s	urface				
			• • •					
90								
100								
110								
10								
				1				

100					ļ			
120	r multi min	M-O-II C	3/			B.I.A		
	Drill Rig:	MacCullum Rock Drilling A	Air Hammer		nate Elevation:	NA		
Type of	f Sampler:			Logged I	Зу:	Keith Schembs / Cal	Olmstead	
							 _	
	Pa	ge: 2 of 2						
Type of Sampler: Logged By: Keith Schembs / Cal Olmstead Page: 2 of 2								

OWNER					JOB NUMBER BORING NUMB				
Mark	Mauren			Maure	nM.Uela	andTreeF	arm	HC-5	
PROJECT Ueland Tree Farm LOCATION Kitsap County DATE 10-2-06									
Uelar	nd Tree Fa	rm		Kitsap	County			10-2-0)6
		Sample Descr	iption		1		Notes		Testing
0		Overburden – Brow	n gravelly silt						
	Moderat			ourple	İ				
				'					
	Fre			t	R-1				
		on, ngm gray onong to	roly ollolly buoul	`					
10									
10				-					

					R-2				
20									
		Very strong, d	ark gray						
					n a				
30	Fre	sh, light gray strong to	very strong basal	t	m-3				
				<u> </u>					
40									
10					R-4				
				<u> </u>				i	
50									
	Mod	d weathered, strong, fr	actured, gray basa	ult	R-5				
								:	
				-					
Type o	f Drill Rig:	MacCullum Rock Drilling A	Air Hammer	Approxi	nate Ele	vation:	NA		
Type o	f Sampler:			Logged	Ву:		Keith Schembs		
	Pa	ge: 1 of 2				**********************			

GeoResources, LLC

OWNER				JOB NUMBER BORING NUMBER					MBER
Mark	Mauren			Maure	nM.Uela	ndTreeFa	ırm	HC-5	
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsap	County			10-2-0	6
Depth		Sample Descri	iption		Run		Notes		Testing
(feet)					#	***************************************			υ
60	Mod we	athered, weak to mod	strong, brown, frac	ctured					
:		rock							
					П С			ľ	
					R-6			ľ	
	Fre	sh, light gray strong to	verv strong basal	t				-	
70		,g g, g	,					-	
				-					
	 1 1:	المصدر المصافح مدد المام	ta i i i and i la i ani i ani		R-7			-	
		ghly weathered, weak							
80	mre.	esh, light gray strong to	very strong basan	1				-	
		1 1 1 0 4 6 1 1 1	* .*						
	rermina	ted at 84 feet below e	xisting ground st	urrace					

90									
100									
110									
					İ				
120					1				
	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	nate Elev	vation:	NA		
Type o	f Sampler:			Logged	Ву:		Keith Schembs / Cal	Olmstead	
Page: 2 of 2									

GeoResources, LLC

OWNER				јов нимвен MaurenM.UelandTreeFarm					BORING NUMBER	
	Mauren				nM.Uelan	dTreeFa	arm	HC-6		
PROJECT	T			LOCATION	O-11-11-1			DATE		
Uelai	nd Tree Fai	П		Kiisap	County			10-2-00	6	
	······			T			·····			
Depth		Sample Descr	intion		Run		Notes		Testing	
(feet)					#		110100		reating	
0		Overburden – Brow	n gravelly silt							
	Moderat	tely weathered, weak t	o medium strong p	urple						
		gray roo	k		R-1					
	Fre	sh, light gray strong to			ויייו					
								<u> </u>	-	
10								-		
								-	***************************************	
								<u> </u>		
	Mod we:	athered, weak to mod	strong, brown, frac	tured				-		
		rock	J. J. J. J. J. J. J. J. J. J. J. J. J. J		R-2			-		
20		TOOK								
								 		
								}		
	Fre	esh, light gray strong to	very etrong basalt					}		
		on, agat gray strong to	very strong basan	•				-		
30					R-3			-		
30								-		
								-		
								-		
40								-		
40					R-4			-		
				-						
50										
					R-5					

			,							
Type o	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	nate Eleva	ation:	NA			
Type o	f Sampler:			Logged	By:		Keith Schembs / Cal	Olmstead		
				· · · · · · · · · · · · · · · · · · ·						
	Pa	ge: 1 of 2								
		-								
l					Militaria da pingga yan gangga yangga yang yang sanangga yanahid					

OWNER				JOB NUMBER BORING NUMB					MBER
Mark	Mauren			Maure	nM.Uelai	ndTreeFa	arm	HC-6	
PROJECT				LOCATION	_			DATE	
Uelar	nd Tree Fa	rm		Kitsap	County			10-2-0)6
Depth (feet)		Sample Descr	iption		Run #		Notes		Testing
60	Fre	sh, light gray strong to	very strong basal	t					
			, ,						
					R-6				
	Mod we	athered, weak to mod	strong, brown, frac	ctured					
70		rock							
	Termina	ted at 72 feet below e	xisting ground s	urface					
80									
90									
100									
100									
110									
110									
460									
120	L								
	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	ļ	mate Elev	ation:	NA		
Type o	f Sampler:			Logged	Ву:		Keith Schembs / Cal C	Imstead	
Page: 2 of 2						·			

OWNER	and Tree Farm			JOB NUMBE				BORING NU	MBER
	Mauren			· · · · · · · · · · · · · · · · · · ·	enM.Uel	andTreeF	arm	HC-7	
PROJECT	nd Trop Eq	×***		LOCATION	County			DATE	
Oelai	nu nee ra	1111		Misa	County			10-2-0)6
Depth		Sample Descr	intion		Run		Notes		Testing
(feet)		oumpio Boosi	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		#		110103		resung
0		Overburden – Brow	n gravelly silt						
	Moderat	ely weathered, weak to		eddish					
		brown ro			_				
	Fre	sh, light gray strong to			R-1				
		on, ngin gray onong te	vory offering baca						
10									
10									
				R-2					
20	Moderately weathered, medium strong of basalt			reen					
	Mod	derately weathered, me	edium strong purp	le					
	·	gray basalt Fresh, dark gray strong to very strong basalt							
	Fre				т о				
30					R-3				
40									
40					R-4				
50									
					R-5				
					' ' - J				
Туре о	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approx	mate Ele	evation:	NA		
Туре о	f Sampler:			Logged	Ву:		Keith Schembs / Cal C	Olmstead	
)		<u> </u>					
	Pa	ge: 1 of 2							
	- '	-							
l			L						



PROJECT LOCATION DA	HC-7 TE 10-2-06 Testing
Depth (feet) Sample Description (feet) Fresh, strong to very strong dark gray basalt, with thin fractured zones R-6 Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	10-2-06
Depth (feet) Sample Description Fresh, strong to very strong dark gray basalt, with thin fractured zones R-6 Fresh, strong to very strong dark gray basalt, with thin fractured zones R-70 Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	
(feet) Sample Description # Notes Fresh, strong to very strong dark gray basalt, with thin fractured zones R-6 Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	Testing
(feet) Sample Description # Notes Fresh, strong to very strong dark gray basalt, with thin fractured zones R-6 Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	Testing
Fresh, strong to very strong dark gray basalt, with thin fractured zones R-6	resting
thin fractured zones R-6 Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	
thin fractured zones R-6 Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	
70 70 Highly weathered, weak to v. weak, brown 80 Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	
70 Highly weathered, weak to v. weak, brown 80 Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90 90	
Highly weathered, weak to v. weak, brown 80 Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Highly weathered, weak to v. weak, brown 80 Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Highly weathered, weak to v. weak, brown 80 Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Highly weathered, weak to v. weak, brown Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
80 Fresh, strong to very strong dark gray basalt Terminated at 84 feet below existing ground surface 90	
Terminated at 84 feet below existing ground surface 90	
90	
90	
100	
100	
100	
100	
110	
100	
120	
Type of Drill Rig: MacCullum Rock Drilling Air Hammer Approximate Elevation: NA	
Type of Sampler: Logged By: Keith Schembs / Cal Olmst	ead
Page: 2 of 2	

OWNER				i				
Mark	Mauren			Maure	nM.UelandTree	Farm	HC-8	
PROJECT				LOCATION		***************************************	DATE	
Uela	nd Tree Fa	rm		Kitsap	County		10-2-06	
Depth					Run			
(feet)		Sample Descr	iption		#	Notes	Testing	
0		Overburden Brow	الم محمد ماليد مناط		<u> </u>			
U	3.4.1	Overburden – Brow						
	Woderat	ely weathered, weak to		eddish				
		brown ro	ck		R-1			
	Fresh, I	light gray strong to ver	y strong basalt witl	n thin	11-1			
		fractured z				Notes Te		
10								
				-				
	Mod w	eathered, very weak to		with				
		clay infilli	ng		R-2			
20	Fre	esh, strong to very stro	ng light gray basal	t				
				-				
					R-3			
30								
40								
					R-4			
				1				
50								
					D.E.			
					R-5			
				1			 	
T. 45	f Duitt Bin	Man Cultura De de D. 10	to 14					
	f Drill Rig:	MacCullum Rock Drilling A	ur Hammer		nate Elevation:			
Type o	f Sampler:			Logged	Ву:	Keith Schembs / Cal C	Olmstead	
	Pa	ge: 1 of 2						



OWNER				JOB NUMBER				BORING NU	MBER
Mark	Mauren			Maurer	nM.Uela	ındTreeFa	arm	HC-8	
PROJECT				LOCATION				DATE	
	nd Tree Fai	rm		Kitsap	County			10-2-()6
					Run				
Depth (feet)		Sample Descr	iption		#		Notes		Testing
					#				
60	Fre	sh, strong to very stro	ng light gray basa	lt					
					R-6				
70									
					R-7				
80									
	Termina	ted at 84 feet below e	existing ground s	surface					
90									
30									
					ľ				
100									
									1
110									
					ļ				
120									
Type o	f Drill Rig:	MacCullum Rock Drilling A	\ir Hammer	Approxir	nate Ele	vation:	NA		
Туре о	f Sampler:			Logged I	Зу:		Keith Schembs / Cal	Olmstead	
				~				***************************************	······································
	Pa	ge: 2 of 2							
		J	1						
									~~~~

OWNER			JOB NUMBER BORING NUMBER					MBER		
Mark	Mauren			Maure	nM.Uela	indTreeFa	arm		HC-9	
PROJECT	*********************			LOCATION			***************************************		DATE	
Uelar	nd Tree Fa	rm		Kitsap	County				10-2-0	06
			1	L					1	
D 11-					Bun					
Depth (feet)		Sample Descri	iption		Run		Notes	5		Testing
					#		***************************************			
0	O ₁	verburden – Dark brow	n gravelly and silt							
	Highly	weathered, weak brow	n rock with clay inf	illing	R-1					
	r ilgiliy	weatherea, weak brow	in rook with day in	ming						
10										
	Mod	weathered to fresh, str	ong, light gray bas	alt	D 0					
		with thin fracture			R-2					
20		***************************************	04 20.100							
					R-3					
30					ה-ט					
		Funda atuana Kalatana	/							
		Fresh, strong light gre	een/gray basait							
40					R-4					
	Fre	sh, strong to very stro	ng dark grav basal	t						
50		,	5 5. <del></del> ,							
	Froch	strong to very strong	dark graan/gray ha	ealt						
	1 10011,	anding to very strong t	uaik gieenigiay ba	ısan	R-5					ļ
Type of	Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	mate Ele	vation:	NA			
Type of	Type of Sampler:			Logged	Ву:		Cal Olmstea	d		
Page: 1 of 2										

# GeoResources, LLC

OWNER					B NUMBER BO MaurenM.UelandTreeFarm				
	Mauren				nM.Ueland I r	ee+arm	HC-9		
PROJECT Uelar	nd Tree Fa	rm		LOCATION Kitsap	County		10-2-06		
					10200				
Depth (feet)		Sample Descri	iption		Run #	Notes	Testing		
60	Fresh	strong to very strong o	dark green/gray	basalt					
					R-6				
70									
70									
					5 -				
					R-7				
80									
				_					
	Termina	ted at 84 feet below e	xisting ground	surface					
90									
-50									
100									
110									
120		T							
	f Drill Rig:	MacCullum Rock Drilling A	ur Hammer		mate Elevation				
Type o	f Sampler:			Logged	Ву:	Cal Olmstead			
	Pa	ge: 2 of 2							
l		and the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the second section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section							

OWNER						JOB NUMBER BORING NUMBE				
Mark	Mauren			Maure	nM.Uela	andTreeFa	rm	HC-10		
PROJECT				LOCATION				DATE		
Uelar	nd Tree Fa	rm		Kitsap	County	•		10-2-06		
			· · · · · · · · · · · · · · · · · · ·							
Depth					Run					
(feet)		Sample Descr	iption		#		Notes	Testing		
		<del></del>	11 1	*11						
0	Overt	burden – Loose, dark b	rown gravelly and	Silt						
					г		•			
					R-1					
10										
10				-						
	O۷	rerburden- loose, light	gray sandy gravel		n 0					
					R-2					
20										
	Madu	anthorod to front made	Latrona to atrona	iaht						
	WOU W	eathered to fresh, med		igiii						
		brown / gray	pasait							
					R-3					
30					n-3					
								-		
40	Fresh, s	trong light brown rock	with thin fractured :	zones	R-4					
					11.4					
								******		
	Mod war	athered, weak to med	etrona light brown	/ oray		\^/=+=:- =:=	animhered -t 40 f t	·····		
	WOU WE	•	O. O	, gray		vvater en	countered at 48 feet			
50		basalt with thin frac	nureu zones							
					R-5					
					, , ,					
	Fre	sh, strong to very stro	ng light gray basal	t						
		- ,	,							
Type	f Drill Rig:	MacCullum Rock Drilling A	ir Hammor	Approxi	mate Fla	vation:	NA			
<u> </u>		Widoodham Hock Dinning P	ar raililloi			/ TUUVIII				
Type o	f Sampler:			Logged	ву:		Cal Olmstead			
	Pa	ge: 1 of 2								
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# GeoResources, LLC

OWNER					OB NUMBER BORING NUMBER				
Mark	Mauren			Maure	MaurenM.UelandTreeFarm HC-1				
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsap	County			10-2-06	
		······································	***************************************	·					
Depth (feet)		Sample Descr	íption		Run #		Notes		Testing
60	Fre	sh, strong to very stro	ng light gray basal	t					
		•							
					R-6				
70									
70				ļ-					
					R-7				
80									
	Termina	ted at 84 feet below e	existing ground si	urtace					
90									
				,					
100									
	•								
					ĺ				
110					j				
					:				
120									
	 f Drill Rig:	MacCullum Rock Drilling A		Approxi	nate Ele	vation:	NA		<u> </u>
	f Sampler:			Logged			Cal Olmstead		
. ,,,,,,		<u> </u>		33	· ·				
	Pa	ge: 2 of 2							
								***************	·

## GeoResources, LLC

OWNER					JOB NUMBER				
Mark	Mauren			Maure	nM.Uel	andTreeFa	ırm	HC-11	
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsap	County	/		10-2-06	
Depth (feet)		Sample Descr	iption		Run #		Notes	Testing	
0	Ον	verburden – Loose, dar	k brown silty sand						
		<b>,</b>							
					R-1				
10									
10		<b>A</b> = <b>1</b> = <b>4 1</b> = <b>1</b> = <b>1</b>							
	1/	Mod weathered, med st							
		gray bas		***************************************					
		Fresh, strong light	gray basalt		R-2				
20									
	Mod	weathered to fresh, me	ed strong dark pur	ole					
		gray bas	alt					***************************************	
		Fresh, strong light	gray basalt		D A				
30					R-3				
				İ					
		Fresh, strong dark	grav basalt						
		, 5	3 . 3					<b>-</b>	
40								******	
					R-4				
	Mod wes	athered, weak to med s	strong light brown	/ gray		101-1		***************************************	
	11100 1100	basalt with thin frac		, gruy		vvater en	countered at 44 feet		
		basait with this flat	AUTOU ZOTIGO	}					
50	Evr	sch etrona to vorv etro	na liaht aray basal	+					
50	FIE	esh, strong to very stro	ng ngin gray basar	i					
					R-5				
		<b></b>							
Type of	Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	nate Ele	evation:	NA		
Type of	Sampler:			Logged	Ву:	***	Cal Olmstead		
		1		I			<u> </u>		
	Pac	ge: 1 of 2							
		<b>y</b> · <b>-</b> · -							
	arror on arrow are servered an an arrow of the female fel ph	***************************************	ge hy y mapshil hit ha hys handig handyn gyr hy yn dengr yn hyn ymwyr gel hy ymnih yd der hyn de dd alleithi dd Marin da i						



OWNER	NER JOB NUI			JOB NUMBER					BORING NUMBER	
Mark	Mauren				aurenM.UelandTreeFarm				HC-11	
PROJECT	,			LOCATION	<b>5</b>			DATE		
Uelar	nd Tree Far	'm		Kitsap (	itsap County				10-2-06	
					·····					
Depth (feet)		Sample Descri	ption		Run #		Notes		Testing	
60	Fre	sh, strong to very stror	ng light gray basal	t						
	. 10	on, onong to very one.	ig ngin gray basar	•						
					R-6					
70										
					R-7					
80					8					
	Termina	ted at 84 feet below e	xisting ground s	urface						
90										
100										
				•						
440										
110										
-										
120										
	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxim	nate Ele	vation:	NA			
	f Sampler:		<u> </u>	Logged E			Cal Olmstead			
- ,,,,,,,,,,	k			1 33						
	Pa	ge: 2 of 2								
	. u	g ···· ···								
l			L					***************************************		

<b></b>	Mark Mauren				JOB NUMBER  MaurenM.UelandTreeFarm  HOSATION			
PROJECT Uelar	nd Tree Fa	rm		LOCATION Kitsap	County		10-3-06	
Depth (feet)		Sample Descr	iption		Run #	Notes	Testing	
10	O\	verburden – Loose, dan Fresh, strong light		d	R-1			
20	<i>N</i>	Mod weathered, med so			R-2			
30		Fresh, strong dark			R-3			
40					R-4			
50	Mod we	eathered, weak to med	strong dark purp	le grav	R-5			
		basalt with thin fra						
	Drill Rig:	MacCullum Rock Drilling A	Air Hammer		mate Elevation:	NA		
Type of	f Sampler:			Logged	By:	Keith Schembs / Cal	Olmstead	
	Pa	ge: 1 of 2						

OWNER					JOB NUMBER				BORING NUMBER	
	Mauren				nM.Uel	andTreeFa	arm		HC-12	
PROJECT	nd Tree Fa	rm		LOCATION	County	,		DATE	00	
Ociai	iu nee i a			πισαρ	tsap County 10-3-06					
	***************************************				Run				1	
Depth (feet)		Sample Descri	iption		#		Notes		Testing	
60	Mod we	athered, weak to med	strong dark purple	grav		Water er	ncountered at 60 fe	eet		
		basalt with thin fra								
	Fre	sh, strong to very stro		t	D C					
					R-6					
70										
					R-7					
80										
	Termina	ted at 84 feet below e	existina around si	urface						
	101111111									
90										
100										
110										
120		¥		·			1			
Type o	f Drill Rig:	MacCullum Rock Drilling A	Air Hammer	Approxi		evation:	NA			
Type o	f Sampler:			Logged	Ву:		Keith Schembs / Ca	nbs / Cal Olmstead		
	Pa	ge: 2 of 2							**************	

OWNER					JOB NUMBER BORING NUMB				
Mark	Mauren			Maure	MaurenM.UelandTreeFarm HC-				
PROJECT				LOCATION				DATE	
Uelar	nd Tree Far	m		Kitsap	County			10-3-06	
Depth (feet)		Sample Descri	ption		Run #		Notes	Testir	ηg
0	Ov	erburden – Loose, dar	k brown silty sand						
		,	·						$\neg$
									$\neg$
	Mod	weathered, weak to me	ed strong gray has	alt	R-1				$\dashv$
	Wida	weatherea, weat to me	ou only gray bas						$\dashv$
10									
10									
					R-2				
	**************************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							
20	Mod wea	athered to fresh, med s		eddish					
		gray basa	alt						
	Mod weathered to fresh, medium strong light brown /			own /	D 0				
30		gray bas			R-3			***************************************	*********
		g,							
									$\dashv$
				ŀ					
									$\dashv$
									$\dashv$
40					R-4				$\dashv$
									_
				ļ					
	Ì								
50									
					R-5				
	ĺ				L-0				
	1							<b></b>	
Type o	i f Drill Rig:	MacCullum Rock Drilling A	uir Hammer	Approxi	mate Elev	/ation:	NA		
		Maccanath Hook Dinning P	an i ranninoi	Logged			Keith Schembs / Cal O	Imstead	
ı ype o	f Sampler:			Logged	<b>-у.</b>		Troiti Gonesinos / Odi G	motoud	
	Page: 1 of 2								

OWNER					BORING NUMBER					
	Mauren				MaurenM.UelandTreeFarm				HC-13	
PROJECT	nd Tree Fai	rm		LOCATION  Kitsap C	County			DATE	00	
OCIAI		*****		ratoup C				10-3-0	סע	
				·						
Depth (feet)		Sample Descr	iption		Run #		Notes		Testing	
60	Mod wea	athered to fresh, med s	strong to strong, re	ddish						
		brown basalt with thin	fracture zones							
					R-6					
					11-0					
70										
	Termina	ted at 84 feet below e	xisting ground su	urface						
80										
ļ										
90										
90										
100										
110										
120				<u> </u>			<u> </u>			
	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxim		ation:	NA			
Type o	f Sampler:		I	Logged B	ly:		Keith Schembs / Cal Olmstead			
	Pa	ge: 2 of 2				·				

PROJECT Ueland Tree Farm    Cocation Kitsap County   Date 10	-3-06	
Depth (feet)   Sample Description   Run #   Notes		
Depth (feet)  O Overburden – Loose, dark brown silty sand  Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt		
(feet)  O Overburden – Loose, dark brown silty sand  Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt		
(feet) Sample Description # Notes  O Overburden – Loose, dark brown silty sand  Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  R-1  R-2  PR-2	l	
Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  R-1  R-2  P-2	Testing	
Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  20  R-2		
Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  20  R-2		
Mod weathered, weak to med strong, fractured gray basalt  Mod weathered to fresh, med strong to strong, light gray basalt  20  R-2		
gray basalt  10  Mod weathered to fresh, med strong to strong, light gray basalt  20  R-2		
Mod weathered to fresh, med strong to strong, light gray basalt  20  R-2		
gray basalt		
20		
Mod weathered to fresh, med strong to strong, light		
brown basalt with thin fracture zones		
30 R-3		
Highly weathered, very weak to weak, brown rock with		
clay infilling		
40 Fresh strong to very strong light gray hasalt		
R-4		
50		
R-5		
	-	
Type of Drill Rig: MacCullum Rock Drilling Air Hammer Approximate Elevation: NA		
Type of Sampler: Logged By: Keith Schembs / Cal Olmstea		
Page: 1 of 2		

# **GeoResources, LLC**

owner Mark					M.UelandTree	BORING NUMBER HC-14	
PROJECT Uelar	nd Tree Fai	rm		LOCATION Kitsap	County		10-3-06
Depth (feet)		Sample Descr	ption		Run #	Notes	Testing
60	Mod wea	athered to fresh, med s brown basalt with thin		eddish	R-6		
70				_			
	Termina	ted at 72 feet below e	xisting ground s	urtace			
80							
90							
100							
110							
120	f Drill Rig:	MacCullum Rock Drilling A	sir Hammer	Approxin	nate Elevation:	NA	
	f Sampler:	, , , , , , , , , , , , , , , , , , ,			gged By: Keith Schembs / Cal Olmstea		
	Page: 2 of 2						

OWNER				JOB NUMBER BORING NUMBER					
	Mauren			Maur	enM.Uel	andTreeF	arm	HC-1	5
PROJECT				LOCATION	_			DATE	***************************************
Uelar	nd Tree Fa	rm		Kitsa	County	′		10-3-	06
Depth (feet)		Sample Desci	ription		Run #		Notes		Testing
0	O۱	verburden – Loose, da	rk brown silty sand	1					
			-						
	Highly w	veathered, very weak t	o weak, brown fra	ctured	R-1				-
		rock							
10		1001							
-10	Mody	cathored to fresh may	d atrana ta atrana	liabt					
		eathered to fresh, med		ngrit					
	1	brown basalt with fract	ures and infilling						
					R-2				
20									
	Fre	sh, strong to very stro	ng, light gray basa	lt					
		with fracture	zones						
					- n				
30					R-3				
40									ļ
					R-4				
50									
					R-5				
					11:3				
	Type of Drill Rig: MacCullum Rock Drilling Air Ham		Air Hammer		mate Ele	vation:	NA		1
Type of Sampler:			Logged	Ву:		Keith Schembs / Ca	l Olmstead		
	Pa	ge: 1 of 2							



OWNER Mark	Mauren		JOB NUMBER BORING NU  MaurenM.UelandTreeFarm HC-1				
PROJECT	Mauren			LOCATION	- and neer a	11118	DATE
	nd Tree Fai	rm		Kitsap Count	у		10-3-06
Depth (feet)		Sample Descri	ption	Run #		Notes	Testing
60	Mod wea	athered to fresh, med s	strong to strong, re	ddish			
``		brown basalt with thin					
			•	R-6			***************************************
70							
,,.,	Termina	ted at 72 feet below e	xisting ground su	ırface			
80							
90							
100							
100							
110							
***********	·						
120							
Type o	Type of Drill Rig: MacCullum Rock Drilling A		ir Hammer	Approximate E	levation:	NA	
Type o	f Sampler:			Logged By:		Keith Schembs / Cal C	Dlmstead
Page: 2 of 2							

OWNER			JOB NUMBER BORING NUI  MaurenM.UelandTreeFarm HC-16						
	Mauren				enM.Uela	andTreeF	arm	HC-16	
PROJECT	. + -			LOCATION				DATE	
Uelan	id Tree Fa	rm		Kitsar	County			10-3-0	6
Depth (feet)		Sample Descr	iption		Run #		Notes		Testing
0	<u> </u>	verburden – Loose, da	rk brown eilty ean	4					
	0,	Cibaldon - Loose, da	ik brown siity saik	<b>J</b>				-	
-	الممالا	weathered, very weak	to wook arou / b	WALLIA				-	
	migniy			TOWIT	R-1			-	
		fractured b	asait					<u> </u>	
10	age with displaying upon your happings during they dray that they have been dead to be the first that they								
	Fre	sh, strong to very stro	ng, light gray basa	alt					
					R-2				
					17-2				
20									
								-	
								-	
				:				-	
								F	
30					R-3			-	
								-	
								-	
<u> </u>								-	
								_	
40					R-4			L	
								L	
								Γ	
50									
					D.E				
					R-5				
								ļ~	
Type of	Type of Drill Rig:   MacCullum Rock Drilling A		ir Hammer	Approxi	mate Ele	vation:	NA		
Type of	Type of Sampler:			Logged By:			Keith Schembs / Cal Olmstead		
Page: 1 of 2									

OWNER		, A M W W W W W W W W W W W W W W W W W W		BORING NUMBER				
	Mauren			MaurenM.Ue	land I reel-a	arm	HC-16	
PROJECT	nd Tree Fai	m		LOCATION Kitsap Count	\/		10-3-06	
UGIAI	id Ties i di	118		Tatoap Oount	у		10-3-06	
					·   · · · · · · · · · · · · · · · · · ·			
Depth (feet)		Sample Descri	ption	Run #		Notes	Testing	
60	Fre	sh, strong to very stror	ng, light gray basal	t				
				R-6				
70								
	Terminat	ted at 72 feet below e	xisting ground su	ırface				
80								
90								
100								
110								
120		F				T		
	Type of Drill Rig: MacCullum Rock Drilling A		ir Hammer	Approximate E	levation:	NA		
Type o	f Sampler:			Logged By: Keith Schem			Dimstead	
	Pa	ge: 2 of 2						

OWNER				JOB NUMBER BORING NUM					
Mark	Mauren			MaurenM.UelandTreeFarm HC-17					
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsap	County			10-3-0	6 l
				1					
								····	
Depth		Sample Descr	intion		Run		Notes		Testing
(feet)			·pro		#		110100		restrig
0	Ove	rburden – Loose, brow	n silty gravelly sar	nd			···		
	0.0	20000, 21011	arony gravony car						
	Highly	weathered, very weak	to weak, gray / br	own	R-1				
		fractured b	asalt		<b>□-</b> 1				
								-	
40								-	
10									
								-	
	Eroch	mod atrong to atrong	Eabt araaalaray be					-	
	riesii,	med strong to strong,	ngni green/gray ba	ısall	R-2			Ĺ	
20									
				ľ					
				L				<u> </u>	
					D 0				
30					R-3			-	
	Fro	sh, strong to very stroi	a light gray basal	  }				-	
	110	sii, siidig to very siidi	ig, light gray basal	1					
				}					
40								-	
				ì	R-4			_	
					l			L	
								-	******
<b> </b>				}				-	
								_	
50									
					R-5				
					מיח				
								-	
								-	
	~~~~~	<u> </u>							
Type of	Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	nate Ele	vation:	NA		
Type of	Sampler:			Logged	Bv:		Cal Olmstead		
7, 2		<u></u>		3304	_ , -		130. 0.11101000		
	_								
	Pa	ge: 1 of 2							
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I		****************************	L.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·····					

OWNER	Mauren			1777	BORING NUMBER HC-17			
PROJECT	Mauren			MaurenM.Uel	anunteera	X1111	DATE	
Uelar	nd Tree Fai	m		Kitsap County	/		10-3-06	
Depth (feet)		Sample Descri	ption	Run #		Notes	Testing	
60	Fre	sh, strong to very stror	ng, light gray basal	t				
				R-6				
70								
70	Torminal	ted at 72 feet below e	vietina around ei	ırface				
	1 CHIIIII IA	ted at 12 feet below e	xisting ground st	arrace				
80								
90								
100								
110								
120								
	Type of Drill Rig: MacCullum Rock Drilling A		ir Hammer	Approximate El	evation:	NA	I	
	f Sampler:			Logged By:		Cal Olmstead		
	•	<u> </u>		1		1		
Page: 2 of 2								

OWNER				JOB NUMBER BORING NUMBER				JMBER	
Mark	Mauren			Maure	enM.Uela	ndTreeF	arm	HC-18	8
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsar	County			10-3-0	06

Depth (feet)		Sample Descr	iption		Run #		Notes		Testing
0	Ove	rburden – Loose, brow	n silty gravelly sar	nd					
		hly weathered, very we fractured b	asalt		R-1				
10	Mo	od weathered, weak to basalt		1					
	F	Fresh, strong to very st	rong, green rock		R-2				
20	20								
	Fresh, med strong to strong, light green/gray basa								
20	Fresh,	med strong to strong,	light green/gray ba	asalt	R-3				
30									
40					- A				
					R-4				
	Mod w	eathered, weak to med	d strong, reddish p	urple					
50		basalt							
		***************************************		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	R-5				
	Fre	sh, strong to very stro	ng, light gray basa	lt	11.3				
Type of	Type of Drill Rig: MacCullum Rock Drilling Air Hammer A			Approxi	imate Elev	vation:	NA		
Type of Sampler: Logg			Logged	Ву:		Cal Olmstead			
Page: 1 of 2									



owner Mark	Mauren			JOB NUMBER MaurenM.Uela	andTreeFa	rm	BORING NUMBER HC-18	
PROJECT				LOCATION			DATE	_
Uelar	nd Tree Fa	rm ————————————————————————————————————		Kitsap County			10-3-06	
								_
Depth (feet)		Sample Descr	iption	Run #		Notes	Testin	g
60	Fre	sh, strong to very stror	ng, light gray basal	t				
								_
				R-6				-
70								
	Termina	ted at 72 feet below e	xisting ground su	ırface				
<u> </u>								
80								
90								
- 30								
100				:				
100								
440								
110								
120	f Drill Rig:	MacCullum Rock Drilling A	ir Liammar	Approximate Ele	wation	NA		
		MacCullum Aock Dilling A	iii i i alliillet	Logged By:	zvauoii.	Cal Olmstead		\dashv
, ype o	Type of Sampler:			augged by.		Out Offisicad	44-7-4-7-4-7-4-7-4-7-4-7-4-7-4-7-4-7-4-	
Page: 2 of 2								
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OWNER				JOB NUMBER BORING NUM					MBER
Mark	Mauren			Maure	nM.Uela	undTreeFa	arm	HC-19	9
PROJECT				LOCATION		.,		DATE	
Uelar	nd Tree Far	m		Kitsap	County			10-3-0	06
	•			······································		***************************************			
Donth					Run				
Depth (feet)		Sample Descri	ption		#		Notes		Testing
			*1		"				
0		Overburden – loose, b	rown siity sand						
					R-1				
					[7-1				
	M	od weathered to fresh,	strong, light gray						
10		basalt							
		oaoan		-					
					R-2				
20									
30					R-3				
- 00									
				1-11-					
	Moderat	ely weathered, med st	rong, dark reddish	ыаск					
40					R-4				
					'''				
<u> </u>	Modera	itely weathered to fresl	n, strong to very st	rona.					
50		dark gray b		· - · · · · g)					
		dank gray b	aoun						
					R-5				
	ļ			:					ļ
Type o	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	mate Ele	vation:	NA		
Туре о	f Sampler:		Logged	Ву:		Cal Olmstead			
						·····		····	
	Pa	ge: 1 of 2							
	· ·	-							
l			L						

GeoResources, LLC

owner Mark	rk Mauren M				ов number MaurenM.UelandTreeFarm				
PROJECT	nd Tree Fa	rm		LOCATION Kitsap C	***************************************		HC-19 DATE 10-3-06		
Depth (feet)		Sample Descr	iption		Run #	Notes	Testing		
60	Modera	tely weathered to fresh		trong,					
		dark gray b	asait		. .				
					R-6				
70									
70	Termina	ted at 72 feet below e	xisting ground s	urface					
80									
90									
90									
100									
440									
110									
120									
	Type of Drill Rig: MacCullum Rock Drilling Air Ham				ate Elevation:	NA			
Type of	Type of Sampler:			Logged B	y:	Cal Olmstead			
	Pa	ge: 2 of 2							
l			L						

OWNER				JOB NUMBE	JOB NUMBER BORING NU				JMBER
Mark	Mauren			Maure	nM.Uela	andTreeF	arm	HC-2	o
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsap	County			10-3-	06
Depth					Run				T
(feet)		Sample Descr	iption		#		Notes		Testing
0		Overburden – loose, k	rown cilty cand						
U		Overburden – 10036, k	nown silly sand						
					R-1				
.,									
	Mod w	reathered to fresh, me	dium strong, light g	gray	-				
10		basalt							
				•					
					R-2				
20									
2.0									
									ļ
					R-3				
30					,,,,				

	Moderate	ly weathered, strong,	dark greenish gray	basalt					
		•							
40									
7.5					R-4				
	Modera	tely weathered to frest	h etrona to very et	rong					
	IVIOGOTA	purple / gray	- •	ong,					
	Madara			onich					
FO	woutla	tely weathered to fresh		C1112[]					
50		gray bas	an						
					R-5				
					_				
Type of	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxi	mate Ele	vation:	NA		
Type of	f Sampler:		Logged By: Cal Olmst			Cal Olmstead			
Page: 1 of 2									

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OWNER					JOB NUMBER BORING NUMBER				
Mark	Mauren			Maure	aurenM.UelandTreeFarm HC-20				
PROJECT				LOCATION				DATE	
Uelar	nd Tree Far	m		Kitsap	County			10-3-06	
					Run		, , , , , , , , , , , , , , , , , , , ,		
Depth (feet)		Sample Descri	ption		#		Notes	Testing	
					17	,			
60	Modera	tely weathered to fresh		enish					
		gray basa	alt						
					D 0				
					R-6				

70									
	Terminat	ted at 72 feet below e	xisting ground su	urface					
80					:				
00									
					ĺ				
90									
					i				
100									
110									
				Ì					
120	<u> </u>								
Туре о	Type of Drill Rig: MacCullum Rock Drilling Air Hammer Appro			Approxi	nate Ele	vation:	NA		
Type o				Logged	Bv:		Cal Olmstead		
. ,,,,,,				33-3					
	_	0							
	Pa	ge: 2 of 2							
·									

OWNER						JOB NUMBER BORING NUMBER				
Mark	Mauren			Maure	nM.Uela	andTreeF	arm	HC-2	1a	
PROJECT				LOCATION	_			DATE		
Uelar	nd Tree Fa	rm		Kitsap	County			10-3-0	06	
								•	,,,,,	
Depth		***************************************			Run	***		***************************************	1	
(feet)		Sample Descr	ription		#		Notes		Testing	
0		Overburden – loose, k	rown cilty cand							
		Overburgen 1003e, k	nown silly sand							
					R-1					
10										
				Ĭ						
	Hiahlv w	veathered, extremely to	verv weak, dark	brown						
		fractured i			R-2					
20 Fresh, strong to very strong, light gray basalt										
	110									
					R-3					
30										
40					-					
					R-4					

				-						
50										
- 50										
					R-5					
		·		,						
	f Drill Rig:	ir Hammer	Approxi	nate Ele	vation:	NA				
Type of Sampler: Logge				Logged	Ву:		Cal Olmstead			
Page: 1 of 2						**************************************				

GeoResources, LLC

OWNER		ر به که که که که چه چه موسط که در که که که که چه چه چه چه چه موسود چه چه در خود و در در در در در در در در در د در در که که که که که چه چه در در در در در در در در در در در در در	*****************************	JOB NUMBER						
Mark	Mauren			MaurenN	MaurenM.UelandTreeFarm H					
PROJECT				LOCATION			DATE			
Uelar	nd Tree Fai	m		Kitsap Co	Kitsap County 10-3-06					
Depth		Sample Descr	ntion	F	Run	Notes	Testing			
(feet)		Sample Descri	ption		#	110162	resung			
60	Fre	sh, strong to very stror	ng, light gray basa	lt l						
				_						
				h	₹-6					
70										
'	Termina	ted at 72 feet below e	visting ground s	urface						
	remina	ted at 12 leet below e	Albing ground o	dilaco						
90										
80										
90										
100										
110										
120										
	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer	Approxima	ite Elevation:	NA	I			
			Logged By		Cal Olmstead					
	-	1				1				
	Pa	ge: 2 of 2								
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l			L			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~				

OWNER	, , , , , , , , , , , , , , , , , , ,	16 da, be byda, da, yl, yl, dd badl be bl. yl, bl. hap bywyw yn n ngwy 18 awn 19 o'n na h 18 newn 19 o'n 19 ym wn 19		JOB NUMBER BORING NUMBER					
Mark	Mauren			Maure	enM.Uela	andTreeFa	arm	HC-21b	
PROJECT				LOCATION				DATE	
Uelar	nd Tree Fa	rm		Kitsap	County			10-3-06	
									
Depth					Run				
(feet)		Sample Descr	iption		#		Notes	Testing	
0		Overburden – loose, b	prown silty sand						
					R-1				
10									
	Fre	sh, strong to very stror	ng, light grav basal	t	D 0				
		•	0, 0 0 ,		R-2				
20									
30					R-3				
30									
40					R-4				
					17-4				
50									
					R-5				
Type of	Type of Drill Rig: MacCullum Rock Drilling Air Hammer			Approxi	mate Ele	vation:	NA	I	
Type of	Type of Sampler: Logo			Logged	ged By: Cal Olmstead				
Page: 1 of 2									

GeoResources, LLC

OWNER	l l				NUMBER BORING NUMBER				
Mark	Mauren		M	aurenM.Uela	HC-21b				
PROJECT			LOCAT				DATE		
Uelai	nd Tree Fa	rm	Ki	tsap County			10-3-06		
Depth				Run					
(feet)		Sample Descri	iption	#		Notes	Testing		
60	Termina	ted at 60 feet helow e	xisting ground surface	re e					
	romina	due to der							
		ude to dei	ioity						
70									
80									
90									
100									
440									
110									
120									
Туре о	f Drill Rig:	MacCullum Rock Drilling A	ir Hammer App	roximate Elev	vation:	NA			
Туре о	Type of Sampler: Logge		ged By:		Cal Olmstead				
	Pa	ge: 2 of 2							

OWNER	i de la companya de la companya de la companya de la companya de la companya de la companya de la companya de					JOB NUMBER BORING NUMBI MaurenM.UelandTreeFarm HC-22				
PROJECT	Mauren			LOCATION	enivi.Uei	andireera	3/1/I	HC-22		
	nd Tree Fa	rm			County	/		10-3-0	16	
				<u>'</u>				10.0.4		
Depth					Run					
(feet)		Sample Desci	ription		#		Notes		Testing	
0		Overburden – loose, t	orown silty sand							
					R-1					
	Mod w	eathered, med strong		wn -	11-1					
		gray bas	alt							
10										
					R-2					
20	20 Fresh, strong to very strong, light purple gray									
20	riesii,	strong to very strong,	light purple gray b	asan						
30					R-3					
40					R-4					
					11					
50						1				
					R-5					
Type of	f Drill Rig:	MacCullum Rock Drilling A	Air Hammer	Approxi	mate Ele	L evation:	NA		L	
			Logged			Cal Olmstead				
. ,,,,,	Type of Sampler.			oggcu	-y·		- Jai Omsteau			
Page: 1 of 2										
Fage: 1 01 2										
1			1				·			

GeoResources, LLC

	rk Mauren N				NUMBER BORIN MaurenM.UelandTreeFarm HC				
PROJECT Uelan	d Tree Fari	m		LOCATION Kitsap County			10-3-06		
Depth (feet)		Sample Descri	otion	Run #		Notes	Testing		
60	Fresh, s	strong to very strong, li	ght purple gray ba	ısalt					
				R-6					
70									
	Terminat	ed at 72 feet below e	xisting ground s	ırface					
80									
90									
100									
110									
120									
Туре о	Type of Drill Rig: MacCullum Rock Drilling Air Hammer		Approximate Ele	evation:	NA				
Туре о	Type of Sampler: Log		Logged By:		Cal Olmstead				
Page: 2 of 2									

OWNER			A 10 10 10 A 10 10 A 10 A 10 A 10 A 10	JOB NUMBER BORING NUMBER					
Mark	Mauren			Maure	enM.UelandTree	eFarm	HC-23		
PROJECT				LOCATION			DATE		
Uelar	nd Tree Fai	rm		Kitsap	County		10-3-06		

Danish					Run				
Depth (feet)		Sample Descr	iption		#	Notes	Т	esting	
					17			,	
0	Oı	verburden – loose, dar	k brown silty sand						
	Mod	weathered to fresh, str	ong light gray bas	alt	R-1				
	11100	Troderior our to in our ij ou	01.g, 1.g. 1. g. a., 2.a.				<u> </u>		
10							<u> </u>		
10									
	Me	od weathered, strong,	purple gray basalt		n o				
					R-2				
20	20								
	Fra	sh, strong to very stro	na liaht aray basal	+			-		
	110	an, anong to very and	ng, ngm gray basa	L			-		
							_		
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	od weathered, strong,							
	Fresh, strong to very strong, light gray basalt			t	R-3				
30					11-0	Notes Testing			
							ļ		
40					R-4				
******									
	Mod w	reathered to fresh, med	d strong to strong,	light					
		gray fractured							
50		9.5.,							
- 30	Erooh	atrana ta varu atrana	ight brown / gray b	ocolt					
ļ	riesii,	strong to very strong, I	igni brown / gray b	asan	R-5				
Туре о	Type of Drill Rig:   MacCullum Rock Drilling Air Hammer   Appro		Approxi	imate Elevation:	NA	1			
L .				Logged		Cal Olmstead			
Type of Sampler: Logged			-,-	ou. o.motodd					
Page: 1 of 2									
Page: 1 of 2									
1									

## GeoResources, LLC

OWNER	ER JC				JOB NUMBER BORING NUMBER				
Mark	Mauren			Mauren	MaurenM.UelandTreeFarm H				
PROJECT				LOCATION				DATE	
Uelar	nd Tree Far	m		Kitsap (	County			10-3-06	<u> </u>
			1						
Depth					Run		Natao		Taatina
(feet)		Sample Descri	ption		#		Notes		Testing
60	Fresh, s	strong to very strong, li	ght brown / gray ba	asalt					
					R-6				
70									
	Terminat	ted at 72 feet below e	xisting ground su	ırface					
80									
90									
100									
100									
110									
	1								
120									
	Type of Drill Rig: MacCullum Rock Drilling Air Hammer		ir Hammer	Approxin	nate Ele	vation:	NA		
	Type of Sampler:			Logged E	Зу:		Cal Olmstead		
		ge: 2 of 2							
	Pa								
			L						

# **GeoResources, LLC**

<b></b>	Mauren			<del></del>	R enM.Uelar	H	NG NUMBER C-24				
PROJECT Uelar	nd Tree Fa	rm		LOCATION Kitsap	County			DATE	)-3-06		
Depth (feet)		Sample Descr			Run #		Notes		Testing		
0	O	verburden – loose, dar	k brown silty sand								
**************					R-1						
10											
	Mod	derate weathered, med fractured b		n							
	Fre	sh, strong to very stroi		lt							
		, <u>g</u> ,	., ., ., ., .,		R-2						
20											
				Ī							
									***************************************		
	Moderately weathered to fresh, strong, purple basalt				R-3						
30					N*3						
		strong to very strong, I									
	vviti	n occasional less than	1-100t purple zone	5							
40					R-4						
50											
					R-5						
Type of Drill Rig: MacCullum Rock Drilling Air Hammer			Approxi	mate Elev	ation:	NA					
Type of Sampler:			Logged	Ву:		Cal Olmstead					
	Pa	ge: 1 of 2									

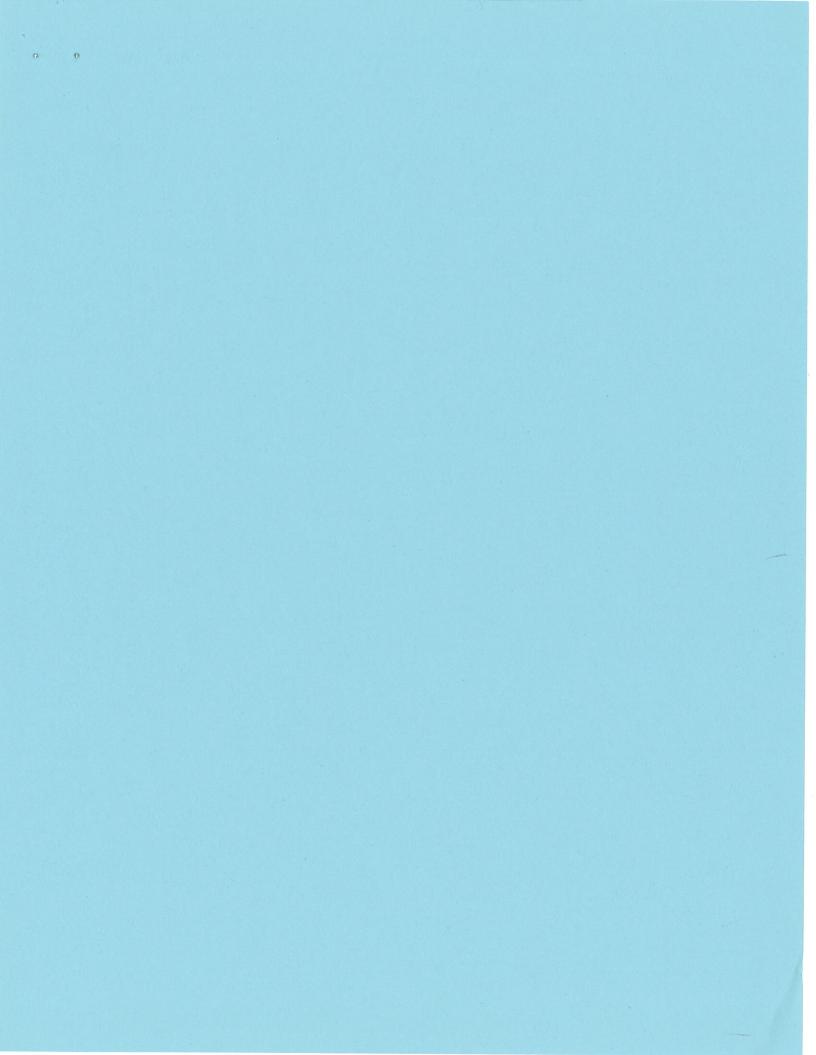
# GeoResources, LLC

OWNER		JOB NUMBER BORING NUMBER  MaurenM.UelandTreeFarm HC-24						
	Mauren			1	ıwı.Uelar	iu i reeha	[[[]	HC-24
PROJECT Uelar	nd Tree Far	m		LOCATION Kitsap	County			10-3-06
Depth (feet)		Sample Descri	ption		Run #		Notes	Testir
	Eroob o	trong to vory strong li	aht brown / gray h	acalt	п			
60		strong to very strong, li occasional less than						
	VVILLI	Occasional less than	1-100t purple zone	3				
					R-6			
70								
				-				
					<b>D</b> =			-,
					R-7			
80								
***************************************	Termina	ted at 84 feet below e	xisting ground s	urface				
90								
100								
110								
110								
	-							
120	-				***************************************			
			Approxi	mate Elev	/ation:	NA		
Туре о	f Sampler:			Logged	Ву:		Cal Olmstead	-
Page: 2 of 2								

OWNER				JOB NUMBER BORING NUMBER				
L	Mauren			MaurenM.UelandTreeFarm HC-2				
PROJECT				LOCATION	_		DATE	
Uelai	nd Tree Fa	rm		Kitsap	County		10-3-06	
Depth (feet)		Sample Desci	ription		Run #	Notes	Testing	
0	0	verburden – loose, dai	k brown silty sand					
		oderately weathered, w basalt			R-1			
10	Fre	sh, strong to very stro	ng, light gray basal	t				
					R-2			
20					N*2			
30					R-3			
40					R-4			
				A Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comment of the Comm	N-4			
50								
	Fresh,	strong to very strong, I	ight brown / gray ba	asalt	R-5			
Type of	Type of Drill Rig: MacCullum Rock Drilling Air Hammer Ap				nate Elevation:	NA		
				Logged F		Cal Olmstead		
Page: 1 of 2								

## **GeoResources, LLC**

OWNER				JOB NUMBEI				BORING NUMBE	R
	Mauren				nM.Uela	ındTreeFa	arm	HC-25	
PROJECT Uelan	id Tree Fa	rm		LOCATION Kitsap					
				1				10-3-06	
Depth (feet)		Sample Descr	iption		Run #		Notes	Т	esting
60	Fresh,	strong to very strong, li	ight brown / gray	basalt					
		<del>-</del>							
					R-6				
70									
, 0		•		-				-	
					R-7				
					'''				
80									
	Termina	ted at 84 feet below e	existing ground s	surface					
	TOTTIMA	tod at 04 loot bolow c	Mothing ground						
90									
100									
110									
110									
120				***************************************					
	f Drill Rig:	MacCullum Rock Drilling A	Air Hammer	Approxi		vation:	NA		***************************************
Type of	f Sampler:			Logged	Ву:		Cal Olmstead		
	Pa	ge: 2 of 2							



Krazan & Associates, Inc.

1501 - 15th Street NW Suite 106, Auburn, WA 98002, (253) 939-2500

Project No. 066-06004

Cyl. Code

061627

7/5/2006

Report No. 18506

Weather In Lab

**Jurisdiction** 

**Pour Date** 

Permit No.

Project Geo Resources In Lab Testing

Location Kitsap Tree Farm

Engineer Architect

Client Geo Resources

Contractor

Field Data		C.	YLINDER RE	PORT			
Concrete		Other					
Supplier			Plant No.			Site Mix	
					Mix	Air	Unit
				Slump	Temp.	Temp.	Wt.
Time	Truck#	Ticket#	% Аіг	(in.)	(F)	(F)	(pcf)

Reported Batch Data

Design Actual Weights Weights

Mix No.

Cem. lbs.

F. Ash lbs.

C. agg. lbs. 1

C. agg. lbs. 2

C. agg. lbs. 3

Sand lbs.

Water lbs.

Air Ent. (oz)

Other (oz)

Other (oz) Other (oz)

Other (oz)

Water Added on Job (gals.)

Placement Area

Location Stone cores from location C-1.

Remarks Correction factor must be applied to break. No 1-2 ratio possible.

Please refer to Field Report No. 64831.

**Field Test Methods** 

**ASTM C143 ASTM C1064**  ASTM C138

ASTM C31

ASTM C173 X ASTM C172

OTHER

ASTM C231

Test Results

**Non-Conforming** 

Conforming

T. Bergstrom Inspector

Laboratory Data					Design Strength		@ 28 days		Date Sp	ecimens	7/3/2006	
Cyl. Code	Test Date	Field Cure	Age	Dim.	Area	C.F.	Max. Load	Comp. Str. (psi)	Set#	Tested By	Break Type	· · · · · · · · · · · · · · · · · · ·
061627	7/6/2006		1	2x2	2.735	applied	36940	1,180		SW	N/A	X ASTM C39 ASTM C109 ASTM C617
												X ASTM C1231 ASTM C780
												Other

Remarks

Results Reviewed By

**Date Reviewed** 

5: Columnar (Split)

Codes for Break Types:

1: Cone

2: Cone & Split

3: Cone & Shear

4: Shear

Measurement Uncertainties: ASTM C-39 +/- 8%

Form 03101 Effective Date 5/12/04

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Field Data		C,	YLINDER RE				
Concrete		Other					
Supplier			Plant No.	Site Mix			
				01	Mix	Air	Unit
Time	Truck#	Ticket#	% Air	Slump (in.)	Temp. (F)	Temp. (F)	Wt. (pcf)

Reported Batch Data

Design Actual Weights Weights

Mix No.
Cem. lbs.
F. Ash lbs.
C. agg. lbs. 1
C. agg. lbs. 2
C. agg. lbs. 3
Sand lbs.
Water lbs.
Air Ent. (oz)
Other (oz)

Placement Area

Location Stone cores from location C-4.

Other (oz)
Water Added on Job (gals.)

Other (oz)

Field Test Methods

Remarks 1-2 ratio good.

No correction factor necessary.

ASTM C143 ASTM C138
ASTM C1064 ASTM C173
ASTM C31 X ASTM C172
OTHER ASTM C231

Please refer to Field Report No. 64831.

Inspector T. Bergstrom

Laboratory Data		Design	Design Strength		@ 28 day	@ 28 days		ecimens	Rec'd.			
Cyl. Code	Test Date	Field Cure	Age	Dim.	Area	C.F.	Max. Load	Comp. Str. (psi)	Set #	Tested By	Break Type	Laboratory Test Methods
061627	7/7/2006		2	2x4	2.812	0.0	55465	19,720		SW	N/A	X ASTM C39
061627	7/7/2006		2	2x4	2.817	0.0	34348	12,190		SW	N/A	ASTM C109 ASTM C617 X ASTM C1231 ASTM C780 Other
Remarks												Test Results Conforming

Codes for Break Types:

Results Reviewed By

1: Cone 2: Cone & Split

3: Cone & Shear

**Date Reviewed** 

4: Shear

5: Columnar (Split)

Non-Conforming

Measurement Uncertainties: ASTM C-39 +/- 8%

Form 03101 Revision 3

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#### **DEGRADATION WORKSHEET**

KA Project No: <u>066-06004</u>	Sample ID No:	61627
Client Name: GeoResources LLC.	Date Sampled:	7/5/2006
Project Name: Ucland Tree Farm	Date Received:	7/5/2006
Location of Samples: Kitsap County, Washington, C-1	Dated Tested:	7/7/2006
	Time Tested:	
Sample Description: Aggregate Cores	Tested By: Tir	nothy I. Bergstrom
SAMPLING	PROCEDURE	
AASHTO T2		
TEST ME	THOD USED	
WSDOT No. 113 X	AASHTO T210	
Grading Requirements (Dry Weights)		
12.5mm (1/2 in.) - 6.3mm (1/4 in.) 500 g 500 g		

Test	Start Time	Agitate	Time Cylinder Filled	Time Cylinder Read	Sediment Level (H)	"D" Value
		□ 10 min				
1		X 20 min			10.3	25
		🗖 10 min				
2		X 20 min			9.7	27
		□ 10 min				
3		□ 20 min				
					Average:	26

Specifications shown are for Class Easphalt. Please correct if you use another type of Asphalt.

6.3mm (1/4 in.) - 2.00mm (No. 10) 500 g 500 g

32212 Degradation Worksbeet!

Revision 0

Effective Date 10/17/02

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#### **DEGRADATION WORKSHEET**

KA Project No: <u>066-06004</u>	Sample ID No:	61627
Client Name: GeoResources LLC.	Date Sampled:	7/5/2006
Project Name: Ueland Tree Farm	Date Received:	7/5/2006
Location of Samples: Kitsap County, Washington, C-24	Dated Tested:	7/7/2006
	Time Tested:	
Sample Description: Aggregate Cores	Tested By: Ti	mothy I. Bergstrom
		***************************************
SAMPLING	PROCEDURE	
AASHTO T2	PROCEDURE	
TEST ME	THOD USED	
WSDOT No. 113 X	AASHTO T210	
Grading Requirements (Dry Weights)		

Test	Start Time	Agitate	Time Cylinder Filled	Time Cylinder Read	Sediment Level (H)	"D" Value
		□ 10 min				
1		X 20 min			8.1	32
		🔲 10 min			***************************************	
2		X 20 min			9.3	28
		☐ 10 min				
3		☐ 20 min				
					Avorago	20

500 g 500 g

Specifications shown are for Class E asphalt. Please correct if you use another type of Asphalt.

12.5mm (1/2 in.) - 6.3mm (1/4 in.) 500 g 500 g

6.3mm (1/4 in.) - 2.00mm (No. 10)

32212 Degradation Worksheet1

Revision 0

Effective Date 10/17/02

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