## APPENDIX L Field Procedures



# APPENDIX L FIELD PROGRAM

#### **General**

The former Mill A facility Marine Area RI field program was conducted in accordance with the Marine Area Remedial Investigation Sampling and Analysis Plan (Marine Area RI SAP; GeoEngineers 2014a), the Remedial Investigation/Feasibility Study Work Plan (RI/FS Work Plan) Addendum No. 1 (GeoEngineers 2016), and the RI/FS Work Plan Addendum No. 4 (GeoEngineers 2018a). The field program included the collection of surface and subsurface sediment samples for field screening, chemical analysis, and bioassay testing. GeoEngineers collected the RI sediment samples at 61 locations (locations MAF-01 through MAF-61) during three field mobilizations: October and November 2015 (locations MAF-01 through MAF-36); September 2016 (locations MAF-37 through MAF-54); and November 2018 (locations MAF-55 through MAF-61).

Figures 10 and 11 shows the Marine Area RI sediment sampling locations. Exploration logs from the Marine Area RI are presented in Figures L-1 through L-95. The horizontal coordinates and sampling depths for the Marine Area RI sampling locations are summarized in Tables L-1 and L-2 for surface sediment and sediment core samples, respectively.

### **Sample Collection Methods**

The RI surface sediment samples were obtained using a power grab sampler. Subsurface sediment core samples were obtained using vibracoring or sonic drilling methods. Intertidal/beach area samples were obtained using hand tools. In offshore areas, sediment sampling tools were deployed from a marine vessel. The intertidal/beach area was accessed by foot from the uplands area. Surface sediment samples were obtained from the upper 10 centimeters (cm) of sediment. Subsurface sediment samples were obtained by advancing continuous cores through the sediment to depths ranging from 3 to 25 feet below the mudline elevation.

The sediment recovered in each surface and subsurface sediment sample was visually classified in accordance with ASTM International (ASTM) D 2488 methods and the Unified Soil Classification System (ASTM D 2487). Sediment samples were observed and field-screened for evidence of potential contamination and for the presence or absence of wood debris or other debris. If wood debris was observed, the GeoEngineers field scientist or engineer recorded the following information on the exploration log and in photographs: the type of wood debris present (i.e., sawdust, bark, chips, twigs, fibers, etc.); the estimated volume percent of wood debris; and the depth interval in which the wood debris was observed. Field observation of sediment samples included visual inspection for staining or discoloration that could be indicative of contamination. Field screening of sediment samples consisted of water sheen testing. Field observation and field screening procedures are discussed below. Field observations and the results of field screening at each RI sediment sampling location are included on the attached exploration logs.

### **Surface Sediment Sample Collection and Processing**

Surface sediment samples were collected using a power grab sampler deployed from a marine vessel. Sediment sampling tools and equipment were decontaminated and inspected before sampling. The procedures for collecting surface sediment samples by marine vessel were as follows:



- 1. Maneuver the sampling vessel to the proposed sampling location, steady the vessel, and verify location control using a Global Positioning System (GPS) device.
- 2. Record the sampling location.
- 3. Prepare the power grab sampler for deployment.
- 4. Lower the sampler through the water column to the mudline at a rate of approximately 1 foot per second. Verify that the cable attached to the sampler is plumb (i.e., vertical).
- 5. Record the sampling time and the depth to mudline below the water surface using the lead-line
- 6. Activate the sampler and raise it through the water column to the vessel at a rate of approximately 1 foot per second.
- 7. Place the sampler on the work surface of the vessel. Avoid jostling the sampler and/or disturbing the sample.
- 8. Examine the sample for the following sediment acceptance criteria:
  - The jaws of the power grab sampler were closed;
  - Sediment was below the top of sampler;
  - Minimal observed leakage and sample disturbance; and
  - The target penetration depth was achieved.

If any of the sediment acceptance criteria are not met, reject the sample and attempt to collect another sample at the same location. If the sediment acceptance criteria cannot be met after four attempts, contact the Project Manager to discuss possible alternate sampling locations.

- 9. Siphon off the water overlying the surface of the sediment while taking care to not disturb the surface of the sediment.
- 10. Collect sediment sample aliquots for porewater analysis (ammonia, sulfide, and tributyltin ion) immediately after siphoning off the overlying water and prior to any additional observation, testing, photography, classification or homogenization of the sample material. Collect the sample aliquots by carefully removing relatively undisturbed sediment directly from the sampler with a decontaminated stainless-steel spoon and place the sediment directly into a sample jar. Take care during sample collection to minimize aeration and sample disturbance. Immediately fill the sample jar completely with sea water to eliminate headspace, seal the lid on the filled sample jar, and place the jar in a cooler used solely for porewater samples. Use ice to maintain a temperature of 2 to 6 degrees Celsius in the sample cooler during sample storage and transport to the analytical laboratory.
- 11. Visually classify sediment in accordance with ASTM D 2488 methods and the Unified Soil Classification System (ASTM D 2487) and record on the field form. Observe and field-screen sediment samples for evidence of potential contamination and record findings on the field form. Also record qualitative descriptive parameters such as the type and abundance of any biota observed and the type and estimated volume percent of wood debris present. Fine sawdust generated by sawmills is often indistinguishable from other sediment, so take care to attempt to identify finer fractions of wood debris in samples.
- 12. Photograph the sediment sample. Include in the camera's field of view a sheet of paper or whiteboard with the sample identification (ID) written in large print; use care not to touch the sediment with the



- paper/whiteboard or with gloved hands that have contacted whiteboards, pens, whiteboard ink, or whiteboard erasers.
- 13. To avoid cross-contamination, use a clean hands/dirty hands approach to the use of whiteboard pens and erasers during sample collection activities where subsequent chemical analyses will be performed on the samples. When handling samples to be submitted for chemical analysis, do not wear gloves that have been in contact with whiteboard pens or erasers.
- 14. Collect the upper 10 cm of sediment from the sampler using a decontaminated stainless-steel spoon. Do not collect sediment that has been in contact with the sides of the sampler.
- 15. Place the sediment in a decontaminated stainless-steel homogenization bowl. Cover the stainless-steel with a new sheet of aluminum foil and dispose after use. If sufficient sample volume was not collected, repeat the sampling process until sufficient volume is collected. Successive sampler deployments should be within an approximate 10-foot radius of the initial deployment.
- 16. For sediment samples where volatilization of sediment is not predicted under field conditions, homogenize the sediment in the stainless-steel bowl using the stainless-steel spoon until the sediment appears generally uniform in color and texture. Record on the field form that the sample was homogenized.
- 17. For sediment samples where volatilization of sediment is predicted (i.e., sulfides), place samples immediately and directly into sample jars without homogenization and immediately seal the sample jars. Record on the field form that the sample was not homogenized.
- 18. Distribute the sample to designated sample jars and ensure that the sample jars are properly labeled, and the lids are tightly secured.
- 19. Clean the exterior of the sample jars and immediately place them in a cooler containing ice.
- 20. After sample jars are filled and stored in a cooler, place extra, unused sediment from sample processing in a drum for temporary storage and subsequent transfer to an appropriate waste handling facility.
- 21. Decontaminate reusable sampling equipment.
- 22. Double-check that field sampling forms are filled out.

### **Subsurface Sediment Sample Collection and Processing**

Subsurface sediment samples were collected using vibracoring and sonic drilling methods. The sediment cores were collected from a marine vessel. The coring utilized a 3- to 4-inch-diameter core barrel containing dedicated (disposable) clear CAB (butryn) liners. The procedures for collecting subsurface sediment samples by marine vessel were as follows:

- 1. Maneuver the sampling vessel to the proposed sampling location, steady the vessel, and verify location control using a GPS device.
- 2. Record the sampling location.
- 3. Record the sampling time and the depth to mudline below the water surface using the lead-line.
- 4. Drive the core barrel into the sediment and collect a continuous sediment core to the target depth or until refusal.
- 5. For each core interval, record the penetration depth on the field form.



- 6. Extract the core barrel, remove and cap the liner from the core barrel, and examine the sediment core relative to the following acceptance criteria:
  - Intact material at the top of the core tube with overlying water;
  - A minimum of 75 percent recovery in the core/linear compaction (compression) not greater than 25 percent;
  - Intact core tube without obstructions or blockage; and
  - Achievement of the target penetration depth.

If any of the sediment acceptance criteria are not met, reject the sample and attempt to collect another sample at the same location. If the sediment acceptance criteria cannot be met after four attempts, notify the Project Manager to discuss possible alternative sampling locations.

- 7. If the core meets the acceptance criteria, proceed with core processing. If the cores will not be processed immediately after collection, seal and label the cores and place them in a container with ice or a refrigerated space. Maintain the cores at a temperature of 2 to 6 degrees Celsius during storage prior to processing, both onboard the sampling vessel and during shipment to any core processing facility.
- 8. Begin core processing by opening the core with a decontaminated core-opening device.
- 9. Visually classify sediment in accordance with ASTM D 2488 methods and the Unified Soil Classification System (ASTM D 2487) and record on the field form. Observe and field-screen sediment samples for evidence of potential contamination and record findings on the field form. Also record qualitative descriptive parameters such as the type and abundance of any biota observed and the type and estimated volume percent of wood debris present, along with the corresponding depth intervals. Fine sawdust generated by sawmills is often indistinguishable from other sediment, so take care to attempt to identify finer fractions of wood debris in samples.
- 10. Photograph the sediment core sample. Include in the camera's field of view a sheet of paper or whiteboard with the sample ID written in large print; use care not to touch the sediment with the paper/whiteboard or with gloved hands that have contacted whiteboards, pens, whiteboard ink, or whiteboard erasers. Several photographs will likely be necessary to document the entire length of the core sample. Include the depth interval on the paper/whiteboard photographed with each portion of the core sample.
- 11. To avoid cross-contamination, use a clean hands/dirty hands approach to the use of whiteboard pens and erasers during sample collection activities where subsequent chemical analyses will be performed on the samples. When handling samples to be submitted for chemical analysis, do not wear gloves that have been in contact with whiteboard pens or erasers.
- 12. Collect sediment from the core barrel liner using a decontaminated stainless-steel spoon. Do not collect sediment that has been in contact with the core-opening device or the sides of the core barrel liner. Place the sediment into a decontaminated stainless-steel homogenization bowl. Cover the stainless-steel bowl with a new sheet of aluminum foil and dispose after use.
- 13. For sediment samples where volatilization of sediment is not predicted under field conditions, homogenize the sediment in the stainless-steel bowl using the stainless-steel spoon until the sediment appears generally uniform in color and texture. Record on the field form that the sample was homogenized.



- 14. For sediment samples where volatilization of sediment is predicted (i.e., sulfides), place samples immediately and directly into sample jars without homogenization and immediately seal the sample jars. Record on the field form that the sample was not homogenized.
- 15. Distribute the sample to designated sample jars and ensure that the sample jars are properly labeled, and the lids are tightly secured.
- 16. Clean the exterior of the sample jars and immediately place them in a cooler containing ice.
- 17. After sample jars are filled and stored in a cooler, place extra, unused sediment from sample processing in a drum for temporary storage and subsequent transfer to an appropriate waste handling facility.
- 18. Decontaminate reusable sampling equipment.
- 19. Double-check that field sampling forms are filled out.

If sufficient sample volume cannot be obtained from a particular target depth interval, attempt to obtain an adjacent sediment core within a 10-foot radius of the original core. If necessary, make at least three attempts to obtain sufficient sample volume at each sampling location. If sufficient sample volume cannot be obtained, contact the Project Manager to discuss possible alternate sampling locations.

### Intertidal/Beach Area Sediment Sampling

Intertidal/beach area sediment samples were collected using hand tools (i.e., stainless steel hand auger and/or shovel). The procedures for collecting intertidal/beach area sediment samples access from the Upland Area by foot were as follows:

- 1. Locate the target intertidal/beach area sampling station using a GPS device.
- 2. Record the actual coordinates of the sampling location.
- 3. Advance the decontaminated sampling device (stainless-steel hand auger or spoon) into the sediment to the target depth or until refusal.
- 4. Place the sediment from the target sample interval into a decontaminated stainless-steel homogenization bowl.
- 5. Visually classify sediment in accordance with ASTM D 2488 methods and the Unified Soil Classification System (ASTM D 2487) and record on the field form. Observe and field-screen sediment samples for evidence of potential contamination and record findings on the field form. Also record qualitative descriptive parameters such as the type and abundance of any biota observed and the type and estimated volume percent of wood debris present, along with the corresponding depth intervals. Fine sawdust generated by sawmills is often indistinguishable from other sediment, so take care to attempt to identify finer fractions of wood debris in samples.
- 6. Photograph the sediment sample. Include in the camera's field of view a sheet of paper or whiteboard with the sample ID written in large print; use care not to touch the sediment with the paper/whiteboard or with gloved hands that have contacted whiteboards, pens, whiteboard ink, or whiteboard erasers. To avoid cross-contamination, use a clean hands/dirty hands approach to the use of whiteboard pens and erasers during sample collection activities where subsequent chemical analyses will be performed on the samples. When handling samples to be submitted for chemical analysis, do not wear gloves that have been in contact with whiteboard pens or erasers.



- 7. For sediment samples where volatilization of sediment is not predicted under field conditions, homogenize the sediment in the stainless-steel bowl using the stainless-steel spoon until the sediment appears generally uniform in color and texture. Record on the field form that the sample was homogenized.
- 8. For sediment samples where volatilization of sediment is predicted (i.e., sulfides), place samples immediately and directly into sample jars without homogenization and immediately seal the sample jars. Record on the field form that the sample was not homogenized.
- 9. Distribute the sample to designated sample jars and ensure that the sample jars are properly labeled, and the lids are tightly secured.
- 10. Clean the exterior of the sample jars and immediately place them in a cooler containing ice.
- 11. Decontaminate reusable sampling equipment.
- 12. Double-check that field sampling forms are filled out.

### **Positioning**

Sampling locations (horizontal coordinates) were measured using a GPS device with 2-meter accuracy. The sampling locations were recorded in units of U.S. Survey Feet referenced to the North American Datum of 1983 (NAD83)/Washington State Plane North coordinate system.

Elevations of the mudline at each sampling location were calculated based on the measured water depth (i.e., depth to mudline) and the tidal elevation at the time of sampling. Depths below mudline for the core samples were measured directly based on the penetration depth of the core barrel, typically to within approximately 0.1 foot. Elevations were referenced to the mean lower low water (MLLW) elevation.

### **Sampling Equipment Decontamination Procedures**

Sediment samples were collected using grab sampling equipment, coring/drilling equipment, and hand tools including stainless-steel spoons and stainless-steel mixing bowls. Reusable sampling equipment that was used to process the samples and that contacted sediment (e.g., spoons, bowls, measuring devices, etc.) was decontaminated before each use. Decontamination procedures for reusable sampling equipment consisted of the following:

- Rinsing with sea water to dislodge and remove sediment;
- Washing with a scrub brush and an aqueous solution of non-phosphate detergent (e.g., Liqui-Nox) and distilled water:
- Rinsing with deionized water; and
- Wrapping or covering the decontaminated equipment with aluminum foil (note: only decontaminated equipment that wasn't immediately reused was wrapped/covered with aluminum foil).

Field personnel limited potential cross-contamination of samples by using new nitrile or vinyl gloves between sampling locations.



### Field Observation and Field Screening

Sediment samples were observed and field-screened for evidence of potential contamination. Field observations and field-screening results were recorded on field forms. Field observations consisted of visual and olfactory observations. Field screening consisted of water sheen testing.

### **Visual and Olfactory Observations**

The sediment samples were observed for the presence or absence of wood debris or other debris, discoloration/staining, and odors that may be indicative of contamination.

#### **Water Sheen Testing**

Water sheen testing is a qualitative field screening method that can help identify the presence or absence of petroleum hydrocarbons. A portion of each sediment sample (approximately a tablespoon) was placed in a small pan containing distilled water. The water surface was then observed for signs of sheen. The following sheen classifications were used:

Classification	Identifier	Description
No Sheen	(NS)	No visible sheen on the water surface
Slight Sheen	(SS)	Light, colorless, dull sheen; spread is irregular, not rapid; sheen dissipates rapidly
Moderate Sheen	(MS)	Light to heavy sheen; may have some color/iridescence; spread is irregular to flowing, may be rapid; few remaining areas of no sheen on the water surface
Heavy Sheen	(HS)	Heavy sheen with color/iridescence; spread is rapid; entire water surface may be covered with sheen

### **Disposition of Incidental Waste**

Incidental waste generated during sampling activities included items such as disposable gloves, plastic sheeting, sample core barrel liners, paper towels, and similar expended and discarded field supplies. These materials were considered *de minimis* and were disposed of in a local trash receptacle or county disposal facility. Sediment obtained during this investigation was considered contaminated, and was appropriately handled, transported, and disposed of at a permitted waste handling facility.

### **Sample Handling and Custody**

#### **Sample Containers and Labeling**

Samples were placed in appropriate laboratory-prepared containers (glass sample jars). Sample containers and preservatives are listed in Table 7 of the Marine Area RI SAP.

Sample containers were labeled with the following information at the time of sample collection:

- Project name and number;
- Type of sample preservative used (where applicable);



- Sample ID, which included a reference to the sampling date and the sample collection depth below the mudline; and
- Date and time of sample collection.

#### **Sample Storage**

Samples were placed in a cooler containing ice after they were collected. Samples were maintained at a temperature of 2 to 6 degrees Celsius. Sample holding times (see Table 7 of the Marine Area RI SAP) were observed during sample storage.

### **Sample Shipment**

Samples were transported and delivered to the analytical laboratory in the sample coolers. The samples were transported by field personnel, laboratory personnel, or courier service. The sample coolers were secured using clear plastic tape and custody seals.

#### **Chain-of-Custody Records**

A Chain of Custody (COC) form was completed for each group of samples shipped to the analytical laboratory. Information recorded on the COC form included:

- Project name and number;
- Sample IDs;
- Date and time of sampling;
- Sample matrix, preservative, and number of containers for each sample;
- Analyses to be performed;
- Names of sampling personnel;
- Project manager name and contact information including phone number; and
- Shipping information including shipping container number, if applicable.

The original COC form was signed by a member of the field team. Field personnel retained copies and placed the original and remaining copies in a plastic bag. The plastic bag containing the COC form was placed in the sample cooler before sealing the cooler for transport to the laboratory.

#### **REFERENCES**

GeoEngineers, Inc. 2014a, "Marine Area Remedial Investigation Sampling and Analysis Plan, Weyerhaeuser Mill A Former, Everett, Washington, Ecology Agreed Order No. DE 8979," prepared for the Washington State Department of Ecology on Behalf of Port of Everett, Weyerhaeuser Company and Washington State Department of Natural Resources, October 16, 2014. (Attachment 2 to the RI/FS Work Plan.)

GeoEngineers, Inc. 2014b, "Dredged Material Characterization Sampling and Analysis Plan, Weyerhaeuser Mill A Former Cleanup Site, Interim Action Dredging Project, Everett, Washington." Prepared for the Port of Everett, December 16, 2014.



- GeoEngineers, Inc. 2016, "Work Plan Addendum No. 1 for Follow-up Sample Collection and Testing at the Former Mill A Marine Area, Everett, Washington," prepared for the Washington State Department of Ecology, GEI File No. 0676-020-04, September 1, 2016.
- GeoEngineers, Inc. 2018a, "Work Plan Addendum No. 4 for Additional Marine Area Sediment Sample Collection and Analysis at the Weyerhaeuser Mill A Former Site, Everett, Washington." Memorandum to Andy Kallus and Peter Adolphson, Washington State Department of Ecology, from lain H. Wingard and John M. Herzog, GeoEngineers. Prepared on behalf of the Port of Everett, September 5, 2018.
- GeoEngineers, Inc. 2018b, "FINAL Dredged Material Characterization Sampling and Analysis Plan, South Terminal Maintenance Dredge Project, Weyerhaeuser Mill A Former Site, Everett, Washington." Prepared for the Dredged Material Management Office and Washington State Department of Ecology on behalf of Port of Everett, October 12, 2018.

#### Attachments:

Table L-1. Surface Sediment Sample Collection Summary

Table L-2. Sediment Core Sample Collection Summary

Figure L-1. Key to Exploration Logs

Figures L-2 through L-99. Log of Explorations



## Table L-1

### **Surface Sediment Sample Collection Summary**

Weyerhaeuser Mill A Former Everett, Washington

					Everett, wasningto	••						
Sample	Sample	Date	NAD83/Washingt	Coordinates <sup>2</sup> on State Plane North rvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water Column	Mudline Elevation	Sampling	Penetration Depth	· ·	e Interval ı bml)	Sample Elevation
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(cm bml)	Тор	Bottom	(ft MLLW)
MAF-01	MAF-SS-01_1-10 MAF-SS-DUP-01	10/20/15	1299021.1	358809.1	10.3	14.1	-3.9	Power Grab	20 cm	0 cm	10 cm	-3.9
MAF-02	MAF-SS-02_1-10	10/20/15	1299224.3	359084.1	9.5	14.2	-4.7	Power Grab	13 cm	0 cm	10 cm	-4.7
MAF-03	MAF-SS-03_1-10	10/20/15	1298929.1	358923.3	10.3	25.5	-15.3	Power Grab	20 cm	0 cm	10 cm	-15.3
MAF-04	MAF-SS-04_1-10	10/20/15	1299156.8	359181.0	10.0	21.7	-11.7	Power Grab	13 cm	0 cm	10 cm	-11.7
MAF-05	MAF-SS-05_1-10	10/20/15	1299413.3	359226.9	9.0	13.1	-4.1	Power Grab	20 cm	0 cm	10 cm	-4.1
MAF-06	MAF-SS-07_1-10	10/19/15	1299663.8	359696.3	8.8	49.4	-40.6	Power Grab	12 cm	0 cm	10 cm	-40.6
MAF-08	MAF-SS-08_1-10 MAF-SS-DUP-02	10/19/15	1299991.6	359954.8	11.8	55.4	-43.7	Power Grab	14 cm	0 cm	10 cm	-43.7
MAF-09	MAF-SS-09_1-10	10/19/15	1299688.9	360174.2	11.8	56.3	-44.5	Power Grab	13 cm	0 cm	10 cm	-44.5
MAF-10	MAF-SS-10_1-10	10/20/15	1299120.0	359536.2	9.0	60.7	-51.7	Power Grab	20 cm	0 cm	10 cm	-51.7
MAF-11	MAF-SS-11_1-10	10/20/15	1298800.9	359022.3	10.0	58.5	-48.5	Power Grab	15 cm	0 cm	10 cm	-48.5
MAF-12	MAF-SS-12_1-10	10/20/15	1298485.7	358651.9	10.0	65.6	-55.6	Power Grab	16 cm	0 cm	10 cm	-55.6
MAF-13	MAF-SS-13_1-10	10/20/15	1298263.2	358311.5	10.0	51.8	-41.8	Power Grab	17 cm	0 cm	10 cm	-41.8
MAF-14	MAF-SS-14_1-10	10/21/15	1298454.6	358044.7	10.5	8.5	2.0	Power Grab	18 cm	0 cm	10 cm	2.0
MAF-15	MAF-SS-15_1-10	10/21/15	1298413.3	357667.5	10.8	3.7	7.1	Power Grab	18 cm	0 cm	10 cm	7.1
MAF-16	MAF-SS-16_1-10	10/21/15	1298205.1	357344.7	10.8	3.8	6.9	Power Grab	20 cm	0 cm	10 cm	6.9
MAF-17	MAF-SS-17_1-10	10/21/15	1298047.6	357719.6	9.5	7.6	2.0	Power Grab	25 cm	0 cm	10 cm	2.0
MAF-18	MAF-SS-18_1-10	10/21/15	1298026.7	358068.1	8.0	49.9	-41.9	Power Grab	18 cm	0 cm	10 cm	-41.9
MAF-19	MAF-SS-19_1-10	10/20/15	1298181.3	358638.0	10.0	85.3	-75.3	Power Grab	18 cm	0 cm	10 cm	-75.3
MAF-20	MAF-SS-20_1-10	10/20/15	1298500.7	359045.8	9.8	87.0	-77.2	Power Grab	19 cm	0 cm	10 cm	-77.2
MAF-21	MAF-SS-21_1-10 MAF-SS-DUP-04	10/21/15	1298784.7	359439.4	7.5	75.2	-67.7	Power Grab	10 cm	0 cm	10 cm	-67.7
MAF-22	MAF-SS-22_1-10	10/21/15	1299121.9	359872.0	7.5	68.8	-61.3	Power Grab	15 cm	0 cm	10 cm	-61.3
MAF-23	MAF-SS-23_1-10	10/21/15	1297791.4	357722.1	8.8	10.9	-2.2	Power Grab	13 cm	0 cm	10 cm	-2.2
MAF-24	MAF-SS-24_1-10	10/21/15	1298013.6	357332.4	11.0	5.6	5.4	Power Grab	23 cm	0 cm	10 cm	5.4
MAF-25	MAF-SS-25_1-10	10/21/15	1298155.4	357488.3	10.8	5.4	5.4	Power Grab	23 cm	0 cm	10 cm	5.4
MAF-26	MAF-SS-26_1-10	10/21/15	1298052.7	357139.9	11.3	2.8	8.5	Power Grab	10 cm	0 cm	10 cm	8.5
MAF-27	MAF-SS-27_1-10	10/21/15	1298181.2	357224.1	11.3	2.3	8.9	Power Grab	16 cm	0 cm	10 cm	8.9
MAF-28	MAF-SS-28_1-10	10/21/15	1297864.7	356972.7	11.3	5.9	5.3	Power Grab	23 cm	0 cm	10 cm	5.3
MAF-29	MAF-SS-29_1-10	10/21/15	1297829.2	357217.9	10.3	5.7	4.6	Power Grab	18 cm	0 cm	10 cm	4.6
MAF-30	MAF-SS-30_1-10 MAF-SS-DUP-03	10/21/15	1297819.1	357451.5	10.0	7.7	2.3	Power Grab	20 cm	0 cm	10 cm	2.3
MAF-31	MAF-SS-31_1-10	10/19/15	1299459.0	359861.8	9.8	51.6	-41.8	Power Grab	20 cm	0 cm	10 cm	-41.8
MAF-32	MAF-SS-32_1-10	10/19/15	1300163.8	359896.2	10.0	51.4	-41.4	Power Grab	12 cm	0 cm	10 cm	-41.4



Sample	Sample	Date	NAD83/Washingt	Coordinates <sup>2</sup> con State Plane North crvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water	Mudline Elevation	Sampling	Penetration Depth		e Interval ı bml)	Sample Elevation
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(cm bml)	Тор	Bottom	(ft MLLW)
MAF-33	MAF-SS-33_1-10 MAF-SS-DUP-06	10/19/15	1299797.8	359587.2	8.5	48.9	-40.4	Power Grab	14 cm	0 cm	10 cm	-40.4
MAF-34	MAF-SS-34_1-10	10/20/15	1298878.9	358749.5	10.5	18.3	-7.8	Power Grab	16 cm	0 cm	10 cm	-7.8
MAF-35	MAF-SS-35_1-10	10/19/15	1299438.5	360251.1	11.8	64.6	-52.9	Power Grab	14 cm	0 cm	10 cm	-52.9
MAF-36	MAF-SS-36_1-10	10/19/15	1299733.2	360427.6	11.8	55.7	-44.0	Power Grab	10 cm	0 cm	10 cm	-44.0
MAF-37	MAF-SS-37_1-10	09/13/16	1298382.4	359137.5	8.0	104.2	-96.2	Power Grab	25 cm	0 cm	10 cm	-96.2
MAF-38	MAF-SS-38_1-10 MAF-SS-DUP-07	09/13/16	1298673.0	359530.5	9.3	102.1	-92.9	Power Grab	24 cm	0 cm	10 cm	-92.9
MAF-39	MAF-SS-39_1-10 MAF-SS-DUP-08	- 09/13/16	1298110.8	358465.1	9.8	74.2	-64.5	Power Grab	26 cm	0 cm	10 cm	-64.5
MAF-40	MAF-SS-40_1-10	09/13/16	1297793.7	358778.2	10.3	164.0	-153.8	Power Grab	16 cm	0 cm	10 cm	-153.8
MAF-41	MAF-SS-41_1-10	09/13/16	1298212.0	358947.0	7.9	159.5	-151.6	Power Grab	21 cm	0 cm	10 cm	-151.6
MAF-42	MAF-SS-42_1-10	09/14/16	1297939.8	359260.9	0.8	181.0	-180.3	Power Grab	27 cm	0 cm	10 cm	-180.3
MAF-43	MAF-SS-43_1-10	09/14/16	1298244.2	359770.2	0.3	143.0	-142.8	Power Grab	25 cm	0 cm	10 cm	-142.8
MAF-44	MAF-SS-44_1-10	09/14/16	1298704.5	359929.6	0.0	69.1	-69.1	Power Grab	26 cm	0 cm	10 cm	-69.1
MAF-45	MAF-SS-45_1-10	09/14/16	1298997.5	360105.1	0.0	63.3	-63.3	Power Grab	24 cm	0 cm	10 cm	-63.3
MAF-46	MAF-SS-46_1-10	09/14/16	1299388.6	360089.9	0.3	53.8	-53.6	Power Grab	25 cm	0 cm	10 cm	-53.6
MAF-47	MAF-SS-47_1-10	09/14/16	1299744.8	359942.4	0.3	51.8	-51.6	Power Grab	22 cm	0 cm	10 cm	-51.6
MAF-48	MAF-SS-48_1-10	09/14/16	1297692.1	358281.7	0.3	111.2	-111.0	Power Grab	26 cm	0 cm	10 cm	-111.0
MAF-49	MAF-SS-49_1-10	09/14/16	1299203.4	360380.3	0.8	75.3	-74.6	Power Grab	25 cm	0 cm	10 cm	-74.6
MAF-50	MAF-SS-50_1-10	09/13/16	1300175.5	360609.9	10.0	56.8	-46.8	Power Grab	24 cm	0 cm	10 cm	-46.8
MAF-51	MAF-SS-51_1-10	09/14/16	1299680.7	961139.4	1.3	41.6	-40.4	Power Grab	22 cm	0 cm	10 cm	-40.4
MAF-52	MAF-SS-52_1-10	09/14/16	1299528.0	361830.0	1.5	104.2	-102.7	Power Grab	25 cm	0 cm	10 cm	-102.7
MAF-53	MAF-SS-53_1-10	09/14/16	1300557.5	361517.0	2.0	36.6	-34.6	Power Grab	25 cm	0 cm	10 cm	-34.6
MAF-54	MAF-SS-54_1-10	09/14/16	1300652.9	360961.4	2.8	42.9	-40.2	Power Grab	25 cm	0 cm	10 cm	-40.2
MAF-55	MAF-SS-55_0-10	11/13/18	1297941.7	358157.0	8.0	56.0	-48.0	Power Grab	10 cm	0 cm	10 cm	-48.0
MAF-56	MAF-SS-56_0-10	11/13/18	1298332.6	358413.1	7.0	50.6	-43.6	Power Grab	10 cm	0 cm	10 cm	-43.6
MAF-57	MAF-SS-57_0-10	11/14/18	1298461.3	358421.4	10.2	50.4	-40.2	Power Grab	18 cm	0 cm	10 cm	-40.2
MAF-58	MAF-SS-58_0-10	11/14/18	1298415.5	358559.4	9.5	62.3	-52.8	Power Grab	10 cm	0 cm	10 cm	-52.8
MAF-59	MAF-SS-59_0-10	11/14/18	1298676.0	358814.4	10.6	60.9	-50.3	Power Grab	10 cm	0 cm	10 cm	-50.3
MAF-60	MAF-SS-60_0-10	11/14/18	1298657.1	358634.0	10.4	52.5	-42.1	Power Grab	10 cm	0 cm	10 cm	-42.1
MAF-61	MAF-SS-61_0-10 MAF-SS-DUP-11	11/14/18	1298160.0	358298.4	7.2	49.8	-42.7	Power Grab	10 cm	0 cm	10 cm	-42.7

### Notes:

ft = feet

cm = centimeter

bml = below mudline

NAD83 = North American Datum of 1983

MLLW = mean lower low water



 $<sup>^{\</sup>rm 1}$  Sediment sampling locations are shown on Figures 10 and 11.

 $<sup>^2</sup>$  Obtained using a differential global positioning system (DGPS) and/or hand-held Trimble GPS device.

<sup>&</sup>lt;sup>3</sup> Surface water elevations are based on one of two surveyed tideboards established for the Marine Area RI.

## Table L-2

### **Sediment Core Sample Collection Summary**

Weyerhaeuser Mill A Former Everett, Washington

Sample	Sample	Date	NAD83/Washingt (US Su	Coordinates <sup>2</sup> con State Plane North crvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water Column	Mudline Elevation	Sampling	Penetration Depth	(ft	e Interval bml)	Sample Elevation
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(ft bml)	Тор	Bottom	(ft MLLW)
	MAF-SC-01_0-2									0	2	-6.4
	MAF-SC-DUP-01									0	2	-6.4
	MAF-SC-01_2-4									2	4	-8.4
	MAF-SC-01_4-6									4	6	-10.4
MAF-01	MAF-SC-01_8-10	11/11/15	1299010.6	358823.8	11.0	17.4	-6.4	Sonic	25	8	10	-14.4
	MAF-SC-01_12-14									12	14	-18.4
	MAF-SC-01_16-18									16	18	-22.4
	MAF-SC-01_20-22									20	22	-26.4
	MAF-SC-DUP-02									20	22	-26.4
	MAF-SC-02_0-2									0	2	-7.6
	MAF-SC-02_2-4									2	4	-9.6
	MAF-SC-02_4-6						>			4	6	-11.6
MAF-02	MAF-SC-02_8-10	11/10/15	1299140.4	359086.7	11.0	18.6	-7.6	Sonic	25	8	10	-15.6
111111 02	MAF-SC-02_12-14 MAF-SC-02_16-18	11/ 10/ 10	1200110.1		12.0	26.0		Come		12	14	-19.6
	MAF-SC-02_16-18									16	18	-23.6
	MAF-SC-02_20-22									20	22	-27.6
	MAF-SC-DUP-10									20	22	-27.6
	MAF-SC-03_0-2									0	2	-13.4
	MAF-SC-DUP-03									0	2	-13.4
	MAF-SC-03_2-4									2	4	-15.4
	MAF-SC-03_4-6									4	6	-17.4
MAF-03	MAF-SC-03_8-10	11/11/15	1298947.6	358923.2	5.3	18.6	-13.4	Sonic	25	8	10	-21.4
	MAF-SC-DUP-04									8	10	-21.4
	MAF-SC-03_12-14									12	14	-25.4
	MAF-SC-03_16-18									16	18	-29.4
	MAF-SC-03_21-23									20	22	-33.4
	MAF-SC-04_0-2									0	2	-10.5
	MAF-SC-DUP-05									0	2	-10.5
	MAF-SC-04_2-4	10/26/15	1299156.8	359181.0	4.8	15.2	-10.5	Vibracore	10.5	2	4	-12.5
	MAF-SC-DUP-06	10/20/10	1299100.0	333101.0	4.0	10.2	-10.5	VIDIACOLE	10.5	2	4	-12.5
MAF-04	MAF-SC-04_4-6									4	6	-14.5
IVIAT-U4	MAF-SC-04_8-10									8	10	-18.5
	MAF-SC-04_10-12									10	12	-21.7
	MAF-SC-04_12-14	11/10/15	1299166.9	250000 4	6.0	17.7	-11.7	Conin	20	12	14	-23.7
	MAF-SC-04_16-18	11/10/15		359202.4				Sonic	20	16	18	-27.7
	MAF-SC-04_18-20									18	20	-29.7



Sample	Sample	Date	NAD83/Washingt	Coordinates <sup>2</sup> on State Plane North rvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water Column	Mudline Elevation	Sampling	Penetration Depth	_	e Interval bml)	Sample Elevation
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(ft bml)	Тор	Bottom	(ft MLLW)
	MAF-SC-05_0-2									0	2	-10.1
	MAF-SC-05_2-4									2	4	-12.1
MAF-05	MAF-SC-05_4-6	11/11/15	1299435.1	359255.6	9.3	19.3	-10.1	Sonic	15	4	6	-14.1
	MAF-SC-05_8-10									8	10	-18.1
	MAF-SC-05_12-14									12	14	-22.1
	MAF-SC-07_0-2									0	2	-41.6
MAF-07	MAF-SC-07_2-4	10/29/15	1299660.9	359679.9	9.3	50.9	-41.6	Vibracore	5	2	4	-43.6
	MAF-SC-07_4-5									4	5	-45.6
	MAF-SC-10_0-2									0	2	-57.4
	MAF-SC-DUP-07									0	2	-57.4
MAF-10	MAF-SC-10_2-4	10/29/15	1299080.4	359521.6	6.0	63.4	-57.4	Vibracore	9	2	4	-59.4
	MAF-SC-10_4-6									4	6	-61.4
	MAF-SC-10_6-8									6	8	-63.4
	MAF-SC-11_0-2									0	2	-57.4
	MAF-SC-11_2-4									2	4	-59.4
MAF-11	MAF-SC-11_4-6	10/28/15	1298798.2	359015.7	9.5	66.9	-57.4	Vibracore	11	4	6	-61.4
MIMI II	MAF-SC-11_6-8	10/20/13	1230130.2		3.3	00.3	37.4	VIBIACOIC		6	8	-63.4
	MAF-SC-11_8-10					Y I				8	10	-65.4
	MAF-SC-11_10-11									10	11	-67.4
	MAF-SC-12_0-2									0	2	-56.0
	MAF-SC-12_2-4									2	4	-58.0
MAF-12	MAF-SC-12_5-6	10/28/15	1298470.3	358637.0	4.8	60.7	-56.0	Vibracore	12	5	6	-61.0
141/11 12	MAF-SC-12_6-8	10/20/10	1200410.0	000001.0	4.0	00.1	00.0	VISIGOOIC	12	6	8	-62.0
	MAF-SC-12_8-10									8	10	-64.0
	MAF-SC-12_10-12									10	12	-66.0
	MAF-SC-13_0-2									0	2	-44.6
MAF-13	MAF-SC-13_2-4	10/27/15	1298258.3	358294.7	8.8	53.3	-44.6	Vibracore	6	2	4	-46.6
	MAF-SC-13_4-6				>					4	6	-48.6
	MAF-SC-14_0-2									0	2	-2.4
MAF-14	MAF-SC-14_2-3	10/28/15	1298324.6	358015.9	6.3	7.9	-2.4	Vibracore	4.5	2	3	-4.4
	MAF-SC-14_3.5-4.5									3.5	4.5	-5.9
	MAF-SC-15_0-2									0	2	3.7
	MAF-SC-DUP-08									0	2	3.7
MAF-15	MAF-SC-15_2-4	10/28/15	1298406.1	357667.7	7.8	4.1	3.7	Vibracore	7.5	2	4	1.7
	MAF-SC-15_4-6									4	6	-0.4
	MAF-SC-15_6-7.5									6	7.5	-2.4
MAF-16	MAF-SC-16_1-2	10/28/15	1298201.2	357348.1	6.3	3.2	3.0	Vibracore	4	1	2	2.0
10	MAF-SC-16_2-4	10, 20, 10		33.040.1		<u> </u>		113.40010		2	4	1.0



Sample	Sample	Date	NAD83/Washingt	Coordinates <sup>2</sup> on State Plane North rvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water Column	Mudline Elevation	Sampling	Penetration Depth	_	e Interval bml)	Sample Elevation		
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(ft bml)	Тор	Bottom	(ft MLLW)		
	MAF-SC-17_0-2									0	2	0.9		
MAF-17	MAF-SC-17_2-4	10/27/15	1298060.2	357718.8	11.5	10.6	0.9	Vibracore	9	2	4	-1.1		
IVIAI -II	MAF-SC-17_4-6	10/21/13	1290000.2	331110.0	11.5	10.0	0.9	Vibracore	9	4	6	-3.1		
	MAF-SC-17_8-9									8	9	-7.1		
	MAF-SC-18_0-2									0	2	-25.7		
	MAF-SC-18_2-4									2	4	-27.7		
MAF-18	MAF-SC-18_4-6	10/27/15	1298050.7	358051.8	3.5	29.2	-25.7	Vibracore	8	4	6	-29.7		
	MAF-SC-18_6-7									6	7	-31.7		
	MAF-SC-18_7-8									7	8	-32.7		
	MAF-SC-19_0-2									0	2	-83.0		
	MAF-SC-19_2-4									2	4	-85.0		
MAF-19	MAF-SC-19_4-6	10/28/15	1298167.8	358645.1	5.0	88.0	-83.0	Vibracore	10	4	6	-87.0		
	MAF-SC-19_6-8									6	8	-89.0		
	MAF-SC-19_8-10									8	10	-91.0		
	MAF-SC-20_0-1									0	1	-78.6		
MAF-20	MAF-SC-20_1-2	10/29/15	1298482.0	359012.5	6.3	84.8	-78.6	Vibracore	4.5	1	2	-79.6		
W// 120	MAF-SC-20_2-3	10/20/10	1200-102.0	000012.0	0.0	04.0	70.0	Vibracore	4.0	2	3	-80.6		
	MAF-SC-20_3-4.5					, i				3	4.5	-81.6		
	MAF-SC-21_0-1									0	1	-68.7		
	MAF-SC-DUP-09						-68.7			0	1	-68.7		
MAF-21	MAF-SC-21_1-2	10/29/15	1298786.1	359421.1	6.8	75.5		Vibracore	6	1	2	-69.7		
	MAF-SC-21_2-4			1								2	4	-70.7
	MAF-SC-21_4-6									4	6	-72.7		
	MAF-SC-23_0-2	_			Y .					0	2	-3.3		
	MAF-SC-23_2-4									2	4	-5.3		
MAF-23	MAF-SC-23_5-6	10/27/15	1297796.0	357725.6	3.8	7.1	-3.3	Vibracore	10	5	6	-8.3		
	MAF-SC-23_6-8	_								6	8	-9.3		
	MAF-SC-23_8-10									8	10	-11.3		
MAF-24	MAF-SC-24_1-2	10/26/15	1298007.4	357331.1	9.3	4.6	4.7	Vibracore	4.8	1	2	3.7		
	MAF-SC-24_2-4	-, -, -				-			_	2	4	2.7		
MAF-25	MAF-SC-25_1-2	10/26/15	1298140.5	357487.0	10.0	6.6	3.4	Vibracore	4	1	2	2.4		
	MAF-SC-25_2-4	. ,								2	4	1.4		
MAF-26	MAF-SC-26_1-2	10/29/15	1298067.7	357151.9	10.8	3.6	7.1	Vibracore	3	1	2	6.1		
	MAF-SC-26_2-3	. ,								2	3	5.1		
MAF-27	MAF-SC-27_1-2	10/29/15	1298123.1	357225.9	11.3	4.2	7.0	Vibracore	3.5	1	2	6.0		
	MAF-SC-27_2-3.5									2	3.5	5.0		
	MAF-SC-28_0-2	_								0	2	2.9		
MAF-28	MAF-SC-28_2-4	10/29/15	1297839.1	356990.7	8.8	5.8	2.9	Vibracore	8	2	4	0.9		
	MAF-SC-28_4-6			356990.7	8.8	5.8				4	6	-1.1		
	MAF-SC-28_6-8										6	8	-3.1	



Sample	Sample	Date	NAD83/Washing	Coordinates <sup>2</sup> ton State Plane North urvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water Column	Mudline Elevation	Sampling	Penetration Depth	_	e Interval bml)	Sample Elevation	
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(ft bml)	Тор	Bottom	(ft MLLW)	
	MAF-SC-29_0-2									0	2	3.3	
MAF-29	MAF-SC-29_2-4	10/07/15	1297828.1	257240.0	7.0	2.7	3.3	Vibrosoro		2	4	1.3	
WAF-29	MAF-SC-29_4-6	10/27/15	1297828.1	357219.0	7.0	3.7	3.3	Vibracore	8	4	6	-0.7	
	MAF-SC-29_6-8									6	8	-2.7	
	MAF-SC-30_0-2									0	2	2.1	
MAE 20	MAF-SC-30_2-4	40/07/45	4007020.0	257450.7	0.0	2.0	0.4	Vilorosono	10	2	4	0.1	
MAF-30	MAF-SC-30_4-6	10/27/15	1297832.2	357456.7	6.0	3.9	2.1	Vibracore	10	4	6	-1.9	
	MAF-SC-30_8-10									8	10	-5.9	
	MAF-SC-55_0-2									0	2	-43.5	
	MAF-SC-55_2-4									2	4	-45.5	
MAF-55	MAF-SC-55_4-6	11/12/18	1297941.7	358157.0	11.0	54.5	-43.5	Vibracore	10	4	6	-47.5	
	MAF-SC-55_6-8									6	8	-49.5	
	MAF-SC-55_8-10									8	10	-51.5	
	MAF-SC-56_0-2									0	2	-45.8	
	MAF-SC-56_2-4									2	4	-47.8	
MAF-56	MAF-SC-DUP-07	11/12/18	1298332.6	358413.1	10.2	56.0	-45.8	Vibracore	10	2	4	-47.8	
IVIAF-50	MAF-SC-56_4-6	11/12/16	1296552.0	336413.1	10.2	56.0	-45.6	Vibracore	10	4	6	-49.8	
	MAF-SC-56_6-8									6	8	-51.8	
	MAF-SC-56_8-10									8	10	-53.8	
	MAF-SC-57_0-2	11/13/18									0	2	-42.3
	MAF-SC-57_2-4						-42.3			2	4	-44.3	
MAF-57	MAF-SC-57_4-6		1298477.4	358421.4	10.2	52.5		Vibracore	10	4	6	-46.3	
	MAF-SC-57_6-8									6	8	-48.3	
	MAF-SC-57_8-9.8									8	9.8	-50.3	
	MAF-SC-58_0-2									0	2	-37.2	
	MAF-SC-58_2-4									2	4	-39.2	
MAF-58	MAF-SC-58_4-6	11/13/18	1298415.5	358559.4	10.8	48.0	-37.2	Vibracore	10	4	6	-41.2	
	MAF-SC-58_6-8									6	8	-43.2	
	MAF-SC-58_8-10									8	10	-45.2	
	MAF-SC-59_0-2									0	2	-50.9	
	MAF-SC-59_2-4									2	4	-52.9	
MAF-59	MAF-SC-59_4-6	11/12/18	1298676.0	358814.4	7.8	58.7	-50.9	Vibracore	13	4	6	-54.9	
WIAL 55	MAF-SC-59_6-8	11/12/10	1230070.0	330014.4	7.5	55.7	30.3	VIDIGOOIG		6	8	-56.9	
	MAF-SC-59_8-10									8	10	-58.9	
	MAF-SC-59_10-12									10	12	-60.9	
	MAF-SC-60_0-2									0	2	-39.5	
	MAF-SC-60_2-4									2	4	-41.5	
MAF-60	MAF-SC-60_4-6	11/12/18	1298657 1	358634.0	8.8	48.3	-39.5	Vibracore	14.5	4	6	-43.5	
1411/11 00	MAF-SC-60_6.5-8		1298657.1	33333-1.0	0.0	48.3	-39.5	Vibracore	14.0	6.5	8	-46.0	
	MAF-SC-60_8-10									8	10	-47.5	
-	MAF-SC-60_10-12									10	12	-49.5	



Sample	Sample	Date	NAD83/Washingt	Coordinates <sup>2</sup> con State Plane North rvey Feet)	Water Surface Elevation <sup>3</sup>	Depth of Water Column	Mudline Elevation	Sampling	Penetration Depth	-	e Interval bml)	Sample Elevation
Location <sup>1</sup>	Identification	Sampled	Easting	Northing	(ft MLLW)	(ft)	(ft MLLW)	Method	(ft bml)	Тор	Bottom	(ft MLLW)
	MAF-SC-61_0-2									0	2	-39.5
	MAF-SC-61_2-4									2	4	-41.5
MAF-61	MAF-SC-61_4-6	11/12/18	1298160.0	358298.4	15.3	54.8	-39.5	Vibracore	9.75	4	6	-43.5
	MAF-SC-61_6-8									6	8	-45.5
	MAF-SC-61_8-9.8									8	9.8	-47.5

### Notes:

ft = feet

cm = centimeter

bml = below mudline

NAD83 = North American Datum of 1983

MLLW = mean lower low water



<sup>&</sup>lt;sup>1</sup> Sediment core sampling locations are shown on Figure 10.

<sup>&</sup>lt;sup>2</sup>Obtained using a differential global positioning system (DGPS) and/or hand-held Trimble GPS device.

 $<sup>^3</sup>$  Surface water elevations are base on one of two surveyed tideboards established for the Marine Area RI.

### **SOIL CLASSIFICATION CHART**

	MAJOR DIVIS	IONS	SYM	BOLS	TYPICAL			
	MAJOR DIVIS	10143	GRAPH	LETTER	DESCRIPTIONS			
	GRAVEL	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES			
	AND GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES			
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES			
SULS	FRACTION RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND CLAY MIXTURES			
MORE THAN 50%	SAND	CLEAN SANDS		sw	WELL-GRADED SANDS, GRAVELLY SANDS			
RETAINED ON NO. 200 SIEVE	AND SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELI SAND			
	MORE THAN 50% OF COARSE FRACTION PASSING	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTUR			
	ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES			
				ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY			
FINE GRAINED	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS LEAN CLAYS			
SOILS				OL	ORGANIC SILTS AND ORGANIC SIL' CLAYS OF LOW PLASTICITY			
MORE THAN 50% PASSING NO. 200 SIEVE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS			
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY			
				ОН	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY			
	HIGHLY ORGANIC	SOILS		PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS			

NOTE: Multiple symbols are used to indicate borderline or dual soil classifications

### **Sampler Symbol Descriptions**

2.4-inch I.D. split barrel

Standard Penetration Test (SPT)

Shelby tube
Piston
Direct-Push

Bulk or grab

Continuous Coring

Blowcount is recorded for driven samplers as the number of blows required to advance sampler 12 inches (or distance noted). See exploration log for hammer weight and drop.

"P" indicates sampler pushed using the weight of the drill rig.

"WOH" indicates sampler pushed using the weight of the hammer.

#### **ADDITIONAL MATERIAL SYMBOLS**

SYM	BOLS	TYPICAL
GRAPH	LETTER	DESCRIPTIONS
	AC	Asphalt Concrete
	cc	Cement Concrete
33	CR	Crushed Rock/ Quarry Spalls
1 71 71 71 71 71 71 71 71 71 71 71 71 71	SOD	Sod/Forest Duff
	TS	Topsoil

### **Groundwater Contact**

**Y** 

Measured groundwater level in exploration, well, or piezometer



Measured free product in well or piezometer

### **Graphic Log Contact**

Distinct contact between soil strata

Approximate contact between soil strata

### **Material Description Contact**

Contact between geologic units

Contact between soil of the same geologic unit

### **Laboratory / Field Tests**

Percent fines Percent gravel %G ΑL Atterberg limits CA Chemical analysis ĊР Laboratory compaction test CS DD Consolidation test Dry density DS Direct shear Hvdrometer analysis HA MC Moisture content MD Moisture content and dry density Mohs Mohs hardness scale OC **Organic content** PM Permeability or hydraulic conductivity Ы Plasticity index Point lead test PL

Pocket penetrometer

Triaxial compression

Sieve analysis

Vane shear

### **Sheen Classification**

Unconfined compression

NS No Visible Sheen SS Slight Sheen MS Moderate Sheen HS Heavy Sheen

PΡ

SA

ΤX

UC

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

### Key to Exploration Logs



Figure L-1

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.2	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)		3.89		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		9021.1 309.13		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	collect	on			10:50:00 A	14.14	10.25

			FIE	LD I	DATA						]
i		G Depth (meters)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-3	.9— 0	J.U —	100	1	MAF-SS- 01 0-10		ML	Dark gray silt and wood debris (bark)	NS	<5%	Slight H₂S odor
-4	.o_ <sup>0</sup>			•	01 0-10 CA						
- 1	0	).2 🖳									



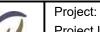
## Log of Boring MAF-SS-01

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.13	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	1.71		Vertical Datum MLLW			Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to  Mudline (ft)	Water Elevation (ft)
Notes:							10:10:00 A	M 14.21	9.5

		FIELD	DATA						
Elevation (feet)	o Depth (meters)	Interval Recovered % Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-4.8			MAF-SS- 02 0-10 CA		SM	Dark gray silty fine sand with occasional shell fragments and wood debris (lumber)	NS	10%	No odor



Log of Boring MAF-SS-02

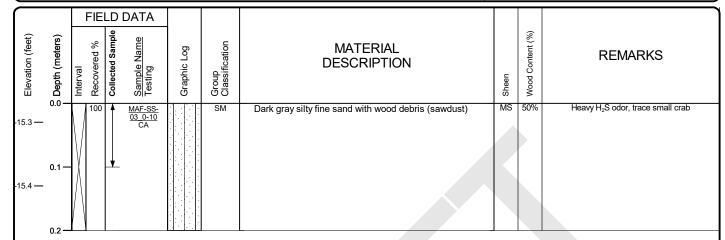
Project: Weyerhaeuser Mill A Former Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-3 Sheet 1 of 1



<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.2	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	5.27		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ïeton
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							11:10:00 A	M 25.52	10.25





## Log of Boring MAF-SS-03

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.13	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	1.74		Vertical Datum MLLW			Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							10:30:00 A	M 21.74	10

		FIELD	DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered % Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-11.8 —		100	MAF-SS- 04_0-10 CA		WD	Wood debris (sawdust) with dark gray silt and trace shell fragments	SS	75%	No odor
	0.1 —	$\bigwedge$							



## Log of Boring MAF-SS-04

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-5 Sheet 1 of 1

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.2	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-	4.1		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tieto	n
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to Wa	ter vation (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	collect	on			9:50:00 AM		9

Elevation (feet)		Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.1 —	100	<b>†</b>	MAF-SS- 05 0-10 CA		SM	Dark gray silty fine sand with occasional shell fragments and trace wood debris	NS	<1%	Slight H <sub>2</sub> S odor



## Log of Boring MAF-SS-05

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-6 Sheet 1 of 1

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.12	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	0.63		Vertical Datum	MLLW	Drilling Equipment	Research Vessel Tie	eton	
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							1:50:00 PN	Л 49.38	8.75

		FIELI	D DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %	<u>a</u> a	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-40.7 —	0.0 —	100	MAF-SS- 07 0-10 CA		SM	Dark gray silty fine sand and occasional wood debris (chips)	NS	5%	Slight H <sub>2</sub> S odor, worms, trace organic matter (roots)



## Log of Boring MAF-SS-07

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-7 Sheet 1 of 1

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.14	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	3.66		Vertical Datum MLLW			Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							11:20:00 A	M 55.41	11.75

		FIEL	D DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
43.7 —		100	MAF-SS- 08 0-10 CA		SP	Gray fine to medium sand with occasional shell fragments and trace wood debris (bark)	NS	<1%	No odor, occasional crab and shellfish



## Log of Boring MAF-SS-08

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-8 Sheet 1 of 1

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.13	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	4.52		Vertical Datum	MLLW	Drilling Equipment	Research Vessel Tieton		
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to Water	on (ft)
Notes:	Notes:						10:50:00 A	M 56.27 11.7	5

		FIELD	DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0 —	100	MAF-SS- 09_0-10 CA		ML	Dark gray silt and wood debris (bark, twigs and trace sawdust)	NS	<25%	Slight H <sub>2</sub> S odor, trace worms
-44.6 <b>—</b>	0.1 —		<u>-</u>						



Log of Boring MAF-SS-09 Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04 Figure L-9 Sheet 1 of 1



<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.2	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)			Vertical Datum		MLLW	Drilling Equipment	Research Vessel Ti	eton	
Easting (X) Northing (Y)				Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							9:20:00 AN	И 60.7	9

ſ		FIEL	D DATA						]
- 21.5 Elevation (feet)	l S Depth (meters) I	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
		100	MAF-SS- 10 0-10 CA		ML	Dark gray silt and trace wood debris (bark and sawdust)	NS	<5%	Slight H₂S odor, occasional worms
-51.8 -	0.1—		<u> </u>						



## Log of Boring MAF-SS-10

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.15	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	udline Elevation (ft) -48.5				Vertical Datum MLLW			Research Vessel Tie	eton
Easting (X) Northing (Y)				Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							1:00:00 PN	M 58.5	10

ſ			FIE	LD [	DATA						]
	⊛ ∵ Elevation (feet) 	S Depth (meters) 	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
Ī	+0.5 —	0.0	100	1	MAF-SS- 11_0-10 CA		SM	Dark gray silty fine sand with wood debris (chips) and trace shell fragments	NS	75%	Moderate H₂S odor
-2	48.6 <b>—</b>	0.1 —									



## Log of Boring MAF-SS-11

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.16	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab
Mudline Elevation (ft)	-5	5.62		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tieton
Easting (X) Northing (Y)				Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Water
Notes:							1:20:00 PN	A 65.62 10

		FIE	LD DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-55.7		100	MAF-SS- 12 0-10 CA		SM	Dark gray-black silty fine sand and occasional wood debris (lumber)	NS	15%	Heavy H₂S odor



## Log of Boring MAF-SS-12

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.17	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	Elevation (ft) -41.84					MLLW	Drilling Equipment	Research Vessel Tiete	on
Easting (X) Northing (Y)				Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to W	ater evation (ft)
Notes:							1:40:00 PN	Л 51.84	10

		FIELD	DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0	100	MAF-SS- 13 0-10		SP	Dark gray fine sand with trace gravel	NS	0%	No odor
-41.9 —	0.1		13 0-10 CA						
-42.0 <del></del>	<u>.</u>								



## Log of Boring MAF-SS-13

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.18	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	udline Elevation (ft) 1.97				Vertical Datum MLLW			Research Vessel Ti	eton
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	e collect	iion			2:40:00 PN	M 8.53	10.5

ſ		FIEI	LD DATA						]
Elevation (feet)	Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0 —	100	MAF-SS- 14 0-10		ML	Dark gray silt with sand	NS	0%	No odor
		$\bigvee$	14_0-10 CA						
	0.1 —	$\bigwedge$	<u> </u>						
		/ \							



## Log of Boring MAF-SS-14

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.18	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	udline Elevation (ft) 7.08				Vertical Datum MLLW			Research Vessel T	eton
Easting (X) Northing (Y)				Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							2:20:00 PN	Л 3.67	10.75

i	Elevation (leet)	Interva	wed %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.1	$\setminus$	100		MAF-SS- 15_0-10 CA		SP	Light brown fine to coarse sand with occasional gravel, trace wood debris (bark) and shell fragments	NS	<1%	No odor



## Log of Boring MAF-SS-15

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015				Logged By RST Checked By IHW Driller Gravity Environmental				Drilling Method Power Grab	
Mudline Elevation (ft)	6	.94		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		205.11 344.71		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							2:00:00 PN	Л 3.81	10.75

Elevation (feet)	S Depth (meters)	Interval Recovered %	Sample Name	Fog	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.1 —	100	MAF-S 16_0- CA		SP	Light brown fine to coarse sand with occasional gravel, trace wood debris (bark) and shell fragments	NS	<1%	No odor, trace ghost shrimp and worms

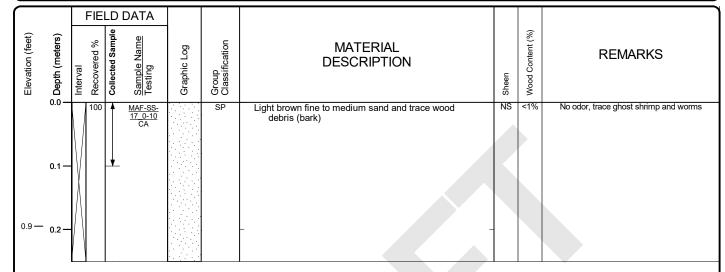


## Log of Boring MAF-SS-16

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	Total Depth (m)	0.25	Logged By RST Checked By IHW Driller Gravity Environmental				ntal, LLC Drilling Method Power Grab		
Mudline Elevation (ft)	1	.95		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ïeton
Easting (X) Northing (Y)		3047.6 719.57		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							10:50:00 A	AM 7.55	9.5





## Log of Boring MAF-SS-17

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.18	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	1.87		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		026.68 068.09		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							10:10:00 A	M 49.87	8

		FIELD	DATA						
Elevation (feet)	Depth (meters)	Interval Recovered % Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0	100	MAF-SS- 18 0-10		SM	Dark gray silty fine sand and trace wood debris (bark)	NS	<1%	No odor, trace worms
-41.9 — -42.0 —	0.1 —		18 0-10 CA						



## Log of Boring MAF-SS-18

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.18	Logged By RST Checked By IHW Driller Gravity Environmental,				Drilling Method Power Grab	
Mudline Elevation (ft)	-7	75.3		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		181.32 338.04		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							2:00:00 PN	M 85.3	10

		FIEL	D DATA							
25. Elevation (feet)	 	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS	
-/5.3	— U.U —	100	MAF-SS- 19 0-10 CA		SM	Gray silty fine sand and occasional wood debris (lumber)	NS	10%	Slight H₂S odor, trace worms	
-75.4	— 0.1 <i>—</i>		•							



## Log of Boring MAF-SS-19

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.19	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-7	7.22		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		500.72 045.76		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							2:20:00 PN	M 86.97	9.75

		FIEL	D DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0	100	MAF-SS- 20_0-10 CA		ML	Gray sandy silt and trace wood debris (lumber)	NS	1%	No odor, trace worms
-77.3 —	0.1 —		CA CA						
-77.4 —	•								



# Log of Boring MAF-SS-20

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.1	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-6	7.73		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tieto	n
Easting (X) Northing (Y)		784.67 139.42		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Wa	ter vation (ft)
Notes:							9:40:00 AN	A 75.23	7.5

		FIEL	D DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-67.8 <b>—</b>	0.0	100	MAF-SS- 21 0-10 CA		ML	Dark gray sandy silt and occasional wood debris (bark and lumber)	NS	10%	Slight H₂S odor



# Log of Boring MAF-SS-21

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.15	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-6	1.33		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	ton
Easting (X) Northing (Y)		121.88 372.04		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to V	Vater levation (ft)
Notes:							9:20:00 AN	M 68.83	7.5

		FIE	LD DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0	100	MAF-SS- 22 0-10 CA		ML	Dark gray sandy silt and trace wood debris (bark)	NS	<1%	No odor, occasional sea lettuce
-61.4 —	0.1 —		CA						



## Log of Boring MAF-SS-22

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.13	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-2	2.18		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		7791.4 722.09		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							10:30:00 A	M 10.93	8.75

		FIEL	D DATA						
Elevation (feet)	Depth (meters)		Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-2.2	0.0 —	100	MAF-SS- 23 0-10 CA		SP	Light brown fine to medium sand and trace wood debris (bark)	NS	<1%	No odor, trace dungeness crab and ghost shrimp
-2.3	0.1 —		•						



## Log of Boring MAF-SS-23

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-23 Sheet 1 of 1

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.23	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	5	5.42		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		013.59 332.37		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							12:10:00 F	PM 5.58	11

		FIELD	DATA						1
Elevation (feet)		Interval Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0 —	100	MAF-SS- 24 0-10 CA		SP	Light brown fine to medium sand and trace wood debris (bark)	NS	<1%	No odor
	0.2 —								



## Log of Boring MAF-SS-24

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.23	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	;	5.4		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		155.38 488.31		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							11:50:00 A	M 5.35	10.75

		FIE	LD	DATA						1
Elevation (feet)	 	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
1.0	— 0.0 <b>—</b>	100		MAF-SS- 25 0-10 CA		SP	Light brown fine to medium sand and trace wood debris (bark)	NS	<1%	No odor
	0.1 —		*							
	0.2									



## Log of Boring MAF-SS-25

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.1	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	8	3.49		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		052.69 139.9		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							1:30:00 PN	A 2.76	11.25

		FIE	LD	DATA						1
Elevation (feet)	.	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 -		100		MAF-SS- 26_0-10 CA		SP	Light brown fine to coarse sand with occasional gravel, trace wood debris (bark) and shell fragments	NS	<1%	No odor, occasional barnacles



## Log of Boring MAF-SS-26

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.16	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	8	3.92		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		181.24 224.11		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							1:40:00 PN	A 2.33	11.25

			FIE	LD I	DATA						1
;	Elevat	G Depth (meters)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
		).1 —	100		MAF-SS- 27 0-10 CA		SP	Light brown fine to coarse sand with occasional gravel, trace wood debris (bark) and shell fragments	NS	<1%	No odor



## Log of Boring MAF-SS-27

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.23	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	5	.31		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		864.65 972.69		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							1:00:00 PN	Л 5.94	11.25

			FIE	LD	DATA						]
(foot)			Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.	0.0	100		MAF-SS- 28_0-10 CA		SP	Light brown fine to coarse sand and trace wood debris (bark) and shell fragments	NS	<1%	No odor, trace sea lettuce
	0.	).1 —		_							
	0.	).2 —									



## Log of Boring MAF-SS-28

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.18	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	4	.55		Vertical Datum		MLLW	Drilling Equipment	Research Vessel 1	ieton
Easting (X) Northing (Y)		829.15 217.92		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							11:30:00 A	M 5.7	10.25

		FIELD	DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %		Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0 —	100	MAF-SS- 29_0-10 CA		SP	Light brown fine to medium sand with occasional shells and gravel and trace wood debris (bark)	NS	<1%	No odor, occasional clams and worms
		$\mathbb{W}$							
	0.1 —	$ $	_						



## Log of Boring MAF-SS-29

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/21/2015	<u>End</u> 10/21/2015	Total Depth (m)	0.2	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	2	26		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		819.11 151.51		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							11:10:00 A	M 7.74	10

Elevation (feet)	Depth (meters)	è	Collected Sample		Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.1 —	$\bigvee$	00	MAF-SS- 30 0-10 CA		SP	Light brown fine to medium sand with trace shell fragments and trace wood debris (bark)	NS	<1%	No odor



## Log of Boring MAF-SS-30

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.2	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	11.8		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	ton
Easting (X) Northing (Y)		458.99 861.82		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Vater</u> Elevation (ft)
Notes:							1:30:00 PN	<i>M</i> 51.55	9.75

		FIEL	_D C	DATA						]
ک ت Elevation (feet)	l S Depth (meters) I	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-41.0	- 0.0 -	100	1	MAF-SS- 31_0-10 CA		ML	Dark gray silt and occasional wood debris (bark)	NS	10%	Moderate H <sub>2</sub> S odor
-41.9 -	— 0.1 —			CA						
	0.2									



# Log of Boring MAF-SS-31

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.12	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	1.35		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		163.82 396.17		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							12:00:00 F	PM 51.35	10

		FIELD	DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered % Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-41.4 —	0.0 —	100	MAF-SS- 32 0-10 CA		ML	Black silt with wood debris (bark) and occasional shell fragments	NS	40%	Heavy H₂S odor



## Log of Boring MAF-SS-32

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.14	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	0.38		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tieto	on
Easting (X) Northing (Y)		797.84 587.21		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to W	ater evation (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	e collect	on			2:10:00 PN	48.88	8.5

		FIEL	D DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-40.4 —		100	MAF-SS- 33 0-10 CA		ML	Dark gray silt and trace wood debris (bark)	NS	<1%	Slight H <sub>2</sub> S odor, occasional organic matter (roots)
-40.5 <del></del>	0.1 —		_				K		



## Log of Boring MAF-SS-33

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington Project Number: 0676-020-04

Figure L-33 Sheet 1 of 1

<u>Start</u> Drilled 10/20/2015	<u>End</u> 10/20/2015	Total Depth (m)	0.16	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-7	7.81		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		878.92 749.54		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to ed Mudline (ft)	<u>Water</u> Elevation (ft)
Notes:							12:30:00 F	PM 18.31	10.5

		FIE	LD DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-7.9 <b>—</b>		100	MAF-SS- 34 0-10 CA		SP	Dark brown to gray fine sand with shell fragments	SS	0%	Slight H₂S odor, trace sea lettuce and worms



## Log of Boring MAF-SS-34

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.14	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-5	2.88		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		438.45 251.12		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							10:20:00 A	M 64.63	11.75

		FIEL	D DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-52.9 –		100	MAF-SS- 35_0-10 CA		ML	Dark gray silt and occasional wood debris (bark and twigs) and trace shell fragments	NS	10%	Moderate H₂S odor
-53.0 -	0.1 <del></del>								



## Log of Boring MAF-SS-35

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/19/2015	<u>End</u> 10/19/2015	Total Depth (m)	0.1	Logged By Checked By	RST IHW	Driller Gravity Environmer	ntal, LLC	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	3.96		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	ton
Easting (X) Northing (Y)		733.22 427.6		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to V	/ater levation (ft)
Notes:							9:50:00 AN	Л 55.71	11.75

		FIELD	DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-44.0 <del></del>	0.0	100	MAF-SS- 36 0-10 CA		ML	Black shell hash with silt and trace wood debris (bark)	NS	<1%	Moderate H₂S odor



# Log of Boring MAF-SS-36

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/13/2016	<u>End</u> 9/13/2016	Total Depth (m)	0.25	Logged By NR Checked By RS	Driller Research Support S	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	12.2		Vertical Datum		Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		382.39 137.57		Horizontal Datum		Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:						1:50:00 PN	_	-8

			FI	ELD	DATA						
	် Elevation (feet) 	S Depth (meters)	Interval	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
1"	2.2 —	0.0	10	00	MAF-SS- 37_0-10 CA		SP-SM	Gray fine sand with silt and trace wood debris	NS	<1	No odor
			\		CA						
			M								
-11:	2.3 —	0.1 —	W	+							
			M								
-11:	2.4 —	0.2	$/ \setminus$					-			
			/ /								



## Log of Boring MAF-SS-37

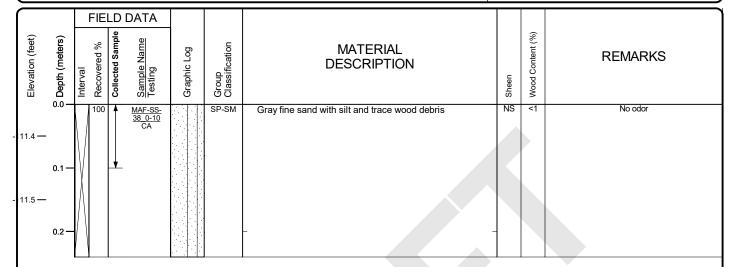
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-05

Figure L-37 Sheet 1 of 1

<u>Start</u> Drilled 9/13/2016	<u>End</u> 9/13/2016	Total Depth (m)	0.24	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	11.35		Vertical Datum		Drilling Equipment	Research Vessel Tieton	
Easting (X) Northing (Y)		530.5 672.98		Horizontal Datum		Surface Wa	Depth to Water	ion (ft)
Notes:						2:20:00 PN	<i>I</i> 102.1 -9.2	<u>2</u> 5





#### Log of Boring MAF-SS-38

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/13/2016	<u>End</u> 9/13/2016	Total Depth (m)	0.26	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-8	3.95		Vertical Datum		Drilling Equipment	Research Vessel Tieton	
Easting (X) Northing (Y)		465.1 110.77		Horizontal Datum		Surface Wa	Depth to Water	on (ft)
Notes:						2:45:00 PM	A 74.2 -9.75	5

		FIE	LD	DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0 —	100	1	MAF-SS- 39_0-10 CA		SP-SM	Gray fine sand with silt and wood debris (chips and saw dust)	NS	35	Slight H₂S odor, trace worms
-84.0 <b>—</b>				CA						
	0.1 —	╢	_							
-84.1 <b>—</b>										
	0.2						-			
-84.2 —										



## Log of Boring MAF-SS-39

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/13/2016	<u>End</u> 9/13/2016	Total Depth (m)	0.16	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-17	74.25		Vertical Datum		Drilling Equipment	Research Vessel Tieton	
Easting (X) Northing (Y)		778.24 7793.7		Horizontal Datum		Surface Wa	Depth to Wate	er ation (ft)
Notes:						4:15:00 PN	<b>Л</b> 164 -10	).25

		FIE	LD DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0 —	100	MAF-SS- 40 0-10 CA		SP-SM	Dark gray fine sand with silt and trace wood debris	NS	<1	No odor, trace roots, worms and ghost shrimp
- 74.3 —		V							
	0.1 —		<u> </u>						
- 74.4 —		/ \							



# Log of Boring MAF-SS-40

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/13/2016	<u>End</u> 9/13/2016	Total Depth (m)	0.21	Logged By I Checked By I	NRS RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	52.4		Vertical Datum			Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		947.04 211.97		Horizontal Datum			Surface Wa	Depth to	Water Elevation (ft)
Notes:							3:15:00 PN	_	7.5

		FIEL	D DATA						
Elevation (feet)	Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-152.4 —	0.0 —	100	MAF-SS- 41_0-10 CA		SP-SM	Gray fine sand with silt and trace wood debris	NS	<1	Slight H₂S odor
- 52.5 —	0.1 —		CA CA						
- 52.6 —	0.2					-			



# Log of Boring MAF-SS-41

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.27	Logged By N Checked By F	NRS RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	67.4		Vertical Datum			Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		260.9 7939.8		Horizontal Datum			Surface Wa	Depth to	Water Elevation (ft)
Notes:							8:55:00 AN	_	13.6

		FIE	LD [	DATA						
Elevation (feet)		Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
- 67.4	- 0.0-	100	1	MAF-SS- 42 0-10 CA		SP-SM	Gray fine sand with silt and trace wood debris	NS	<1	No odor
-167.5	- 0.1-	-	<u> </u>	CA						
- 67.6	— 0.2 <i>-</i>									



## Log of Boring MAF-SS-42

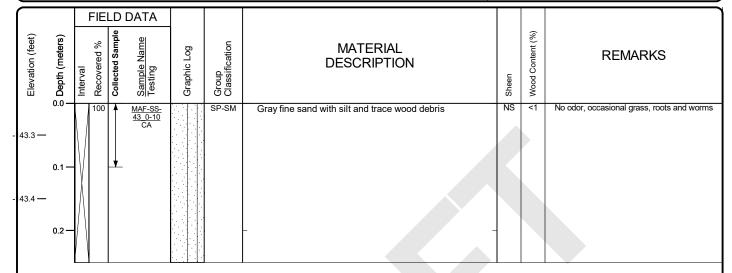
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-05

Figure L-42 Sheet 1 of 1

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-14	13.25		Vertical Datum		Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		770.16 244.15		Horizontal Datum		Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	collect	on		9:05:00 AN	143	-0.25





#### Log of Boring MAF-SS-43

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-05

Figure L-43 Sheet 1 of 1

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.26	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab
Mudline Elevation (ft)	-6	69.1		Vertical Datum		Drilling Equipment	Research Vessel Tieton
Easting (X) Northing (Y)		929.61 3704.48		Horizontal Datum		Surface Wa	Depth to Water
Notes:						9:25:00 AM	M 69.1 0

	Elevation (feet)	Depth (meters)		Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-6	9.1 <b>—</b>	0.0		00 1	MAF-SS- 44_0-10 CA		SP-SM	Gray fine to medium sand with silt and wood debris	NS	50	No odor
		0.1 —	$\left  \begin{array}{c} \\ \\ \end{array} \right $	ļ	44 U-10 CA			(bark)			



## Log of Boring MAF-SS-44

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.24	Logged By NR Checked By RS		Oriller Research Support S	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-(	63.3		Vertical Datum			Drilling Equipment	Research Vessel T	ïeton
Easting (X) Northing (Y)				Horizontal Datum			Surface Wa	Depth to	Water Elevation (ft)
Notes: Eelgrass observed at the time of sample collection							9:35:00 AN	A 63.3	0

		FIELI	D DATA						
ထိ သဲ့    -  -  -	o Depth (meters)	Interval Recovered %	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-03.3	0.0—	100	MAF-SS- 45_0-10 CA		SP-SM	Gray fine sand with silt and trace wood debris	NS	<1	No odor, occasional roots
-63.4 —	0.1—		<u>.</u>						
-63.5 —	0.2					-			

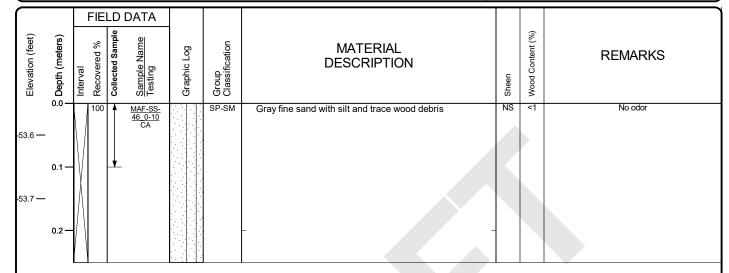


## Log of Boring MAF-SS-45

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-5	3.55		Vertical Datum		Drilling Equipment	Research Vessel Tieto	n
Easting (X) Northing (Y)		089.9 388.61		Horizontal Datum		Surface Wa	Depth to Wa	ter vation (ft)
Notes:						9:45:00 AM	A 53.8	).25





#### Log of Boring MAF-SS-46

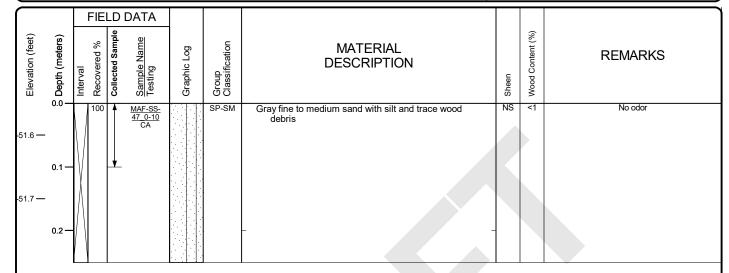
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-05

Figure L-46 Sheet 1 of 1

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-5	1.55		Vertical Datum		Drilling Equipment	Research Vessel Tieton	
Easting (X) Northing (Y)		942.44 9744.8		Horizontal Datum		Surface Wa	Depth to Wate	er ation (ft)
Notes:						9:55:00 AM	<i>M</i> 51.8 0	25





#### Log of Boring MAF-SS-47

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.26	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	10.95		Vertical Datum		Drilling Equipment	Research Vessel Tief	on
Easting (X) Northing (Y)		281.71 692.13		Horizontal Datum		Surface Wa	Depth to V	/ater levation (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	collect	on		10:05:00 A	M 111.2	0.25

		FIE	LD	DATA						
Elevation (feet)	S Depth (meters)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
	0.0	100	1	MAF-SS- 48_0-10 CA		SP-SM	Gray fine sand with silt and trace wood debris	NS	<1	No odor, occasional ghost shrimp
-111.0 —	<u>-</u>			CA						
	0.1		+							
- 11.1 —	•	$ \Lambda $								
	0.2						-			
-111.2 —	<b>3</b>		<u>L</u>							



## Log of Boring MAF-SS-48

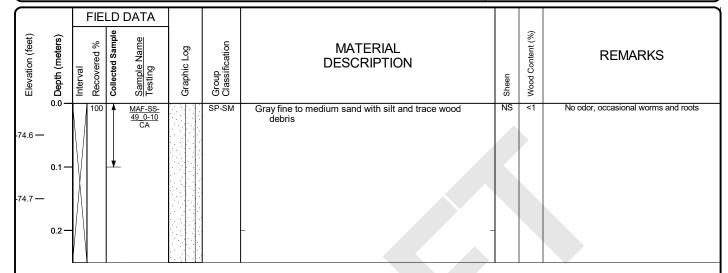
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-05

Figure L-48 Sheet 1 of 1

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-7	4.55		Vertical Datum		Drilling Equipment	Research Vessel Tie	ton
Easting (X) Northing (Y)		380.33 203.43		Horizontal Datum		Surface Wa	Depth to V	/ater levation (ft)
Notes:						10:15:00 A	M 75.3	0.75





#### Log of Boring MAF-SS-49

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-05

Figure L-49 Sheet 1 of 1

<u>Start</u> Drilled 9/13/2016	<u>End</u> 9/13/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-6	66.8		Vertical Datum		Drilling Equipment	Research Vessel Tieton	
Easting (X) Northing (Y)		609.85 0175.5		Horizontal Datum		Surface Wa	Depth to Water	on (ft)
Notes:						3:30:00 PN		

		FIEL	D DATA						
⇔ ⇔ Elevation (feet) 	S Depth (meters)		Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-00.0 —	0.0	100	MAF-SS- 50_0-10 CA		SP-SM	Gray fine to medium sand with silt and trace wood debris	NS	<1	No odor
-66.9 —	01-		CA •						
-00.9	0.1	I I I							
-67.0 <del></del>	0.2					_			

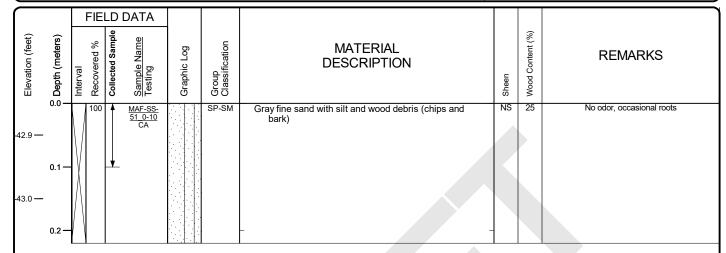


## Log of Boring MAF-SS-50

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.22	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	2.85		Vertical Datum		Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		139.37 680.71		Horizontal Datum		Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes: Eelgrass observed at the time of sample collection						11:00:00 A	41.6	-1.25





#### Log of Boring MAF-SS-51

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft)	-1	02.2		Vertical Datum		Drilling Equipment	Research Vessel Tieton	
Easting (X) Northing (Y)		330.04 528.01		Horizontal Datum		Surface Wa	Depth to Water	ı (ft)
Notes: Eelgrass obse	erved at the ti	me of sample	e collecti	on		11:15:00 A	104.2 2	

		FIEL	D DATA						
S Elevation (feet)	o Depth (meters)	Interval Recovered %	Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-102.2	- 0.0 —	100	MAF-SS- 52_0-10 CA		SP	Gray fine to medium sand with cobbles and wood debris (bark) and shell fragments	NS	35	No odor, occasional sea lettuce
		M = 1							
-102.3 —	- 0.1 —		<u></u>						
		$\mathbb{N}$							
- 02.4 —	- 0.2 —								



## Log of Boring MAF-SS-52

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By NRS Checked By RST	Driller Research Support	Service	Drilling Method Power Grab	
Mudline Elevation (ft) -38.6				Vertical Datum		Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)				Horizontal Datum		Surface Wa	Depth to	Water Elevation (ft)
Notes:						11:30:00 A	M 36.6	-2

		FIE	LD DA	TA						]
స్ట 9 Elevation (feet)	 	Interval Recovered %	Collected Sample	Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-36.0	— 0.0—	100	MAI 53	F-SS- 0-10 CA		SP-SM	Black fine sand with silt and wood debris (chips and bark) and shells	NS	65	No odor
-38.7	— 0.1 <i>—</i>			CA						
-38.8	— 0.2 <i>—</i>									

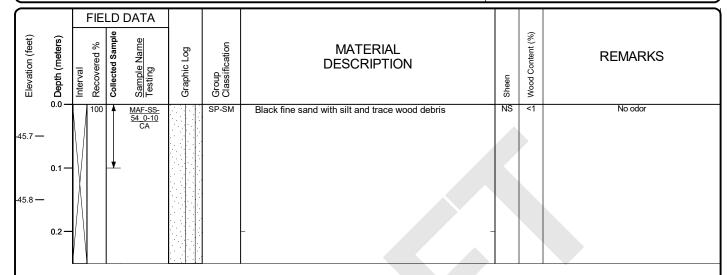


## Log of Boring MAF-SS-53

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 9/14/2016	<u>End</u> 9/14/2016	Total Depth (m)	0.25	Logged By N Checked By R	IRS RST	Driller Research Support S	Service	Drilling Method Power Grab	
Mudline Elevation (ft) -45.65		Vertical Datum		Drilling Equipment	Research Vessel T	ieton			
Easting (X) 360961.42 Northing (Y) 1300652.93			Horizontal Datum			Surface Wa	Depth to	Water Elevation (ft)	
Notes:							11:40:00 A	AM 42.9	-2.75





#### Log of Boring MAF-SS-54

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/13/2018	<u>End</u> 11/13/2018	Total Depth (m)	0.1	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	ation (ft) -47.97			Vertical Datum MLLW		Drilling Equipment	Research Vessel Ti	eton	
Easting (X) Northing (Y)	1297937.94 358167.63			Horizontal WA State Plane,North Datum NAD83 (feet)		Surface Wa	Depth to	Water Elevation (ft)	
Notes:							2:00:00 PN		8.03

Depth (meters)	Interval Recovered % III Collected Sample   C	Graphic Log Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 —	100 A MAF-SS-55 0-10 CA	SP	Gray fine to medium sand	NS	0%	



# Log of Boring MAF-SS-55

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/13/2018	<u>End</u> 11/13/2018	Total Depth (m)	0.1	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	13.6		Vertical Datum		MLLW	Drilling Equipment	Research Vessel 1	ieton
Easting (X) Northing (Y)		323.69 408.12		Horizontal Datum		State Plane, North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							3:20:00 PN	<i>A</i> 50.6	7

	FIE	LD	DATA						
. Depth (meters)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 —	100	1	MAF-SS-56 0-10 CA		SM	Gray silty fine sand with occasinal shell fragments	NS	0%	
0.1	$\mathbb{N}$		<i>5</i> /(		SP	Gray fine to medium sand	NS	0%	



# Log of Boring MAF-SS-56

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-06

Figure L-56 Sheet 1 of 1

<u>Start</u> Drilled 11/14/2018	<u>End</u> 11/14/2018	Total Depth (m)	0.18	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	10.2		Vertical Datum		MLLW	Drilling Equipment	Research Vessel	Γieton
Easting (X) Northing (Y)		461.28 439.37		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							9:22:00 AN	M 50.4	10.2

	FIELD DATA					
Depth (meters)	Interval Recovered % Collected Sample Sample Name Testing	Graphic Log Group	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 —	100 MAF-SS-57 0-10 CA	SM	Gray silty fine to medium sand with occasional shells and trace wood debris (twigs)  Dark gray silty fine to medium sand with shell hash	NS NS	<1% 0%	Light H <sub>2</sub> S odor
0.1 —	<u> </u>	SN	Dark gray silty fine to medium sand	NS	0%	



# Log of Boring MAF-SS-57

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-06

Figure L-57 Sheet 1 of 1

<u>Start</u> Drilled 11/14/2018	<u>End</u> 11/14/2018	Total Depth (m)	0.1	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	-5	2.78		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ïeton
Easting (X) Northing (Y)		411.49 533.88		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							8:51:00 AN	A 62.3	9.52

ſ	FIELD DATA					]
S Depth (meters)	Interval Recovered % Collected Sample Sample Name Testing Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 -	100 MAF-SS-58 0-10 CA	SM SM	Light gray silty fine sand with rare wood debris (chips and bark) and shell fragments  Dark gray silty fine to medium sand with trace shell fragments and wood debris (chips)	NS NS	5% <1%	



# Log of Boring MAF-SS-58

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-06

Figure L-58 Sheet 1 of 1

<u>Start</u> Drilled 11/14/2018	<u>End</u> 11/14/2018	Total Depth (m)	0.1	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	-5	0.26		Vertical Datum		MLLW	Drilling Equipment	Research Vess	el Tieton
Easting (X) Northing (Y)	358789.4 Datum NAD83 (feet)		Surface Wa	Depth to	Water Elevation (ft)				
Notes:							10:32:00 A	AM 60.9	10.64

	FIELD DATA					]
Depth (meters)	Interval Recovered % Collected Sample Sample Name Testing	Graphic Log Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 —	100 MAF-SS-59 0-10 CA	SM	Light gray silty fine to medium sand with wood debris (bark and chips) and occasional shell fragments	NS	20%	Moderate H₂S odor
0.1 —	$\bigwedge$	SP	Dark gray fine to coarse sand with occasional shell fragments	NS	0%	



# Log of Boring MAF-SS-59

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/14/2018	<u>End</u> 11/14/2018	Total Depth (m)	0.1	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	2.12		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Tie	eton
Easting (X) Northing (Y)		634.89 628.76		Horizontal Datum	WA	State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes:							9:46:00 AN		10.38

	FIELD DATA					
S Depth (meters)	Interval Recovered % Collected Sample Sample Name Testing	Graphic Log Group	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 -	100 MAF-SS-60 0-10 CA	SI	Light gray silty fine to medium sand with occasional shell fragments and trace wood debris (twigs)  Dark gray silty fine to medium sand with shell hash	SS NS	<1% 0%	Moderate H₂S odor
0.1 -	/ \	S	Dark gray silty fine to medium sand	NS	0%	



# Log of Boring MAF-SS-60

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-06

Figure L-60 Sheet 1 of 1

<u>Start</u> Drilled 11/13/2018	<u>End</u> 11/13/2018	Total Depth (m)	0.1	Logged By Checked By	RST RST	Driller Gravity Marine Ser	vice	Drilling Method Power Grab	
Mudline Elevation (ft)	-4	2.65		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ïeton
Easting (X) Northing (Y)		164.11 300.44		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							2:55:00 PN	<i>A</i> 49.8	7.15

ſ	FIELD DATA						
Depth (meters)	Interval Recovered % Collected Sample Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
0.0 —	100 MAF-SS-61 0-10 CA		SM	Gray fine silty sand with trace wood debris (bark and chips) and organic matter (roots)	NS	5%	
			SP	Gray fine to medium sand with occasional gravel	NS	0%	

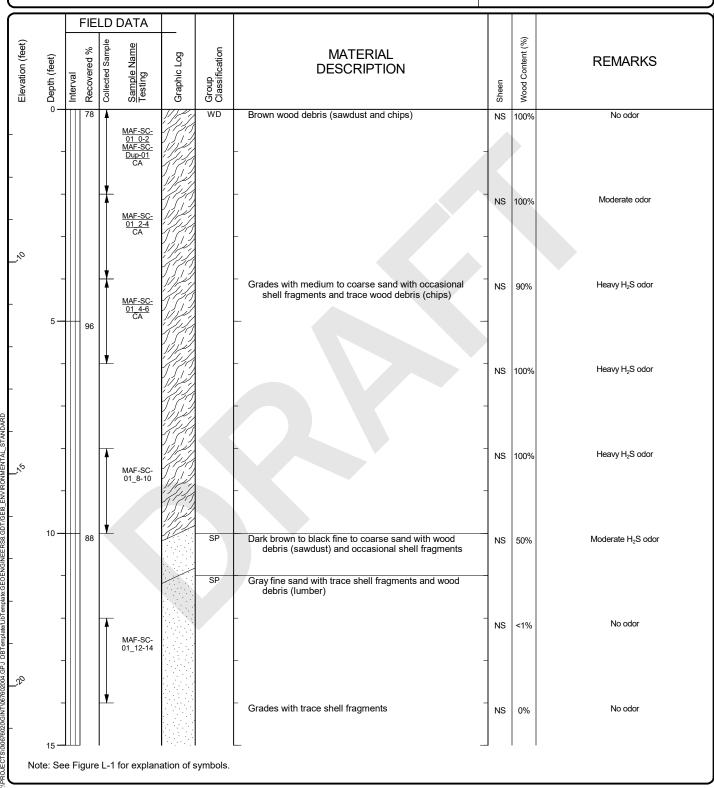


# Log of Boring MAF-SS-61

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/11/2015	<u>End</u> 11/11/2015	Total Depth (ft)	25	Logged By Checked By	RST IHW	Driller Cascage Drilling LP			Sonic	
Mudline Elevation (ft)	-	6.4		Vertical Datum		-6.4 MLLW	Drilling Equipment		100C Limite	d Access
Easting (X) Northing (Y)		9010.6 323.83		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	t), OD 0.33 (f		8:00:00 AN	_	17.4	11				



# Log of Boring MAF-SC-01

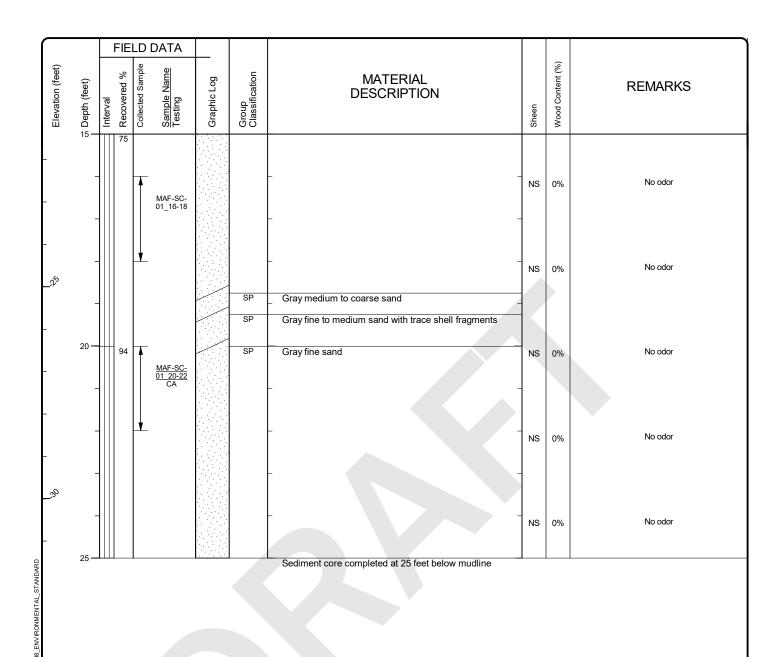


Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-62 Sheet 1 of 2



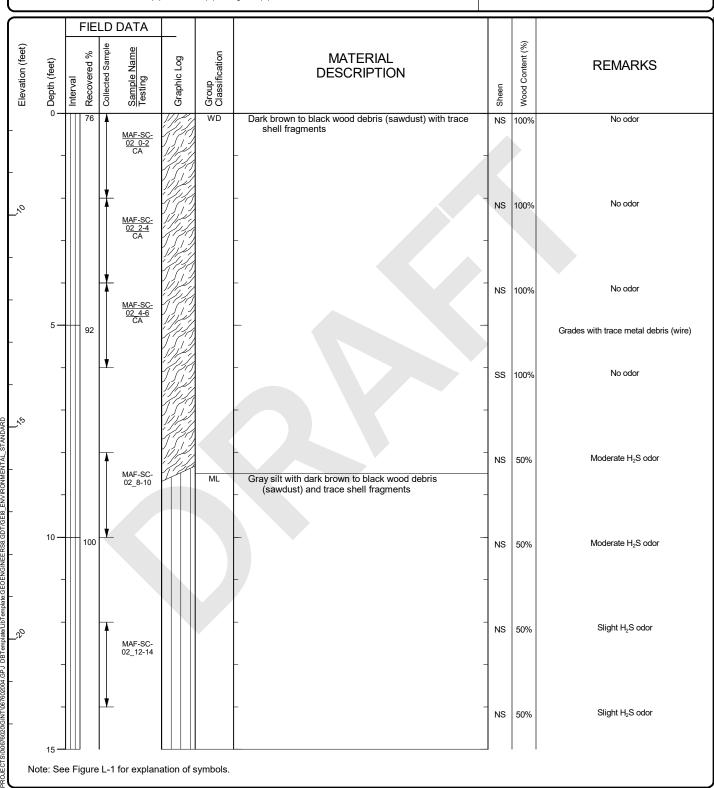
#### Log of Boring MAF-SC-01 (continued)



Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/10/2015	<u>End</u> 11/10/2015	Total Depth (ft)	25	Logged By Checked By	RST IHW	Drillor Cascade Drilling LP			Sonic	
Mudline Elevation (ft)	-	7.6		Vertical Datum		-7.6 MLLW	Drilling Equipment		100C Limite	d Access
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)
Notes: Core Tube D	t), OD 0.33 (f		1:45:00 PN	_	18.6	11				



# GEOENGINEERS

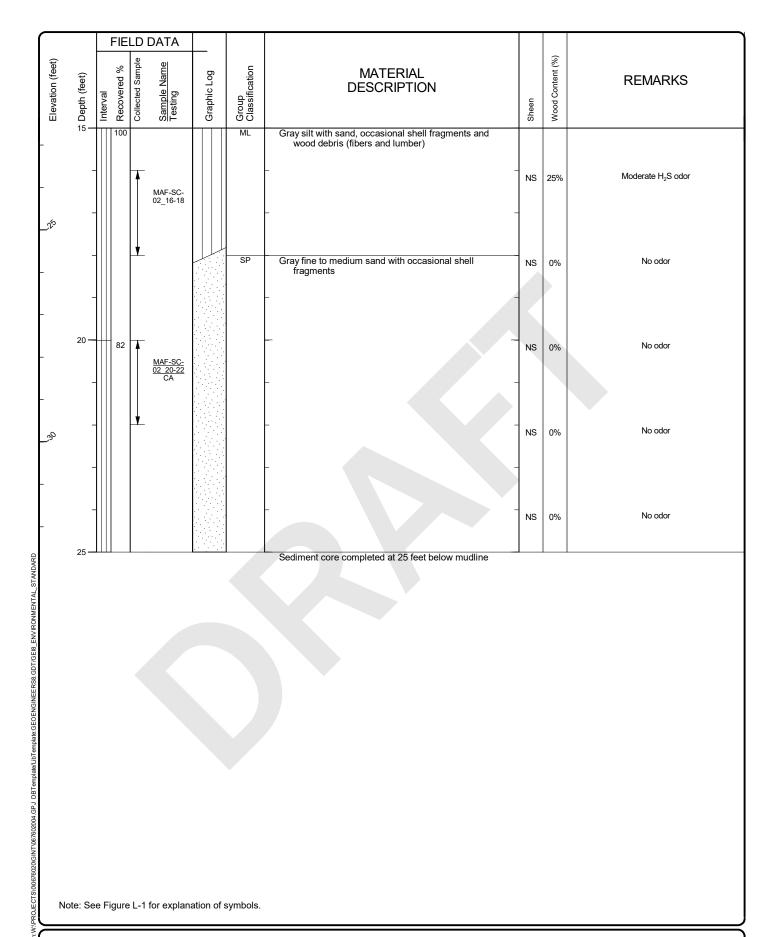
#### Log of Boring MAF-SC-02

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-63 Sheet 1 of 2



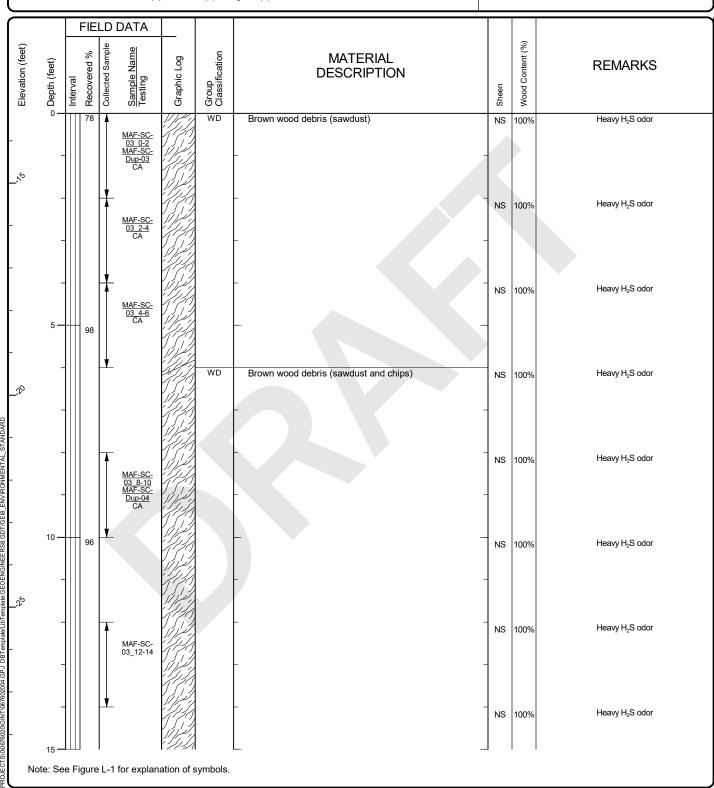
#### Log of Boring MAF-SC-02 (continued)



Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/11/2015	<u>End</u> 11/11/2015	Total Depth (ft)	25	Logged By Checked By	RST IHW	Driller Cascade Drilling, I	_P	Drilling Method	Sonic	
Mudline Elevation (ft)	-1	3.35		Vertical Datum		-13.35 MLLW	Drilling Equipment		100C Limite	d Access
Easting (X) Northing (Y)		3947.6 923.15		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 5 (ft)		10:30:00 A	M	18.6	5.25	

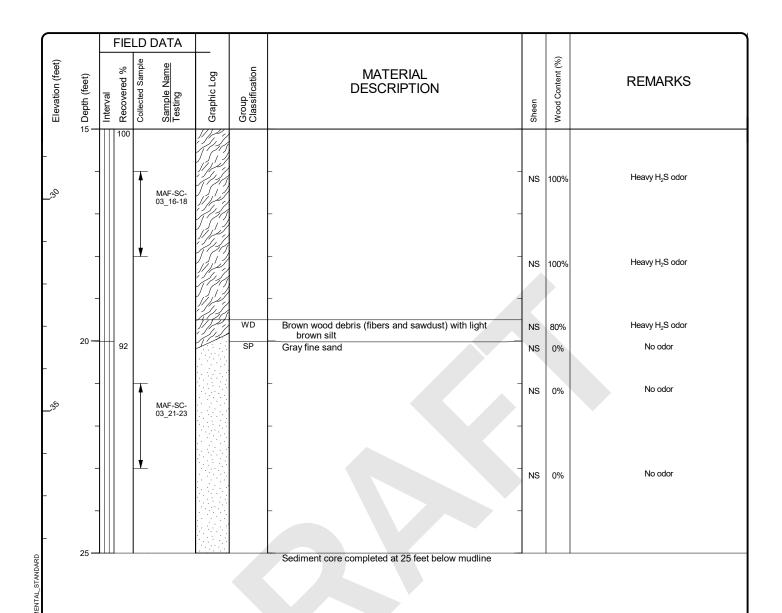


# GEOENGINEERS

#### Log of Boring MAF-SC-03

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington



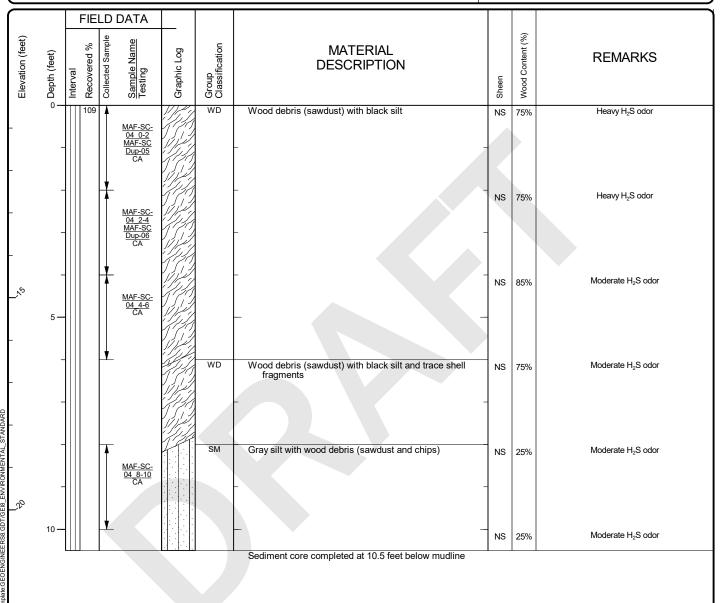
#### Log of Boring MAF-SC-03 (continued)



Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/26/2015	<u>End</u> 10/26/2015	Total Depth (ft)	10.5	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Method Vibracore	
Mudline Elevation (ft)	-1	0.46		Vertical Datum		-10.46 MLLW	Drilling Equipment	Research Vessel Titan	
Easting (X) Northing (Y)		156.77 181.04		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Water	n (ft)
Notes: Core Tube Da	ata: ID 0.33 (f	t), OD 0.31 (f		9:21:00 AN					



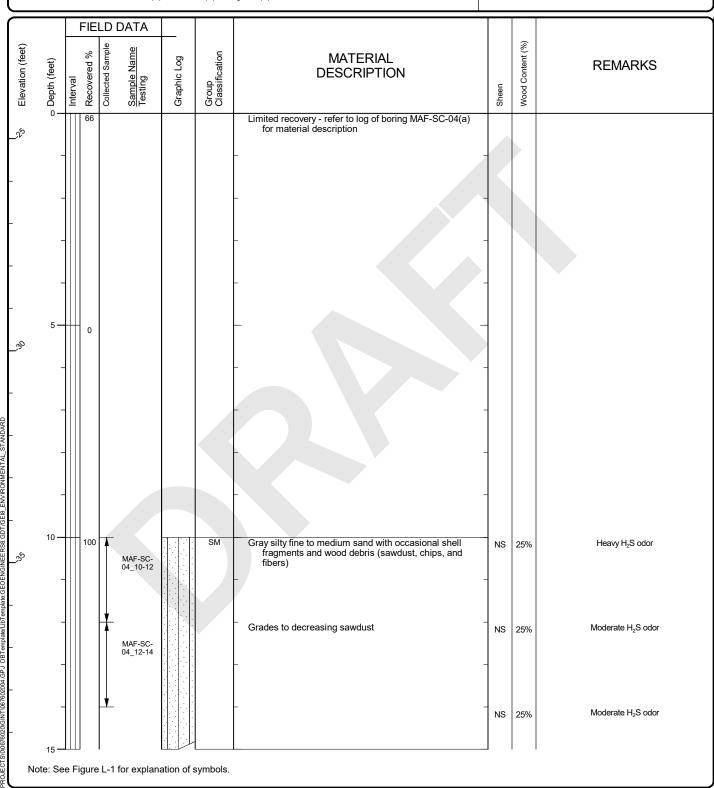


Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington
Project Number: 0676-020-04

Figure L-65 Sheet 1 of 1

<u>Start</u> Drilled 11/10/2015	<u>End</u> 11/10/2015	Total Depth (ft)	20	Logged By Checked By	Logged By RST Checked By IHW Driller Cascade Drilling,				Sonic	
Mudline Elevation (ft)	-2	24.4		Vertical Datum		-24.4 MLLW	Drilling Equipment		100C Limite	ed Access
Easting (X) Northing (Y)		166.86 202.37		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 5 (ft)			8:30:00 AN	1	30.4	6



#### Log of Boring MAF-SC-04(b)

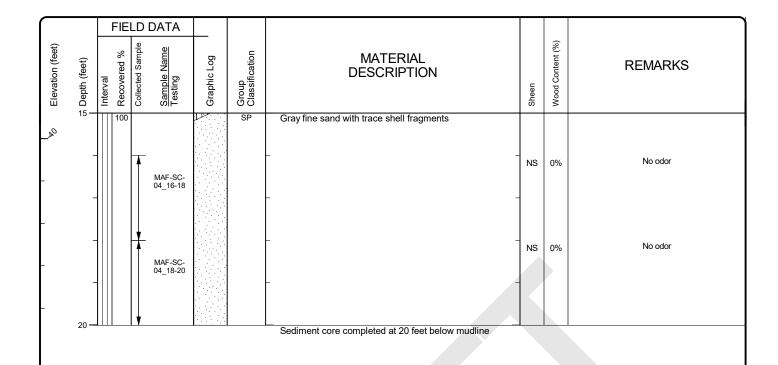


Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-66 Sheet 1 of 2



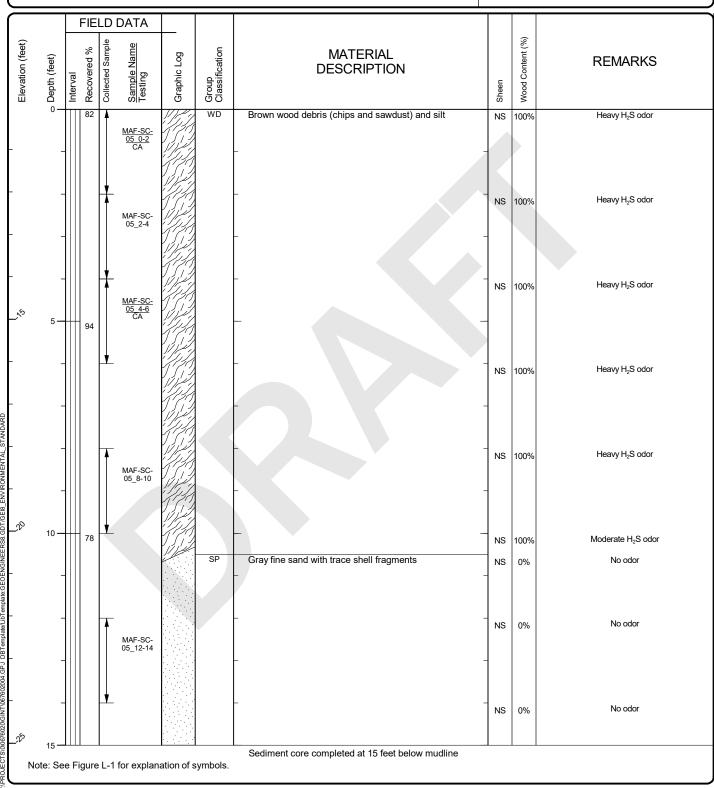
#### Log of Boring MAF-SC-04(b) (continued)



Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/11/2015	<u>End</u> 11/11/2015	Total Depth (ft)	15	Logged By Checked By	RST IHW	Driller Cascade Drilling, I	_P	Drilling Method	Sonic	
Mudline Elevation (ft)	-1	0.05		Vertical Datum		-10.05 MLLW	Drilling Equipment		100C Limite	d Access
Easting (X) Northing (Y)		435.11 255.56		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 5 (ft)			12:50:00 F	PM	19.3	9.25



# Log of Boring MAF-SC-05



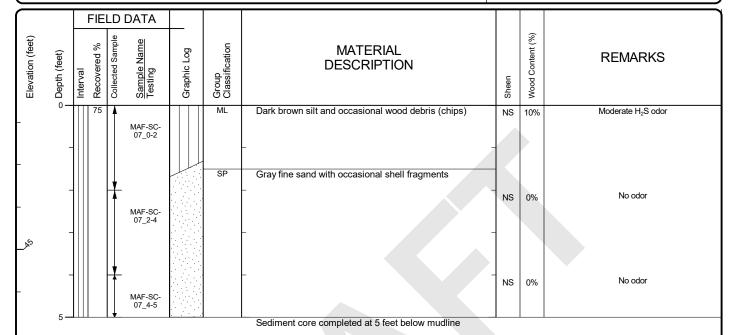
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-67 Sheet 1 of 2

<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	5	Logged By Checked By	gged By RST Driller Gravity Environmental, LLC Drilling Method Vibracore					
Mudline Elevation (ft)	-4	11.6		Vertical Datum		-41.6 MLLW	Drilling Equipment	Research Vessel Titan		
Easting (X) Northing (Y)		660.87 679.91		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Water		
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (ft		2:54:00 PN						





#### Log of Boring MAF-SC-07

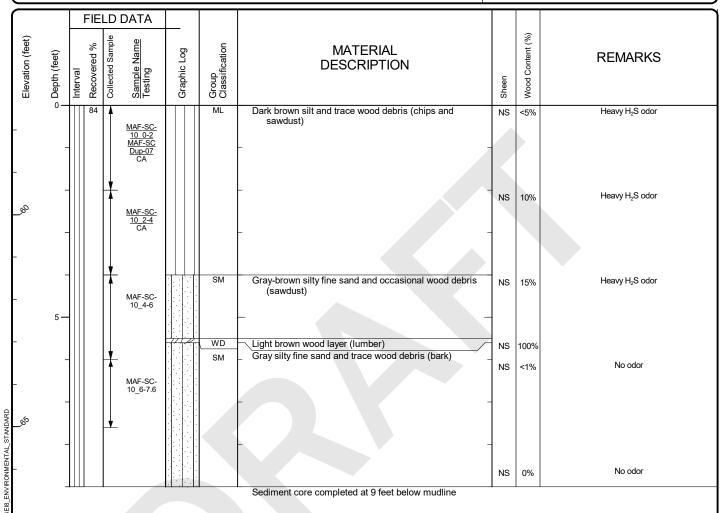
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-68 Sheet 1 of 1

<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	9	Logged By Checked By	Driller Gravity Environmental LLC   Stiming Vibracore					
Mudline Elevation (ft)	-5	7.42		Vertical Datum		-57.42 MLLW	Drilling Equipment	Research Vessel Titan		
Easting (X) Northing (Y)		080.38 521.61		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Water		
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (ft		2:01:00 PN	_					





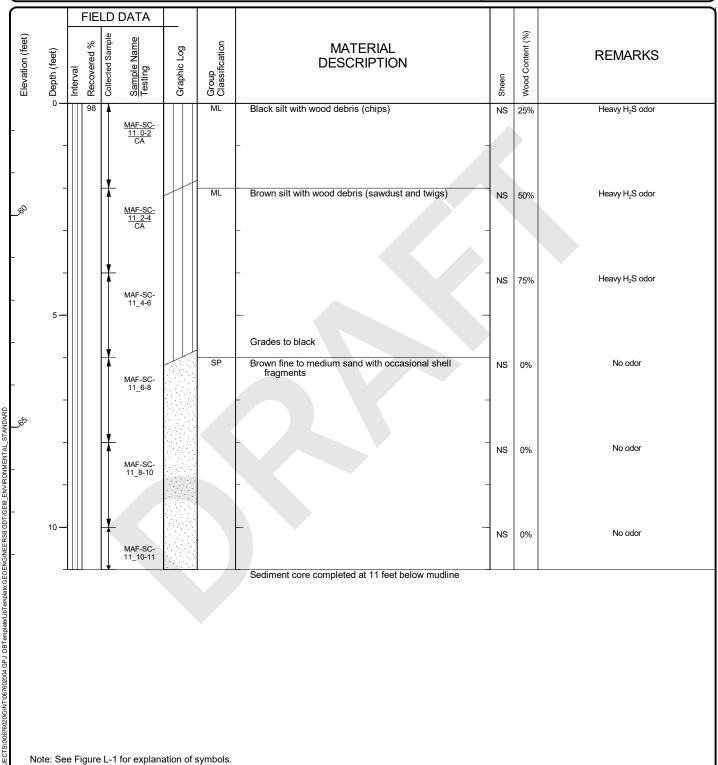
Weyerhaeuser Mill A Former

Project Location: Everett, Washington
Project Number: 0676-020-04

Figure L-69 Sheet 1 of 1



<u>Start</u> Drilled 10/28/2015	<u>End</u> 10/28/2015	Total Depth (ft)	11	Logged By Checked By	RST IHW	Driller Gravity Environme	Drilling Method Vibracore		
Mudline Elevation (ft)	-5	7.36		Vertical Datum		-57.36 MLLW	Drilling Equipment	Research Vessel 1	ītan
Easting (X) Northing (Y)		3798.22 015.68		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f		3:05:00 PN	M 66.86	9.5			



Log of Boring MAF-SC-11

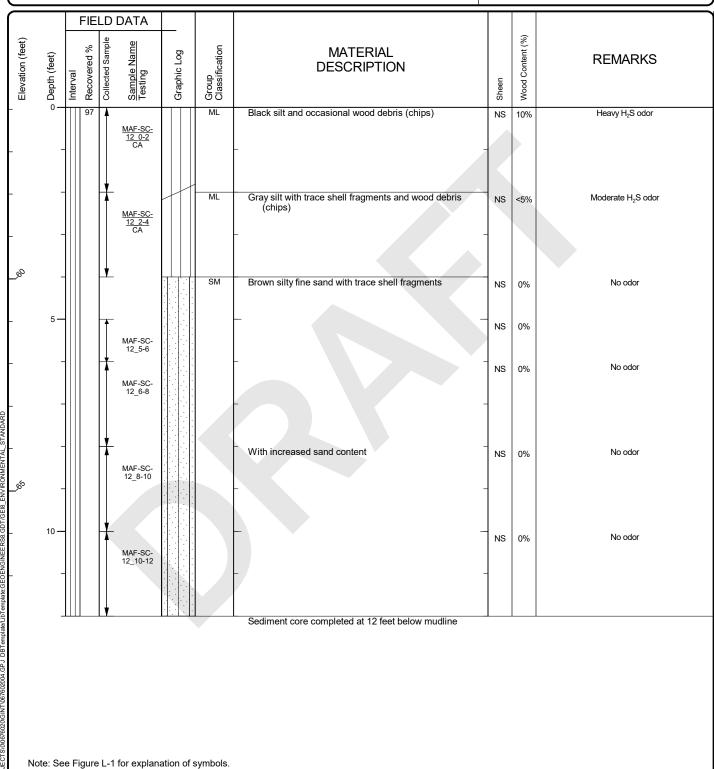


Weyerhaeuser Mill A Former Project:

Project Location: Everett, Washington Project Number:

Figure L-70 Sheet 1 of 1 0676-020-04

<u>Start</u> Drilled 10/28/2015	<u>End</u> 10/28/2015	Total Depth (ft)	12	, ,	Logged By RST Checked By IHW Driller Gravity Environmental, LLC Drilling Method Vibracore				
Mudline Elevation (ft)	-5	5.95		Vertical Datum		-55.95 MLLW	Drilling Equipment	Research Vesse	l Titan
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f		11:31:00 A	AM 60.7	4.75			



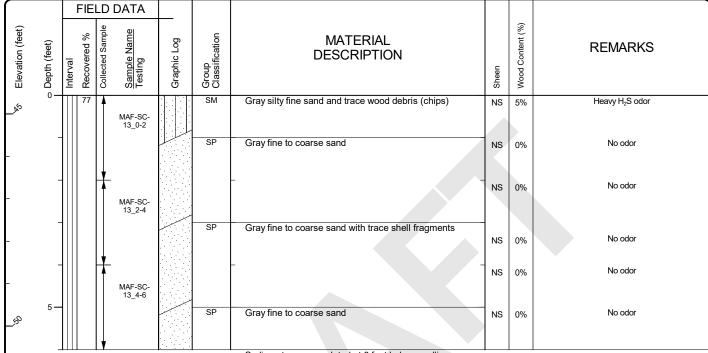
Log of Boring MAF-SC-12

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington
Project Number: 0676-020-04



<u>Start</u> Drilled 10/27/2015	<u>End</u> 10/27/2015	Total Depth (ft)	6	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC		
Mudline Elevation (ft)	-4	4.56		Vertical Datum		-44.56 MLLW	Drilling Equipment	Research Vessel	Titan
Easting (X) Northing (Y)		258.31 294.67		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f		2:35:00 PN		8.65			



Sediment core completed at 6 feet below mudline

Note: See Figure L-1 for explanation of symbols.

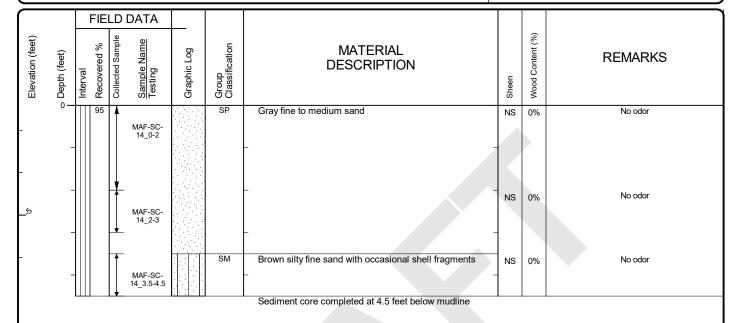


#### Log of Boring MAF-SC-13

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/28/2015	<u>End</u> 10/28/2015	Total Depth (ft)	4.5	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Vibracore	
Mudline Elevation (ft)	-2	2.41		Vertical Datum		-2.41 MLLW	Drilling Equipment	Research Vessel Titar	l
Easting (X) Northing (Y)		324.57 015.92		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Wa	ter vation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f		2:10:00 PN		5.49			



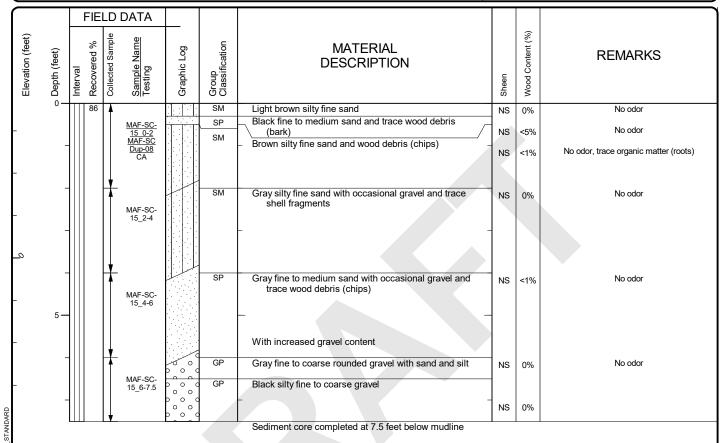


#### Log of Boring MAF-SC-14

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/28/2015	<u>End</u> 10/28/2015	Total Depth (ft)	7.5	Logged By Checked By	RST IHW	Driller Gravity Environmental, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	3	3.65		Vertical Datum		3.65 MLLW	Drilling Equipment	Research Vessel Tit	an
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to V	<u>Vater</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 10 (ft)			9:38:00 AN		7.75





#### Log of Boring MAF-SC-15

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/28/2015	<u>End</u> 10/28/2015	Total Depth (ft)	4	Logged By Checked By	RST IHW	Driller Gravity Environme	ntal, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	3	3.05		Vertical Datum		3.05 MLLW	Drilling Equipment	Research Vesse	l Titan	
Easting (X) Northing (Y)		201.21 348.06		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)	
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	n 10 (ft)			9:50:00 AN		6.27	

		FIE	LD [	ATA						
Elevation (feet)	, Depth (feet)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
ľ	0 —	81				SP	Light brown fine sand	NS	0%	No odor
						GP	Brown fine gravel with sand and trace shell fragments			
<b> </b>	-		1					NS	0%	No odor
				MAF-SC- 16_1-2						
<b> </b>	_		1			SP	Brown fine to coarse sand with occasional gravel	NS	0%	No odor
				MAF-SC- 16_2-4						
_0	-						Increased gravel content			
						GP	Brown coarse gravel with sand	NS	0%	No odor
							Sediment core completed at 4 feet below mudline			

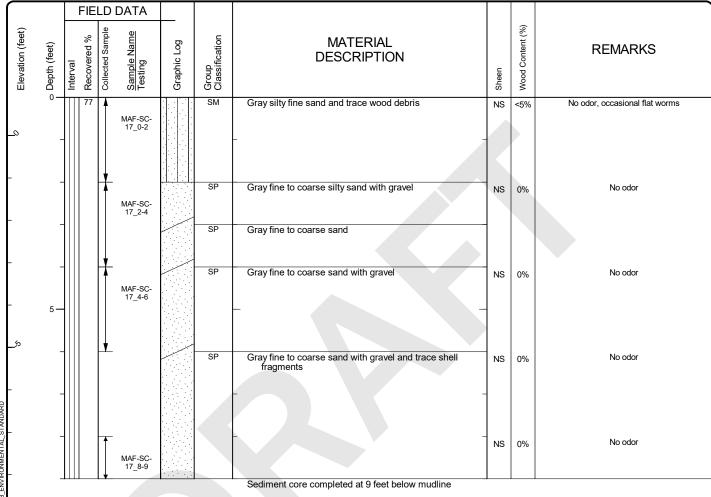


# Log of Boring MAF-SC-16

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/27/2015	<u>End</u> 10/27/2015	Total Depth (ft)	9	Logged By Checked By	RST IHW	Driller Gravity Environmental, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	udline Elevation (ft) 0.9					0.9 MLLW	Drilling Equipment	Research Vessel Titan	
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to Wat	er vation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (ft)	, Lengt	h 10 (ft)			3:55:00 PN		1.5



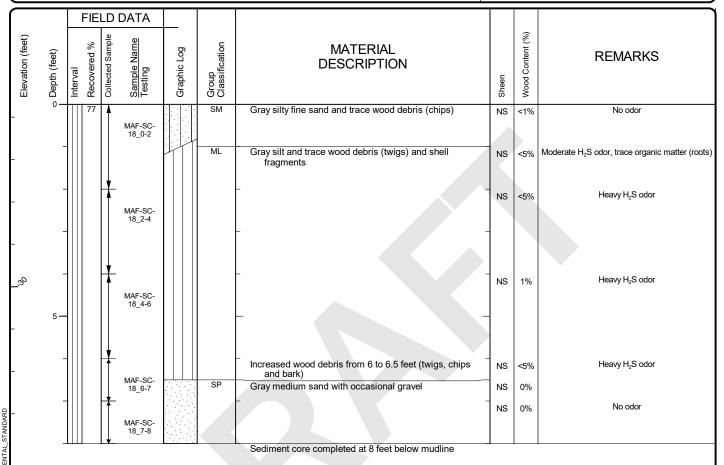


#### Log of Boring MAF-SC-17

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/27/2015	<u>End</u> 10/27/2015	Total Depth (ft)	8	Logged By Checked By	RST IHW	Driller Gravity Environmental, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	-2	25.7		Vertical Datum		-25.7 MLLW	Drilling Equipment	Research Vess	el Titan
Easting (X) Northing (Y)					WA	State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (ft	), Lengt	h 10 (ft)			11:12:00 A	AM 29.2	3.5



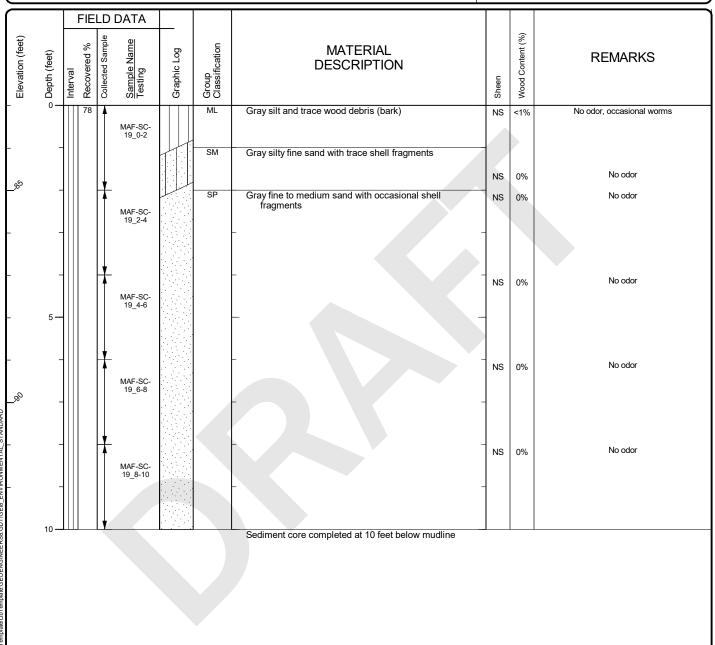


#### Log of Boring MAF-SC-18

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/28/2015	<u>End</u> 10/28/2015	Total Depth (ft)	10	Logged By Checked By	RST IHW	Driller Gravity Environmental, LLC Drilling Method Vibracore				
Mudline Elevation (ft)	-8	2.99		Vertical Datum		-82.99 MLLW	Drilling Equipment		Research Ve	ssel Titan
Easting (X) Northing (Y)		167.75 645.08		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 12 (ft)			12:05:00 F	_	87.99	5





Weyerhaeuser Mill A Former

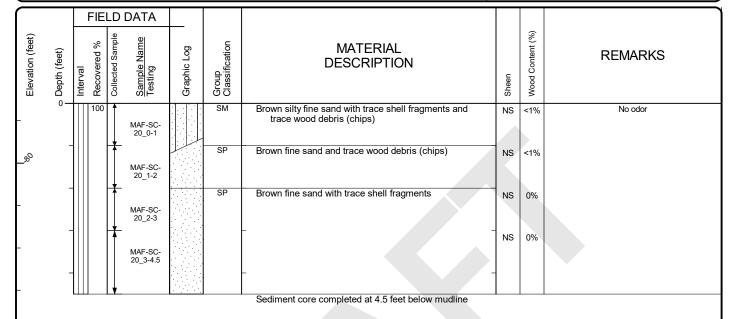
Project Location: Everett, Washington Project Number:

0676-020-04





<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	4.5	Logged By Checked By	RST IHW	Driller Gravity Environme	ntal, LLC Drilling Method Vibracore		
Mudline Elevation (ft)	-7	8.59		Vertical Datum		-78.59 MLLW	Drilling Equipment	Resea	rch Vessel Titan
Easting (X) Northing (Y)		481.99 012.51		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth	
Notes: Core Tube Data: ID 0.31 (ft), OD 0.33 (ft), Length 10 (ft)								AM 84.84	4 6.25





#### Log of Boring MAF-SC-20

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	6	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	tal, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	-6	8.71		Vertical Datum		-68.71 MLLW	Drilling Equipment	F	Research Ve	essel Titan	
Easting (X) Northing (Y)		786.12 421.05		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa		Depth to Mudline (ft)	<u>Water</u> Elevation (ft)	
Notes: Core Tube Da		12:42:00 F		75.46	6.75						

FIELD DATA	
Elevation (feet)  Depth (feet)  Interval  Recovered % Collected Sample Name Testing Group  Graphic Log  Graphic Log  Sheen  Wood Content (%)	
Dark brown silty fine sand and occasional wood debris  MAF-SC.  MAF-SC.  MAF-SC.  MAF-SC.  MAF-SC.  MAF-SC.	ms
Dup-09 CA MAF-SC-21_1-2 ML Dark brown silt with occasional wood debris (bark, sawdust and chips)	
MAF-SC- 21 2-4 CA  SP  Brown fine sand with occasional shell fragments  NS  0%  No odor	
SP Gray fine sand with occasional shell fragments  NS 0%  No odor	
Sediment core completed at 6 feet below mudline	



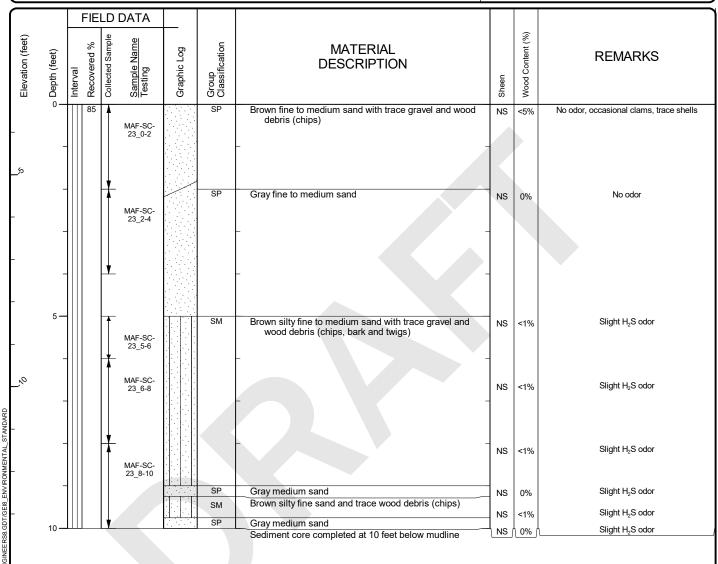
# Log of Boring MAF-SC-21

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04 Figure L-80 Sheet 1 of 1

<u>Start</u> Drilled 10/27/2015	<u>End</u> 10/27/2015	Total Depth (ft)	10	Logged By Checked By	RST IHW	Driller Gravity Environmental, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	-:	3.34		Vertical Datum		-3.34 MLLW	Drilling Equipment	Research Vesse	l Titan
Easting (X) Northing (Y)						State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 10 (ft)			10:43:00 A	AM 7.09	3.75





Log of Boring MAF-SC-23

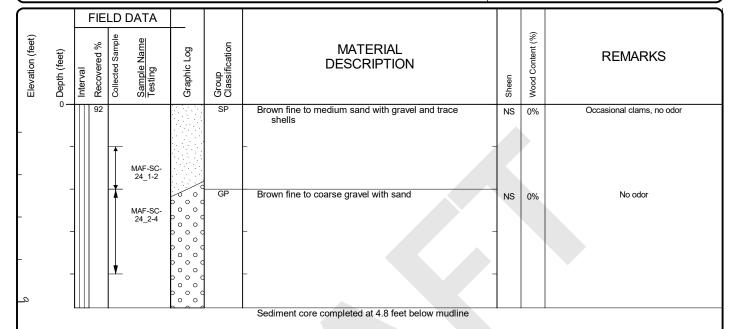
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington
Project Number: 0676-020-04

#### Figure L-81 Sheet 1 of 1



<u>Start</u> Drilled 10/26/2015	<u>End</u> 10/26/2015	Total Depth (ft)	4.8	Logged By Checked By	RST IHW	Driller Gravity Environme	ravity Environmental, LLC Drilling Method Vibracore			
Mudline Elevation (ft)	4	.66		Vertical Datum		4.66 MLLW	Drilling Equipment	Research	Vessel Titan	
Easting (X) Northing (Y)		007.36 331.05		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)	
Notes: Core Tube Data: ID 0.33 (ft), OD 0.31 (ft), Length 10 (ft)								M 4.59	9.25	





#### Log of Boring MAF-SC-24

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/26/2015	<u>End</u> 10/26/2015	Total Depth (ft)	4	Logged By Checked By	RST IHW	Driller Gravity Environme	ntal, LLC Drilling Vibracore		
Mudline Elevation (ft)	3	3.44		Vertical Datum		3.44 MLLW	Drilling Equipment	Research Vessel	Гitan
Easting (X) Northing (Y)		140.47 487.03		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes: Core Tube Data: ID 0.33 (ft), OD 0.31 (ft), Length 10 (ft)								M 6.56	10

ſ			FIE	LD [	DATA						
	Elevation (feet)	, Depth (feet)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
ŀ		0 —	81				SP	Brown fine to medium sand with trace gravel and shell fragments	NS	0%	No odor
L		_			MAF-SC-		SW	Prove for the second with a secional way to a			
		_		+	25_1-2		SVV	Brown fine to coarse sand with occasional gravel and occasional shell fragments	NS	0%	No odor
ľ		_			MAF-SC- 25_2-4		0.0				
ŀ	۵						SP	Brown fine to medium sand with occasional gravel and trace wood debris (bark)	NS	<1%	No odor
		_				, , ,		Sediment core completed to 4 feet below mudline			

# Log of Boring MAF-SC-25

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington
Project Number: 0676-020-04

Figure L-83 Sheet 1 of 1

<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	3	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Method Vibracore	
Mudline Elevation (ft)	7	'.14		Vertical Datum 7.14 MLLW			Drilling Equipment	Research Vessel Titar	1
Easting (X) Northing (Y)		067.73 151.88		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Wa	i <u>ter</u> vation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (ft	8:50:00 AN	M 3.61 1	0.75				

$\bigcap$		F	ELC	DATA						
Elevation (feet)	, Depth (feet)		Collected Sample		Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
-	0-	9	2	MAF-SC- 26_1-2		SP	Brown fine sand with occasional gravel and trace wood debris (twigs)	NS	<1%	No odor
_ <u></u> %	_		1	-				NS	0%	No odor
	_			MAF-SC- 26_2-3		GP	Brown fine to coarse gravel with sand  Sediment core completed at 3 feet below mudline			



# Log of Boring MAF-SC-26

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-84 Sheet 1 of 1

<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	3.5	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Method Vibracore	
Mudline Elevation (ft) 7.02				Vertical Datum 7.02 MLLW			Drilling Equipment	Research Vo	essel Titan
Easting (X) Northing (Y)		123.09 225.9		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	<u>Water</u> Elevation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f		8:15:00 AN		11.25			

ſ			FIE	LD	DATA						1
	Elevation (feet)	, Depth (feet)	Interval Recovered %	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Wood Content (%)	REMARKS
Ī	•	0 —	86	T			SP	Brown fine to medium sand with gravel	NS	0%	No odor
					MAF-SC- 27_1-2						
ŀ	-	_		+	_			-	NS	0%	No odor, organic matter (leaves)
							SP	Black fine to medium sand with occasional gravel	INO	0 76	. to easi, e.gaine mater (eares)
	<u>\$</u>			L			SP	Gray-brown fine sand with occasional gravel			
				11					NS	0%	No odor
					MAF-SC- 27_2-3.5						
ŀ	-	_						-			
				1							
								Sediment core completed at 3.5 feet below mudline			



# Log of Boring MAF-SC-27

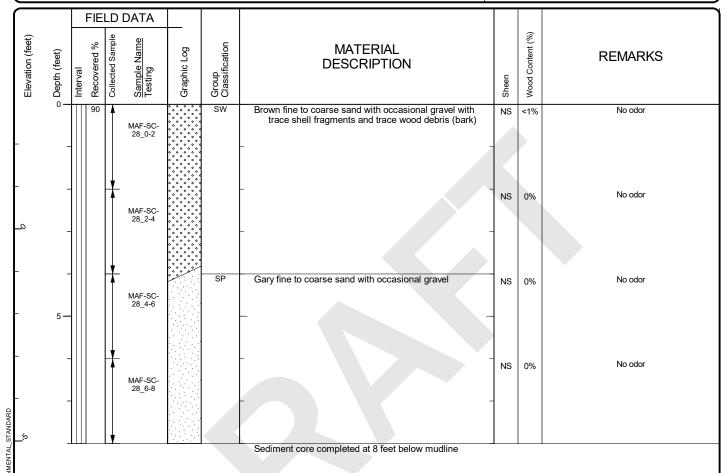
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

Project Number: 0676-020-04

Figure L-85 Sheet 1 of 1

<u>Start</u> Drilled 10/29/2015	<u>End</u> 10/29/2015	Total Depth (ft)	8	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Method Vibracore	
Mudline Elevation (ft)	2	2.94		Vertical Datum 2.94 MLLW			Drilling Equipment	Research Vessel Titan	
Easting (X) Northing (Y)		7839.1 990.73		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Water	
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (ft	), Lengt	h 10 (ft)			9:42:00 AN	M 5.81 8.7	 '5





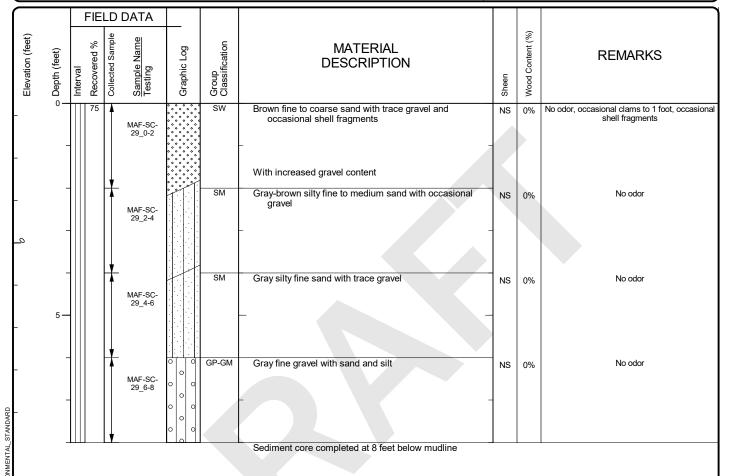
Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington Project Number: 0676-020-04





<u>Start</u> Drilled 10/27/2015	<u>End</u> 10/27/2015	Total Depth (ft)	8	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Method Vibracore	
Mudline Elevation (ft)	3	3.29		Vertical Datum 3.29 MLLW			Drilling Equipment	Research Vessel Tita	n
Easting (X) Northing (Y)		'828.05 218.99		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to W	ater evation (ft)
Notes: Core Tube D	ata: ID 0.31 (f	t), OD 0.33 (ft	), Lengt	h 10 (ft)			8:48:00 AN		7



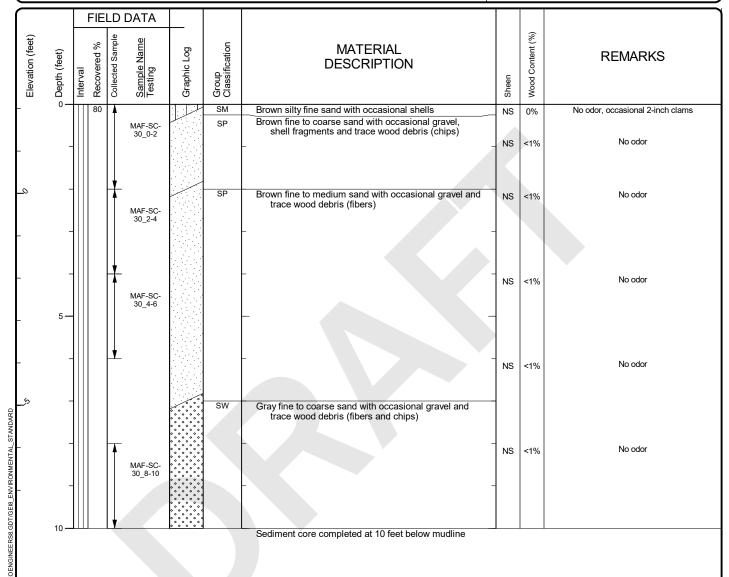


### Log of Boring MAF-SC-29

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 10/27/2015	<u>End</u> 10/27/2015	Total Depth (ft)	10	Logged By Checked By	RST IHW	Driller Gravity Environme	ental, LLC	Drilling Method Vibracore	
Mudline Elevation (ft)		2.1		Vertical Datum		2.1 MLLW	Drilling Equipment	Research Vessel Titan	
Easting (X) Northing (Y)		832.22 456.68		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to Wate	er ation (ft)
Notes: Core Tube Da	ata: ID 0.31 (f	t), OD 0.33 (f	t), Lengt	h 10 (ft)			9:20:00 AN	3.9 G	3

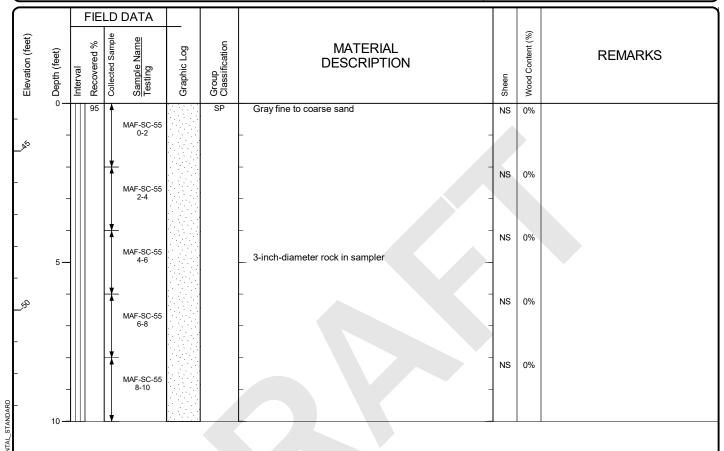




Project: Weyerhaeuser Mill A Former



<u>Start</u> Drilled 11/12/2018	<u>End</u> 11/12/2018	Total Depth (ft)	10	Logged By Checked By	RST RST	Driller Gravity Marine Se	rvice	Drilling Method Vibracore	
Mudline Elevation (ft)	-4	43.5		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		941.65 157.03		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to ed Mudline (ft)	Water Elevation (ft)
Notes:							9:00:00 AN	И 54.5	11



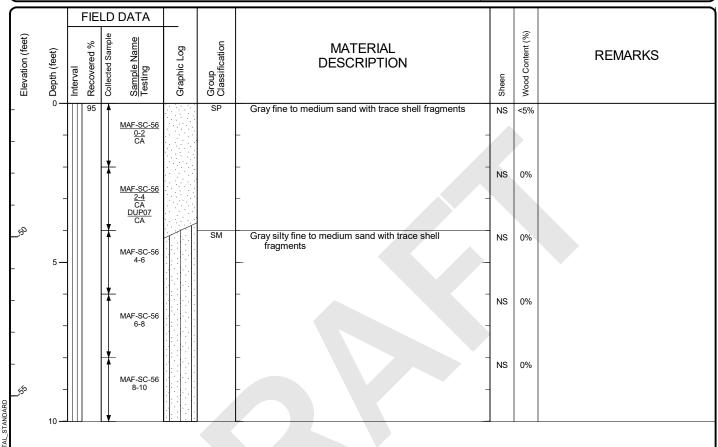


#### Log of Boring MAF-SC-55

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/12/2018	<u>End</u> 11/12/2018	Total Depth (ft)	10	Logged By Checked By	RST RST	Driller Gravity Marine Se	rvice	Drilling Method Vibracore	
Mudline Elevation (ft)	-4	15.8		Vertical Datum		MLLW	Drilling Equipment	Research Vesse	l Tieton
Easting (X) Northing (Y)		3332.6 413.13		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							10:30:00 A	AM 56	10.2



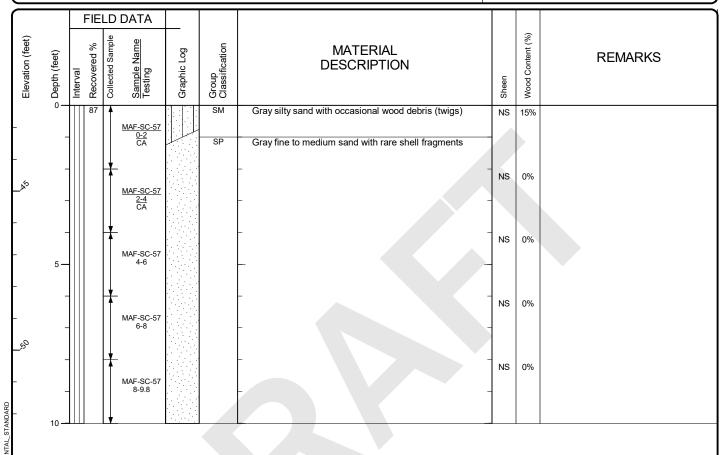


#### Log of Boring MAF-SC-56

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/13/2018	<u>End</u> 11/13/2018	Total Depth (ft)	10	Logged By Checked By	RST RST	Driller Gravity Marine Se	rvice	Drilling Vibracore Method	
Mudline Elevation (ft)	-4	42.3		Vertical Datum		MLLW	Drilling Equipment	Research Vessel	Tieton
Easting (X) Northing (Y)		477.44 421.42		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							11:25:00 A	AM 52.5	10.2



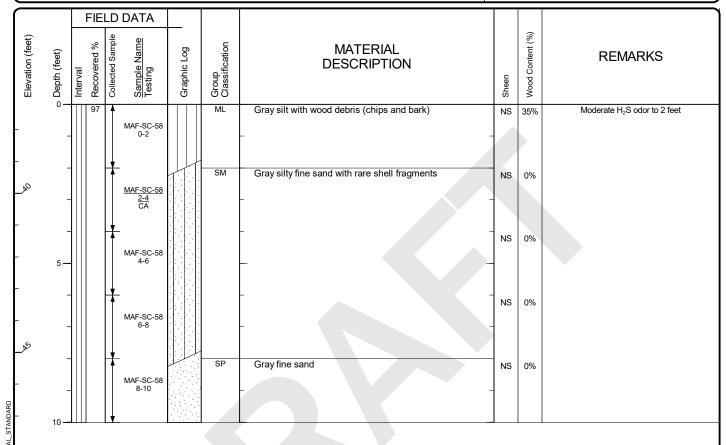


### Log of Boring MAF-SC-57

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/13/2018	<u>End</u> 11/13/2018	Total Depth (ft)	10	Logged By Checked By	RST RST	Driller Gravity Marine Se	rvice	Drilling Method Vibracore	
Mudline Elevation (ft)	-3	37.2		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ieton
Easting (X) Northing (Y)		415.48 559.44		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:	Notes:						9:50:00 AN	<i>M</i> 48	10.8

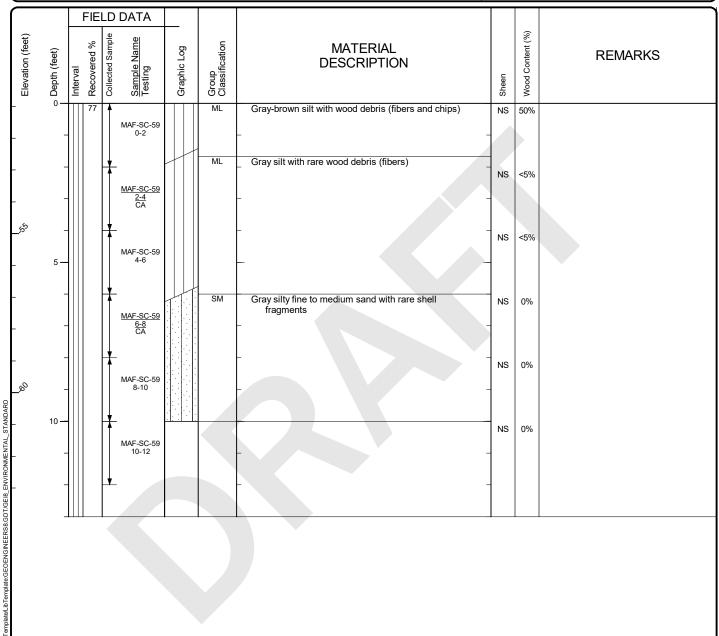




Project: Weyerhaeuser Mill A Former



<u>Start</u> Drilled 11/12/2018	<u>End</u> 11/12/2018	Total Depth (ft)	13	Logged By Checked By	RST RST	Driller Gravity Marine Se	rvice	Drilling Method Vibracore	
Mudline Elevation (ft)		50.9		Vertical Datum		MLLW	Drilling Equipment	Research Vessel T	ïeton
Easting (X) Northing (Y)		676.04 314.35		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:							12:40:00 F	PM 58.7	7.8



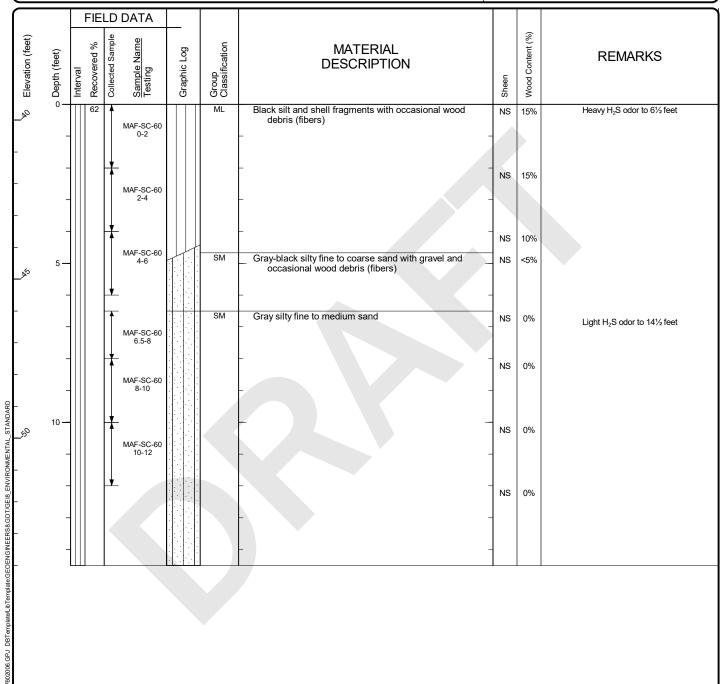


### Log of Boring MAF-SC-59

Project: Weyerhaeuser Mill A Former

Project Location: Everett, Washington

<u>Start</u> Drilled 11/12/2018	<u>End</u> 11/12/2018	Total Depth (ft)	14.5	Logged By Checked By	 Driller Gravity Marine Se	rvice	Drilling Method Vibracore	
Mudline Elevation (ft)	-3	39.5		Vertical Datum	MLLW	Drilling Equipment	Research Vessel 1	ieton
Easting (X) Northing (Y)		657.11 634.04		Horizontal Datum	State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:	Notes:					11:40:00 A	AM 48.3	8.8

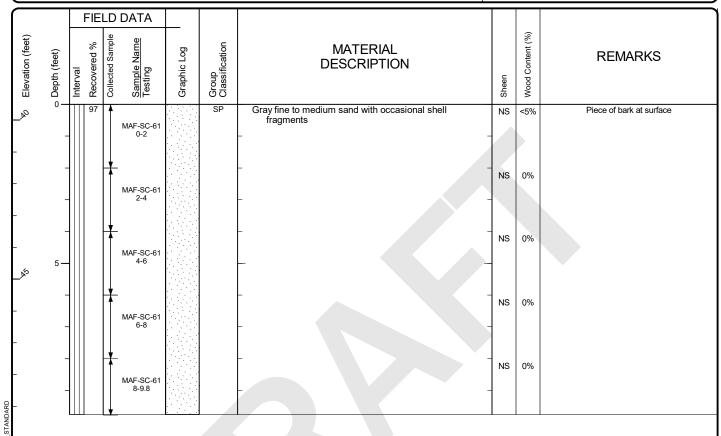




Project: Weyerhaeuser Mill A Former



<u>Start</u> Drilled 11/12/2018	<u>End</u> 11/12/2018	Total Depth (ft)	9.75	Logged By Checked By	RST RST	Driller Gravity Marine Se	rvice	Drilling Method Vibracore	
Mudline Elevation (ft)	-3	39.5		Vertical Datum		MLLW	Drilling Equipment	Research Vessel Ti	eton
Easting (X) Northing (Y)		159.96 298.44		Horizontal Datum		State Plane,North NAD83 (feet)	Surface Wa	Depth to	Water Elevation (ft)
Notes:	Notes:						9:40:00 AN	M 54.8	15.3





Project: Weyerhaeuser Mill A Former



Drilled	<u>Start</u> 4/27/2021	<u>End</u> 4/27/2021	Total Depth (ft)	3	Logged By Checked By	NS RST	Driller Cascade Drilling, LLC		Drilling Method Hand tools
Surface E Vertical D	Elevation (ft) Datum		L.64 LLW		Hammer Data		NA	Drilling Equipment	Hand-auger
Easting () Northing	5.05a.25a				System Datum	W	A State Plane North NAD83 (feet)	Groundwate	er not observed at time of exploration
Notes:									

			FIEL	D D	ATA							
Elevation (feet)	, Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	1	Sneen	Headspace Vapor (ppm)	REMARKS
_% -	-	12			EDP-62-0.0 CA		SP SP	Brown soft to medium sand with shell fragments (moist)  Brown-gray fine to medium sand with organic matter	-	S	<1	
-	-	12			EDP-62-2.0 CA		SW	(moist) Gray fine to coarse sand with gravel (moist)	_ \	NS	<1	

# Log of Boring EDP-62



Project: Mill A Site

Project Location: Everett, Washington Project Number: 0676-020-07

Figure L-96 Sheet 1 of 1

Drilled	<u>Start</u> 4/27/2021	<u>End</u> 4/27/2021	Total Depth (ft)	3	Logged By Checked By	NS RST	Driller Cascade Drilling, LLC		Drilling Method Hand tools
	Elevation (ft) Datum		L.69 LLW		Hammer Data		NA	Drilling Equipment	Hand-auger
Easting ( Northing	ertical Datum MLLW asting (X) 1298221.2 orthing (Y) 357259.85				System Datum	W	A State Plane North NAD83 (feet)	Groundwate	er not observed at time of exploration
Notes:									

			FIEL	D D	ATA						
Elevation (feet)	Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	<u>Sample Name</u> Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
20	-	12			EDP-63-0.0 CA		SP	Brown fine to medium sand with shell fragments (moist)	NS	<1	
-	-	12			EDP-63-2.0 CA		SW	Gray fine to coarse sand with gravel (moist)	NS	<1	

# Log of Boring EDP-63



Project: Mill A Site

Project Location: Everett, Washington Project Number: 0676-020-07

Figure L-97 Sheet 1 of 1

Drilled	<u>Start</u> 4/27/2021	<u>End</u> 4/27/2021	Total Depth (ft)	3	Logged By Checked By	NS RST	Driller Cascade Drilling, LLC		Drilling Method Hand tools
Surface I Vertical I	Elevation (ft) Datum	11.89 MLLW			Hammer Data		NA	Drilling Equipment	Hand-auger
Easting ( Northing		1298247.04 357317.51			System Datum	W	A State Plane North NAD83 (feet)	Groundwate	er not observed at time of exploration
Notes:									

			FIEL	LD DATA							
Elevation (feet)	b Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
-	-	12		$\perp$	EDP-64-0.0 CA		SP	Brown fine to medium sand with shell fragments (moist) –	NS	<1	
_%	_	12			EDP-64-2.0 CA		SW	Dark gray fine to coarse sand with gravel (moist)	NS	<1	

#### Log of Boring EDP-64



Project: Mill A Site

Drilled	<u>Start</u> 4/27/2021	<u>End</u> 4/27/2021	Total Depth (ft)	3	Logged By Checked By	NS RST	Driller Cascade Drilling, LLC		Drilling Method Hand tools
Surface I Vertical I	Elevation (ft) Datum	11.28 MLLW			Hammer Data		NA	Drilling Equipment	Hand-auger
Easting ( Northing		1298245.19 357379.02			System Datum	W	A State Plane North NAD83 (feet)	Groundwate	er not observed at time of exploration
Notes:									

		FIELD DATA									
Elevation (feet)	, Depth (feet)	Interval Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Graphic Log	Group Classification	MATERIAL DESCRIPTION	Sheen	Headspace Vapor (ppm)	REMARKS
-	0-	12			EDP-65-0.0 CA		SP	Brown silty fine to coarse sand with shell fragments	NS	<1	
_ <sub>20</sub>		12						_	NS	<1	
<b> </b>		12		EDP-65-2.0 CA SW Dark gray fine to coarse sand with gravel		Dark gray fine to coarse sand with gravel	145				

# Log of Boring EDP-65



Project: Mill A Site

Project Location: Everett, Washington Project Number: 0676-020-07

Figure L-99 Sheet 1 of 1