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Fax 503.639.7619

July 19, 2005

Ms. Jennifer Bariska  
Weyerhaeuser Company  
33663 Weyerhaeuser Way South  
Federal Way, Washington 98003

**Re: Supplemental ESA for Former UST/AST Area  
Weyerhaeuser Cascade Lumber Mill  
Snoqualmie, Washington**

Dear Jennifer:

This letter presents the results of the supplemental environmental site assessment (ESA) completed by Delta Environmental Consultants (Delta) at the Weyerhaeuser Cascade Mill in Snoqualmie, Washington. The scope of the ESA was to collect supplemental soil and groundwater data near the former location of the underground storage tank (UST)/aboveground storage tanks (ASTs). Groundwater in monitoring well A1-9 has consistently contained benzene concentrations above the Washington Department of Ecology (Ecology) preliminary screening level of 5 micrograms per liter ( $\mu\text{g/l}$ ). The goal of this assessment was to identify the source of groundwater impacts and to collect sufficient soil and groundwater data to estimate remedial excavation soil removal volumes in and around UST monitoring well A1-9 (see Figure 1).

The data summarized in this report should be used to supplement previous site investigation work conducted in and around the former UST/AST area. It should be used, along with previous site investigation information to prepare and submit a No Further Action (NFA) request to Ecology.

## SCOPE OF WORK

Work was completed on March 31 and April 1, 2005 consistent with the project scope of work described in the February 24, 2005 Proposal for O&M Projects (Various Sites) and included the following:

- Collecting depth-discrete soil samples (18 borings) and groundwater samples (two borings) from soil borings using direct push sampling methods (see Figure 1).

A member of:



- Analyzing select soil and groundwater samples for total petroleum hydrocarbons as gasoline (TPH-G) by Method NWTPH-Gx and benzene, toluene, ethylbenzene, total xylenes (BTEX) by EPA Method 8021. Soil samples were selected for analytical testing based on field screening results and location of the boring. The selection goals were to first identify and confirm the presence of impacted soil and second to evaluate the extent of impacted soil. As a result, it was not necessary to analytically test each soil sample from each soil boring. Sample nomenclature follows previous work completed at the site (e.g. SB2-2-4 represents area 2, boring 2, at four feet below ground surface (bgs)).
- Preparing this letter report summarizing the data and estimating the remedial excavation volumes.

## SOIL ANALYTICAL RESULTS

Gasoline impacted soil was identified primarily south and west of the former UST excavation. Detected TPH-G concentrations ranged from 570 milligrams per kilograms (mg/kg) in SB2-5-4 collected at four feet bgs to 28.0 mg/kg in SB2-2-4 collected at a depth of four feet bgs. Detected benzene concentrations ranged from 5.9 mg/kg in SB2-5-4 collected at four feet bgs to 0.2 mg/kg in SB2-2-4 and 15 in SB2-15-4 collected at a depth of four feet bgs. Analytical results are summarized in Table 1 and shown on Figure 2. Copies of the laboratory reports are present in Attachment A.

## GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from SB2-11, which is located hydraulically upgradient of monitoring well A1-9 and SB2-6, which is located hydraulically downgradient of monitoring well A1-9. Groundwater flow near the former UST/AST area has historically been toward the southwest (see Figure 1). Groundwater samples were collected from temporary wells screens using a single-use dedicated bailer. TPH-G and benzene were detected in the groundwater sample collected from SB2-11 at 1,500 µg/l and 230 µg/l respectively. TPH-G and BTEX were not detected in the groundwater sample collected from SB2-6. Groundwater results are summarized in Table 2 and shown on Figure 2.

## ESTIMATED REMEDIAL EXCAVATION EXTENT AND VOLUMES

Delta estimates that approximately 1,900 cubic yards of soil will need to be excavated to remove the residual TPH source which is impacting the groundwater near monitoring well A1-9. The estimate was calculated based on a combination of the laboratory data, the field screening observations, and the Ecology benzene soil leaching standard of 0.03 mg/kg. Boring logs summarizing the field observations are included in Attachment B. The footprint of the proposed excavation is presented on Figure 2. The estimated depth of the excavation is anticipated to be eight feet bgs. The proposed excavation includes the removal of impacted monitoring well A1-9.

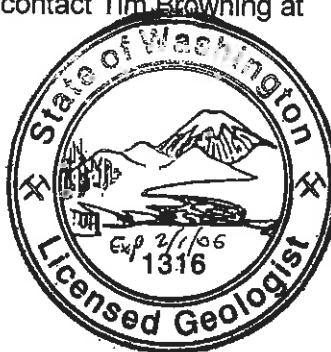
After remedial activities are completed, Delta recommends installing a new monitoring well south or southwest (downgradient) of the excavation for closure monitoring of the groundwater. Ecology typically requires four (4) consecutive quarters of groundwater analytical results that show benzene concentrations do not exceed MTCA cleanup levels before issuing an NFA determination.

Delta appreciates the opportunity to provide environmental services to Weyerhaeuser. If you have any questions or comments, please contact Tim Browning at (503) 639-8098.

Sincerely,  
**Delta Environmental Consultants, Inc.**



Timothy Browning, LG  
Project Manager



**Timothy D. Browning**

Attachments: Table 1 – Former UST/AST Soil Analytical Results  
Table 2 – Former UST/AST Groundwater Analytical Results  
Figure 1 – Former UST Area Site Map  
Figure 2 – Former UST Area Soil and Groundwater  
TPH Concentration Map  
Attachment A – Laboratory Analytical Reports  
Attachment B – Boring Logs

cc: John North, Delta

**TABLE 1**  
**FORMER UST/AST SOIL ANALYTICAL RESULTS**  
Weyerhaeuser Cascade Mill  
Snoqualmie, Washington

Sample I.D.	Sample Date	Sample Depth (feet)	TPH-Gasoline (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
SB2-2-4	31-Mar-05	4	28.0	0.2	<0.05	0.1	0.3
SB2-2-8	31-Mar-05	8	80.0	0.3	<0.1	0.2	0.7
SB2-4-4	31-Mar-05	4	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-4-8	31-Mar-05	8	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-5-4	31-Mar-05	4	570.0	5.9	9.6	8.3	46.0
SB2-5-8	31-Mar-05	8	530.0	5.5	<2.5	8.7	49.0
SB2-6-8	31-Mar-05	8	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-8-8	31-Mar-05	8	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-9-6	31-Mar-05	6	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-10-4	1-Apr-05	4	290.0	1.4	4.1	3.4	16.0
SB2-10-8	1-Apr-05	8	90.0	1.5	1.8	1.4	6.8
SB2-10-12	1-Apr-05	12	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-13-4	1-Apr-05	4	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-13-8	1-Apr-05	8	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-14-4	1-Apr-05	4	<3.0	0.05	<0.05	<0.05	<0.2
SB2-14-8	1-Apr-05	8	<3.0	<0.03	<0.05	<0.05	<0.2
SB2-15-4	1-Apr-05	4	240.0	0.2	<0.03	0.4	<0.8
SB2-17-4	1-Apr-05	4	<3.0	<0.03	<0.05	<0.05	<0.2

Notes:

mg/kg = milligram per kilogram

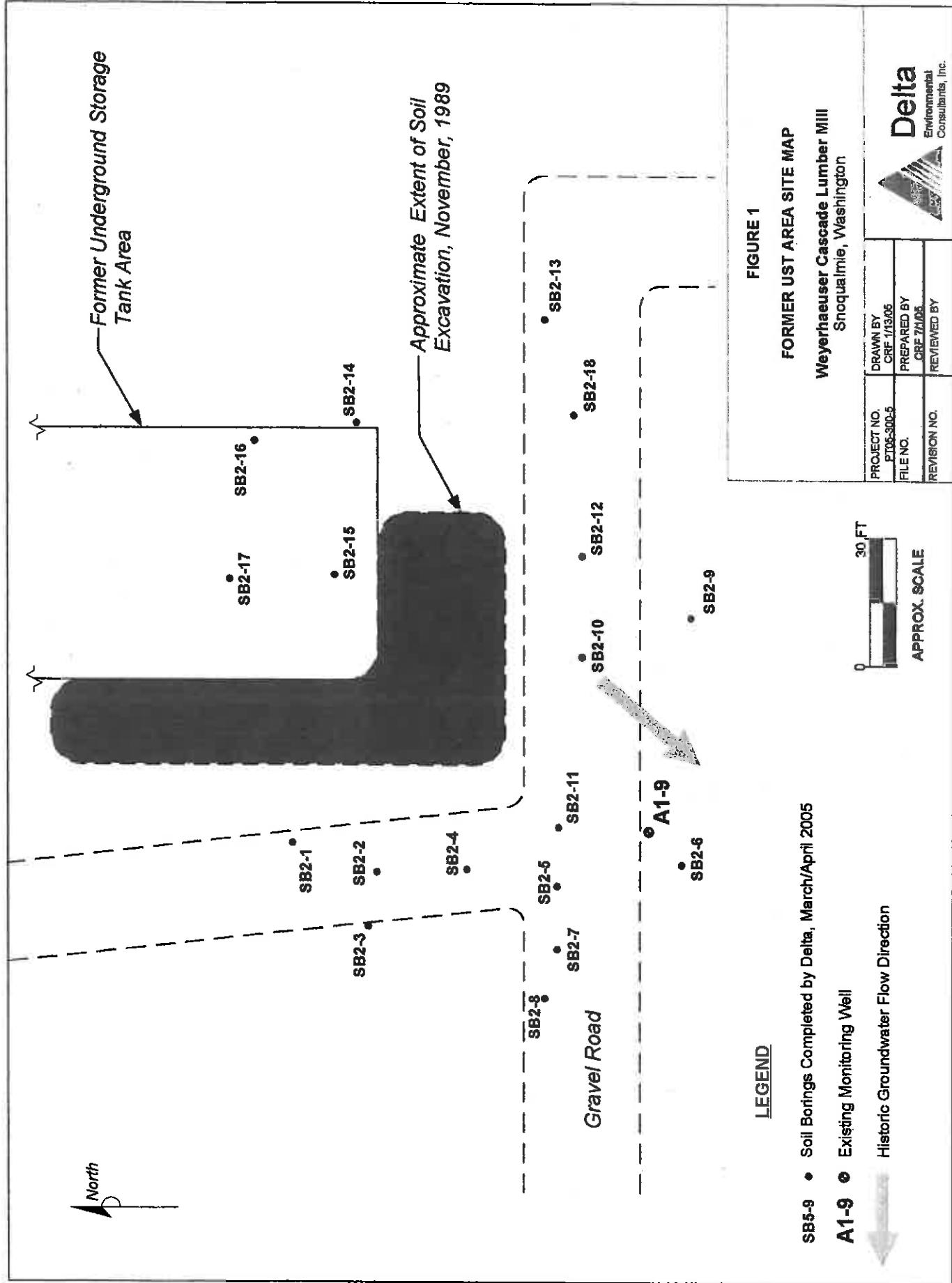
MTCA benzene level of 0.03 mg/kg based on protection of groundwater.

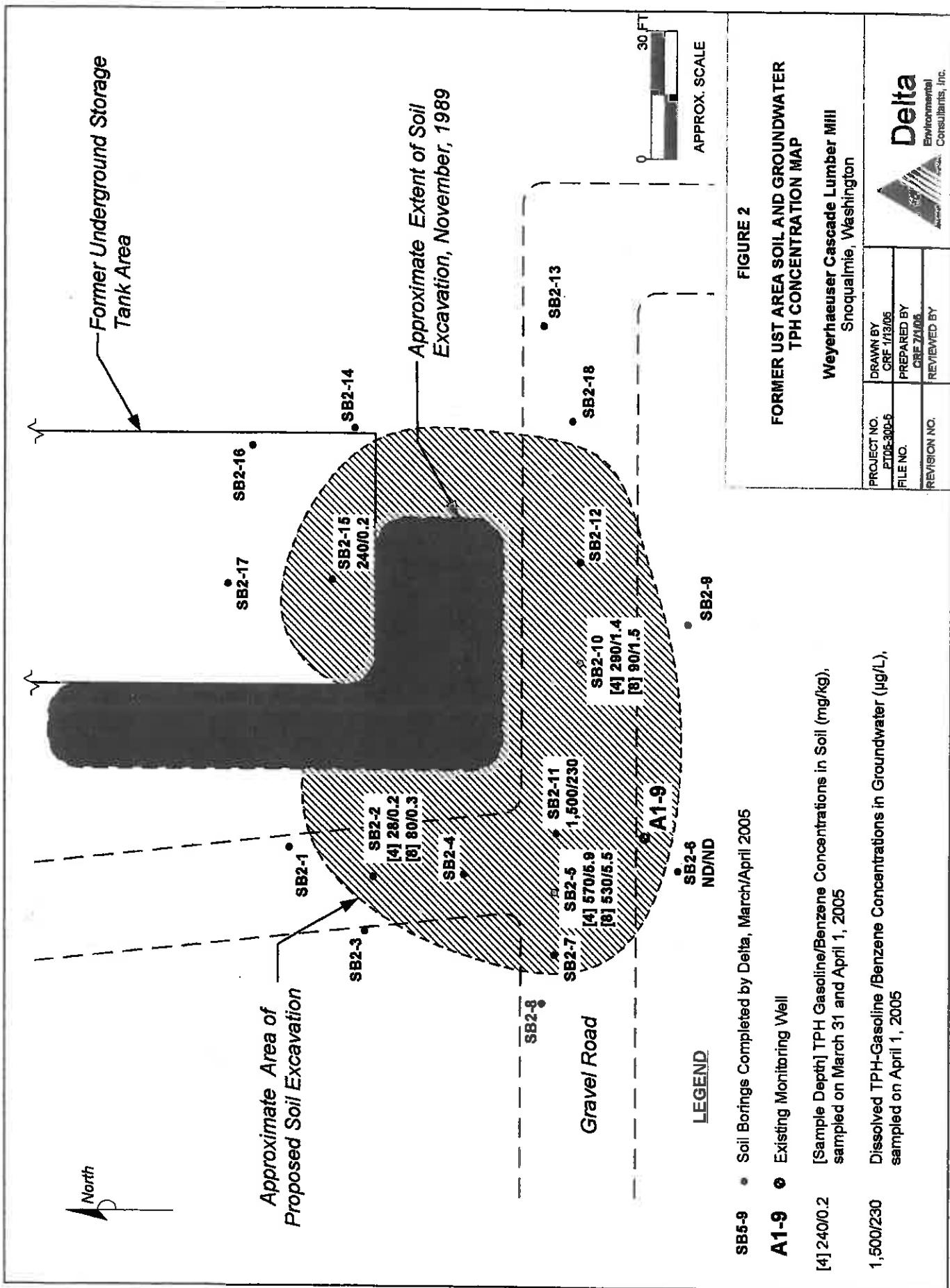
TPH as Gasoline - Analysis by Method NWTPH-Gx

BTEX Compounds - Analysis by EPA Method 8021

**TABLE 2**  
**FORMER UST/AST GROUNDWATER ANALYTICAL RESULTS**  
 Weyerhaeuser Cascade Mill  
 Snoqualmie, Washington

Sample I.D.	Sample Date	TPH-Gasoline ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Xylenes ( $\mu\text{g/l}$ )
SB2-6	31-Mar-05	<50	<1	<1	<1	<3
SB2-11	1-Apr-05	1,500	230	300	43	170
MTCA Method B Standard		na	0.795	2.92	800	1,600
Notes: $\mu\text{g/l}$ = micrograms per liter TPH as Gasoline - Analysis by Method NWTPH-Gx BTEX Compounds - Analysis by EPA Method 8021						







### CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC.  
17720 NE 65TH #201  
REDMOND, WA 98052

DATE: 4/7/05  
CCIL JOB #: 503194  
CCIL SAMPLE #: 1  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-6 3/31/05 13:00

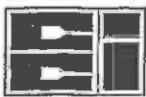
### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	UG/L	4/1/05	LAP
BENZENE	EPA-8021	ND(<1)	UG/L	4/1/05	LAP
TOLUENE	EPA-8021	ND(<1)	UG/L	4/1/05	LAP
ETHYLBENZENE	EPA-8021	ND(<1)	UG/L	4/1/05	LAP
XYLEMES	EPA-8021	ND(<3)	UG/L	4/1/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 50 UG/L

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052 CCIL SAMPLE #: 3  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-2-4 3/31/05 10:40

**DATA RESULTS**

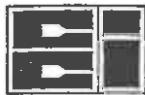
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTIPH-GX	28	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	0.2	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	0.1	MG/KG	4/5/05	LAP
XYLEMES	EPA-8021	0.3	MG/KG	4/5/05	LAP

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE  
VOLATILE RANGE RESULT MAY BE BIASED HIGH DUE TO SEMIVOLATILE RANGE PRODUCT

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052 CCIL SAMPLE #: 7  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-4-4 3/31/05 11:50

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/1/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/1/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/1/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/1/05	LAP
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/1/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052 CCIL SAMPLE #: 8  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-4-8 3/31/05 12:00

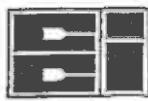
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/4/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/4/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/4/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/4/05	LAP
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/4/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC.  
17720 NE 65TH #201  
REDMOND, WA 98052

DATE: 4/7/05  
CCIL JOB #: 503194  
CCIL SAMPLE #: 9  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-5-4 3/31/05 12:20

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	570	MG/KG	4/4/05	LAP
BENZENE	EPA-8021	5.9	MG/KG	4/4/05	LAP
TOLUENE	EPA-8021	9.6	MG/KG	4/4/05	LAP
ETHYLBENZENE	EPA-8021	8.3	MG/KG	4/4/05	LAP
XYLEMES	EPA-8021	46	MG/KG	4/4/05	LAP

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 60 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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### CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052 CCIL SAMPLE #: 10  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-5-8 3/31/05 12:30

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	530	MG/KG	4/4/05	LAP
BENZENE	EPA-8021	5.5	MG/KG	4/4/05	LAP
TOLUENE	EPA-8021	ND(<2.5)	MG/KG	4/4/05	LAP
ETHYLBENZENE	EPA-8021	8.7	MG/KG	4/4/05	LAP
XYLENES	EPA-8021	49	MG/KG	4/4/05	LAP

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 150 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052 CCIL SAMPLE #: 11  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-6-8 3/31/05 12:50

### DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/1/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/1/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/1/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/1/05	LAP
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/1/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052 CCIL SAMPLE #: 13  
DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-9-6 3/31/05 14:20

### DATA RESULTS

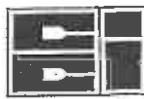
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTOPH-GX	ND	MG/KG	4/1/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/1/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/1/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/1/05	LAP
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/1/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

A handwritten signature consisting of a stylized, cursive initial 'C' followed by a more fluid, cursive name.



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/7/05  
17720 NE 65TH #201 CCIL JOB #: 503194  
REDMOND, WA 98052

DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5

**QUALITY CONTROL RESULTS**

**SURROGATE RECOVERY**

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
503194-01	NWTPH-GX	TFT	109
503194-01	EPA-8021	TPT	107
503194-03	NWTPH-GX	TFT	61
503194-03	EPA-8021	TFT	61
503194-04	NWTPH-GX	TFT	73
503194-04	EPA-8021	TFT	74
503194-07	NWTPH-GX	TFT	112
503194-07	EPA-8021	TFT	118
503194-08	NWTPH-GX	TFT	105
503194-08	EPA-8021	TFT	110
503194-09	NWTPH-GX	TFT	*
503194-09	EPA-8021	TFT	*
503194-10	NWTPH-GX	TFT	*
503194-10	EPA-8021	TFT	*
503194-11	NWTPH-GX	TFT	99
503194-11	EPA-8021	TFT	103
503194-12	NWTPH-GX	TFT	50
503194-12	EPA-8021	TFT	55
503194-13	NWTPH-GX	TFT	41
503194-13	EPA-8021	TFT	46



CCI  
ANALYTICAL  
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CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC.  
17720 NE 65TH #201  
REDMOND, WA 98052

DATE: 4/7/05  
CCIL JOB #: 503194

DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5

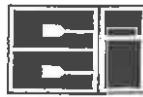
### QUALITY CONTROL RESULTS

#### BLANK AND DUPLICATE RESULTS

METHOD	BLK RESULT	ASSOC SIMPLS
NWTPH-GX (GAS)	ND(<50)	503194-01
EPA-8021(BENZENE)	ND(<1)	503194-01
EPA-8021(TOLUENE)	ND(<1)	503194-01
EPA-8021(ETHYLBENZ)	ND(<1)	503194-01
EPA-8021(XYLENE)	ND(<3)	503194-01
NWTPH-GX (GAS)	ND(<3)	503194-03, 04, 07, 11, 12, 13
EPA-8021(BENZENE)	ND(<0.03)	503194-03, 04, 07, 11, 12, 13
EPA-8021(TOLUENE)	ND(<0.05)	503194-03, 04, 07, 11, 12, 13
EPA-8021(ETHYLBENZ)	ND(<0.05)	503194-03, 04, 07, 11, 12, 13
EPA-8021(XYLENE)	ND(<0.2)	503194-03, 04, 07, 11, 12, 13
NWTPH-GX (GAS)	ND(<3)	503194-08, 09, 10
EPA-8021(BENZENE)	ND(<0.03)	503194-08, 09, 10
EPA-8021(TOLUENE)	ND(<0.05)	503194-08, 09, 10
EPA-8021(ETHYLBENZ)	ND(<0.05)	503194-08, 09, 10
EPA-8021(XYLENE)	ND(<0.2)	503194-08, 09, 10

#### SPIKE/ SPIKE DUPLICATE RESULTS

METHOD	SPIKE ID	ASSOCIATED SAMPLES	% SPIKE RECOVERY	% SPIKE DUP RECOVERY	REL % DIFF
NWTPH-GX	GASOLINE	503194-Q1	112	117	4
EPA-8021	BENZENE	503194-01	94	94	0
EPA-8021	TOLUENE	503194-01	95	94	1
EPA-8021	ETHYLBENZENE	503194-01	95	93	2
EPA-8021	XYLENE	503194-01	96	95	1
NWTPH-GX	GASOLINE	503194-03, 04, 07, 11, 12, 13	73	73	0
EPA-8021	BENZENE	503194-03, 04, 07, 11, 12, 13	99	101	2
EPA-8021	TOLUENE	503194-03, 04, 07, 11, 12, 13	98	100	2
EPA-8021	ETHYLBENZENE	503194-03, 04, 07, 11, 12, 13	96	98	2
EPA-8021	XYLENE	503194-03, 04, 07, 11, 12, 13	97	99	2
NWTPH-GX	GASOLINE	503194-08, 09, 10	84	81	4
EPA-8021	BENZENE	503194-08, 09, 10	103	108	5



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**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC.  
17720 NE 65TH #201  
REDMOND, WA 98052

DATE: 4/7/05  
CCIL JOB #: 503194

DATE RECEIVED: 3/31/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5

**QUALITY CONTROL RESULTS**

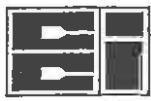
EPA-8021	TOLUENE	503194-08, 09, 10	104	108	4
EPA-8021	ETHYLBENZENE	503194-08, 09, 10	102	106	4
EPA-8021	XYLENE	503194-08, 09, 10	102	107	5

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:







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ANALYTICAL  
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC., DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 1  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-10-4 4/10/05 7:20

DATA RESULTS

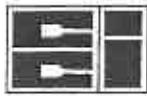
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	290	MG/KG	4/6/05	LAP
BENZENE	EPA-8021	1.4	MG/KG	4/6/05	LAP
TOLUENE	EPA-8021	4.1	MG/KG	4/6/05	LAP
ETHYLBENZENE	EPA-8021	3.4	MG/KG	4/6/05	LAP
XYLENES	EPA-8021	16	MG/KG	4/6/05	LAP

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 30 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



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ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 2  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-10-8 4/10/05 7:30

**DATA RESULTS**

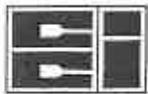
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	90	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	1.5	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	1.8	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	1.4	MG/KG	4/5/05	LAP
XYLEMES	EPA-8021	6.8	MG/KG	4/5/05	LAP

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 3  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-10-12 4/1/05 7:40

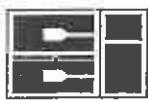
**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/5/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



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ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 7  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-11 4/1/05 8:30

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	1500	UG/L	4/8/05	LAP
BENZENE	EPA-8021	230	UG/L	4/8/05	LAP
TOLUENE	EPA-8021	300	UG/L	4/8/05	LAP
ETHYLBENZENE	EPA-8021	43	UG/L	4/8/05	LAP
XYLENES	EPA-8021	170	UG/L	4/8/05	LAP

NOTE: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY WEATHERED GASOLINE

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 250 UG/L

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



### CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 10  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-13-4 4/1/05 9:00

### DATA RESULTS

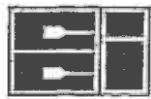
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/5/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

A handwritten signature of Tim Browning.



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**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 11  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-13-8 4/10/05 9:10

**DATA RESULTS**

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/5/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



### CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 12  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-14-4 4/10/05 9:20

### DATA RESULTS

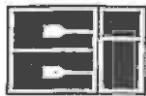
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	0.05	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
XYLÉNES	EPA-8021	ND(<0.2)	MG/KG	4/5/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:

A handwritten signature in black ink, appearing to read 'Tim Browning'.



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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 13  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-14-8 4/1/05 9:30

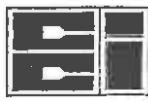
DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
XYLEMES	EPA-8021	ND(<0.2)	MG/KG	4/5/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



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LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052 CCIL SAMPLE #: 14  
DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-15-4 4/10/05 10:10

DATA RESULTS

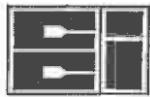
ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	240	MG/KG	4/6/05	LAP
BENZENE	EPA-8021	0.2	MG/KG	4/6/05	LAP
TOLUENE	EPA-8021	ND(<0.3)	MG/KG	4/6/05	LAP
ETHYLBENZENE	EPA-8021	0.4	MG/KG	4/6/05	LAP
XYLEMES	EPA-8021	ND(<0.8)	MG/KG	4/6/05	LAP

NOTES: CHROMATOGRAM INDICATES SAMPLE CONTAINS PRODUCT WHICH IS LIKELY HIGHLY WEATHERED GASOLINE VOLATILE RANGE RESULT BIASED HIGH DUE TO SEMIVOLATILE RANGE PRODUCT

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 12 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



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ANALYTICAL  
LABORATORIES, INC.

CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC.  
17720 NE 65TH #201  
REDMOND, WA 98052

DATE: 4/11/05  
CCIL JOB #: 504011  
CCIL SAMPLE #: 16

DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5  
CLIENT SAMPLE ID: SB2-17-4 4/1/05 10:50

DATA RESULTS

ANALYTE	METHOD	RESULTS*	UNITS**	ANALYSIS DATE	ANALYSIS BY
TPH-VOLATILE RANGE	NWTPH-GX	ND	MG/KG	4/5/05	LAP
BENZENE	EPA-8021	ND(<0.03)	MG/KG	4/5/05	LAP
TOLUENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
ETHYLBENZENE	EPA-8021	ND(<0.05)	MG/KG	4/5/05	LAP
XYLENES	EPA-8021	ND(<0.2)	MG/KG	4/5/05	LAP

\* "ND" INDICATES ANALYTE ANALYZED FOR BUT NOT DETECTED AT LEVEL ABOVE REPORTING LIMIT. REPORTING LIMIT IS GIVEN IN PARENTHESES OR AS FOLLOWS:  
GASOLINE(VOLATILE RANGE) REPORTING LIMIT IS 3 MG/KG

\*\* UNITS FOR ALL NON LIQUID SAMPLES ARE REPORTED ON A DRY WEIGHT BASIS

APPROVED BY:



CCI  
ANALYTICAL  
LABORATORIES, INC.

**CERTIFICATE OF ANALYSIS**

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC. DATE: 4/11/05  
17720 NE 65TH #201 CCIL JOB #: 504011  
REDMOND, WA 98052

DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

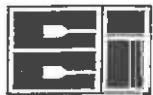
CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5

**QUALITY CONTROL RESULTS**

**SURROGATE RECOVERY**

CCIL SAMPLE ID	ANALYTE	SUR ID	% RECV
504011-01	NWTPH-GX	TFT	*
504011-01	EPA-8021	TFT	*
504011-02	NWTPH-GX	TFT	74
504011-02	EPA-8021	TFT	117
504011-03	NWTPH-GX	TFT	66
504011-03	EPA-8021	TFT	65
504011-07	NWTPH-GX	TFT	111
504011-07	EPA-8021	TFT	100
504011-10	NWTPH-GX	TFT	82
504011-10	EPA-8021	TFT	79
504011-11	NWTPH-GX	TFT	81
504011-11	EPA-8021	TFT	83
504011-12	NWTPH-GX	TFT	59
504011-12	EPA-8021	TFT	62
504011-13	NWTPH-GX	TFT	79
504011-13	EPA-8021	TFT	79
504011-14	NWTPH-GX	TFT	73
504011-14	EPA-8021	TFT	91
504011-16	NWTPH-GX	TFT	75
504011-16	EPA-8021	TFT	73



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CERTIFICATE OF ANALYSIS

CLIENT: DELTA ENVIRONMENTAL CONSULTANTS, INC.  
17720 NE 65TH #201  
REDMOND, WA 98052

DATE: 4/11/05  
CCIL JOB #: 504011

DATE RECEIVED: 4/4/05  
WDOE ACCREDITATION #: C142

CLIENT CONTACT: TIM BROWNING

CLIENT PROJECT ID: PT-05-300-5

QUALITY CONTROL RESULTS

BLANK AND DUPLICATE RESULTS

METHOD	BLK RESULT	ASSOC SMPLS
NWTPH-GX (GAS)	ND(<3)	504011-01 TO 03, 10 TO 14, 16
EPA-8021(BENZENE)	ND(<0.03)	504011-01 TO 03, 10 TO 14, 16
EPA-8021(TOLUENE)	ND(<0.05)	504011-01 TO 03, 10 TO 14, 16
EPA-8021(ETHYLBENZ)	ND(<0.05)	504011-01 TO 03, 10 TO 14, 16
EPA-8021(XYLENE)	ND(<0.2)	504011-01 TO 03, 10 TO 14, 16
NWTPH-GX (GAS)	ND(<50)	504011-07
EPA-8021(BENZENE)	ND(<1)	504011-07
EPA-8021(TOLUENE)	ND(<1)	504011-07
EPA-8021(ETHYLBENZ)	ND(<1)	504011-07
EPA-8021(XYLENE)	ND(<3)	504011-07

SPIKE/ SPIKE DUPLICATE RESULTS

METHOD	SPIKE ID	ASSOCIATED SAMPLES	% SPIKE RECOVERY	% SPIKE DUP RECOVERY	REL % DIFF
			RECOVERY	RECOVERY	
NWTPH-GX	GASOLINE	504011-01 TO 03, 10 TO 14, 16	84	81	4
EPA-8021	BENZENE	504011-01 TO 03, 10 TO 14, 16	103	108	5
EPA-8021	TOLUENE	504011-01 TO 03, 10 TO 14, 16	104	108	4
EPA-8021	ETHYLBENZENE	504011-01 TO 03, 10 TO 14, 16	102	106	4
EPA-8021	XYLENE	504011-01 TO 03, 10 TO 14, 16	102	107	5
NWTPH-GX	GASOLINE	504011-07	104	102	2
EPA-8021	BENZENE	504011-07	104	104	0
EPA-8021	TOLUENE	504011-07	104	104	0
EPA-8021	ETHYLBENZENE	504011-07	104	103	1
EPA-8021	XYLENE	504011-07	103	103	0

\* SURROGATE DILUTED OUT OF CALIBRATION RANGE

APPROVED BY:

**Laboratory Analysis Request****50401**

PROJECT ID: PT-05-300-5      UST      ANALYSIS REQUESTED

Date 04/01/05 Page 1 of 2

REPORT TO: Det/Hq  
COMPANY: Tim Brownning

PROJECT MANAGER: Tim Brownning  
ADDRESS: 14720 NE 65th St., #201  
Richard WA 98052

PHONE: 558-0134      FAX: 869-7494  
PO. NUMBER: E-MAIL:

INVOICE TO COMPANY: Det/Hq, Inc. Weyerhaeuser  
ATTENTION: John North

ADDRESS:

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	OTHER (Specify)
1. SB2-10-4	04-01-05	7:20	Soil	1	
2. SB2-10-8		7:30		2	X
3. SB2-10-12		7:40		3	X
4. SB2-11-4		7:50		4	X
5. SB2-11-8		8:00		5	X
6. SB2-11-10		8:10		6	X
7. SB2-11-		8:30	Water	7	X
8. SB2-12-4		8:40	Soil	8	X
9. SB2-12-8		8:50	Soil	9	X
10. SB2-13-4		9:00	Soil	10	X

**SPECIAL INSTRUCTIONS**

CCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By:

*Jeffrey CCI* 4/4/05 1:00

Organic, Metals &amp; Inorganic Analysis

Turnaround

10 days

Standard

5 days

3 days

1 day

Same day

Rush

1 day

Same day

Rush&lt;/div



Everett, WA 98208  
 Phone (425) 356-2800  
 (206) 292-9859 Seattle  
 (425) 356-2828 Fax  
<http://www.ocilabs.com>

# Laboratory Analysis Request

**50401K**

PROJECT ID:

See page 1,

REPORT TO COMPANY:

PROJECT MANAGER:

ADDRESS:

PHONE: FAX:

PO. NUMBER: E-MAIL:

INVOICE TO COMPANY:

ATTENTION:

ADDRESS:

## ANALYSIS REQUESTED

Date 04/01/05 Page 2 of 2

OTHER (Specify)

SAMPLE I.D.	DATE	TIME	TYPE	LAB#
1. SB2-13-8	04-01-05	9:10	Soil	11
2. SB2-14-4		9:20		12
3. SB2-14-8		9:30		13
4. SB2-15-4		10:10		14
5. SB2-16-4		10:30		15
6. SB2-17-4		10:50		16
7. SB2-18-4		11:10		17
8. SB2-18-8		11:20	✓	18
9. SB2-19		11:30 water	19	X
0.				

NWTPH-HCID

NWTPH-DX

NWTPH-GX/BTEX

BTEX by EPA-8021 NWTPH GX/BTEX Method 5035A

MTBE by EPA-8021 □ EPA-8260 □

Halogenated Volatiles by EPA 8260

Volatile Organic Compounds by EPA 8260

Ethylene dibromide (EDB) by EPA-8260 □ EPA-504.1 □

1,2 Dichloroethene (EDC) by EPA-8260

Semivolatile Organic Compounds by EPA 8270

Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM □

PCB □ Pesticides □ by EPA 8081/8082

Metals-MTCA-5 □ RCRA-8 □ Pri Pol □ TAL □

Metals Other (Specify)

TCLP-Metals □ VOA □ Semi-Vol □ Pest □ Herbs □

NUMBER OF CONTAINERS

RECEIVED IN GOOD CONDITION?

## SPECIAL INSTRUCTIONS

OCI Analytical Laboratories, Inc accepts and processes this request on the terms and conditions set forth on the reverse side. By its signature hereon, Customer accepts these terms and conditions.

SIGNATURES (Name, Company, Date, Time):

Relinquished By:

Received By:

Organic, Metals & Inorganic Analysis

TURNAROUND REQUESTED in Business Days\*

OTHER:

Jeffrey Clegg \$ 4/4/05 2:00

Specify: 5 samples taken by 5035A

Fuels & Hydrocarbon Analysis

Standard

Sample Day

Sample Day

Received By:

## **ATTACHMENT B**

---

### **BORING LOGS**

# SOIL CLASSIFICATION GRAPHIC SYMBOLS

MAJOR DIVISIONS	SYMBOLS	TYPICAL SOIL DESCRIPTIONS
	GW	Well graded gravels or gravel-sand mixtures, little or no fines
GRAVELS	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
	GM	Silty gravels, gravel-sand-silt mixtures
	GC	Clayey gravels, gravel-sand-clay mixtures
	SW	Well graded sands or gravelly sands, little or no fines
	SP	Poorly graded sands or gravelly sands, little or no fines
SANDS	SM	Silty sands, sand-silt mixtures
	SC/SM	Clayey sands with a touch of gravel
	SC	Clayey sands, sand-clay mixtures
	ML	Inorganic silts and very fine sands, rock flour, silty or clayey sands or clayey silts with slight plasticity
SILTS & CLAYS	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
LL<50	OL	Organic silts and organic silty clays of low plasticity
	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils elastic silts
SILTS & CLAYS	CH	Inorganic clays of high plasticity, fat clays
LL>50	OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils
FILL MATERIAL	FILL	
	ASPHALT	

**Delta**  
Environmental  
Consultants, Inc.

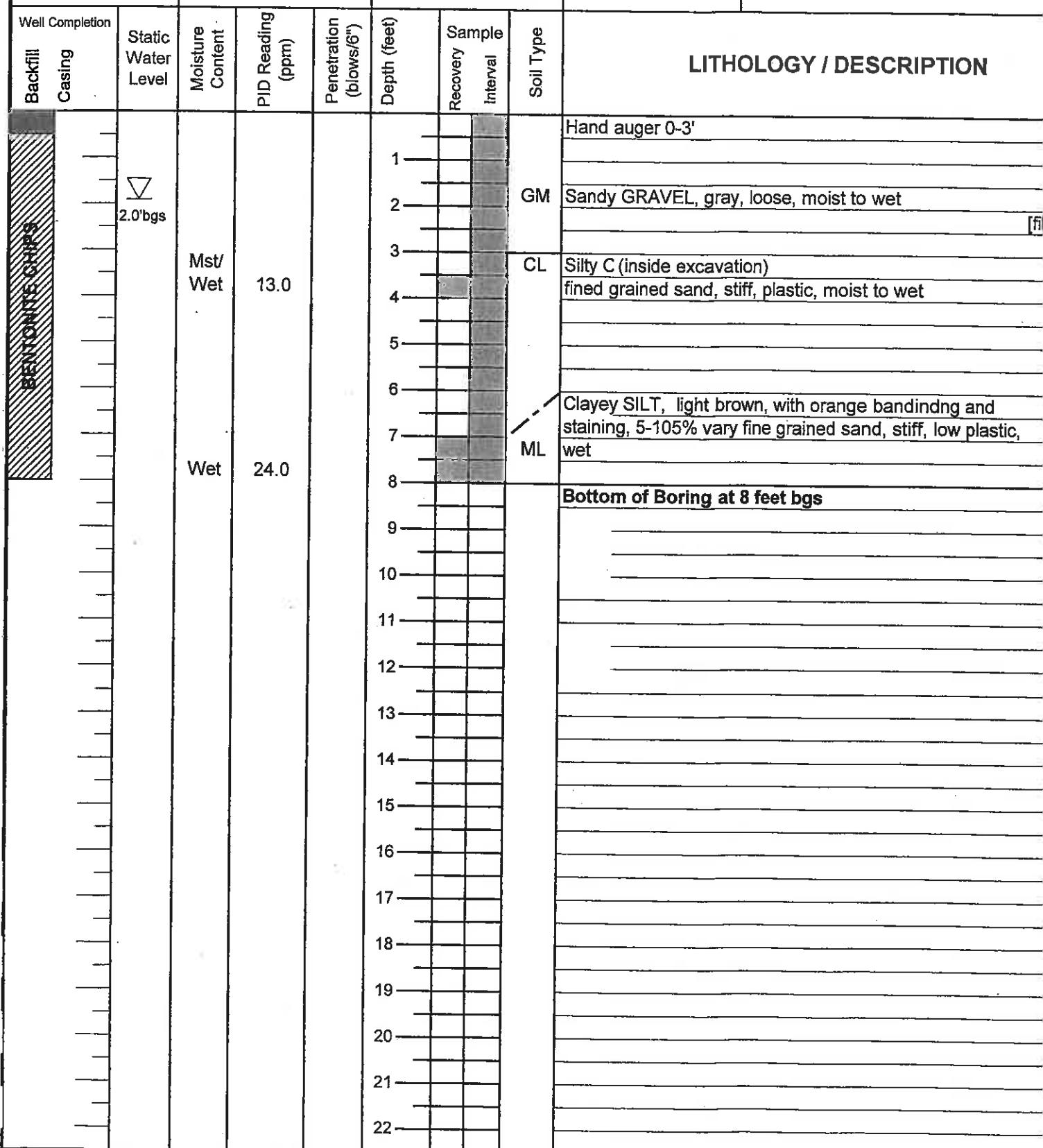
PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-1
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	
ELEVATION	NORTHING	EASTING		

# Delta

Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-2
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

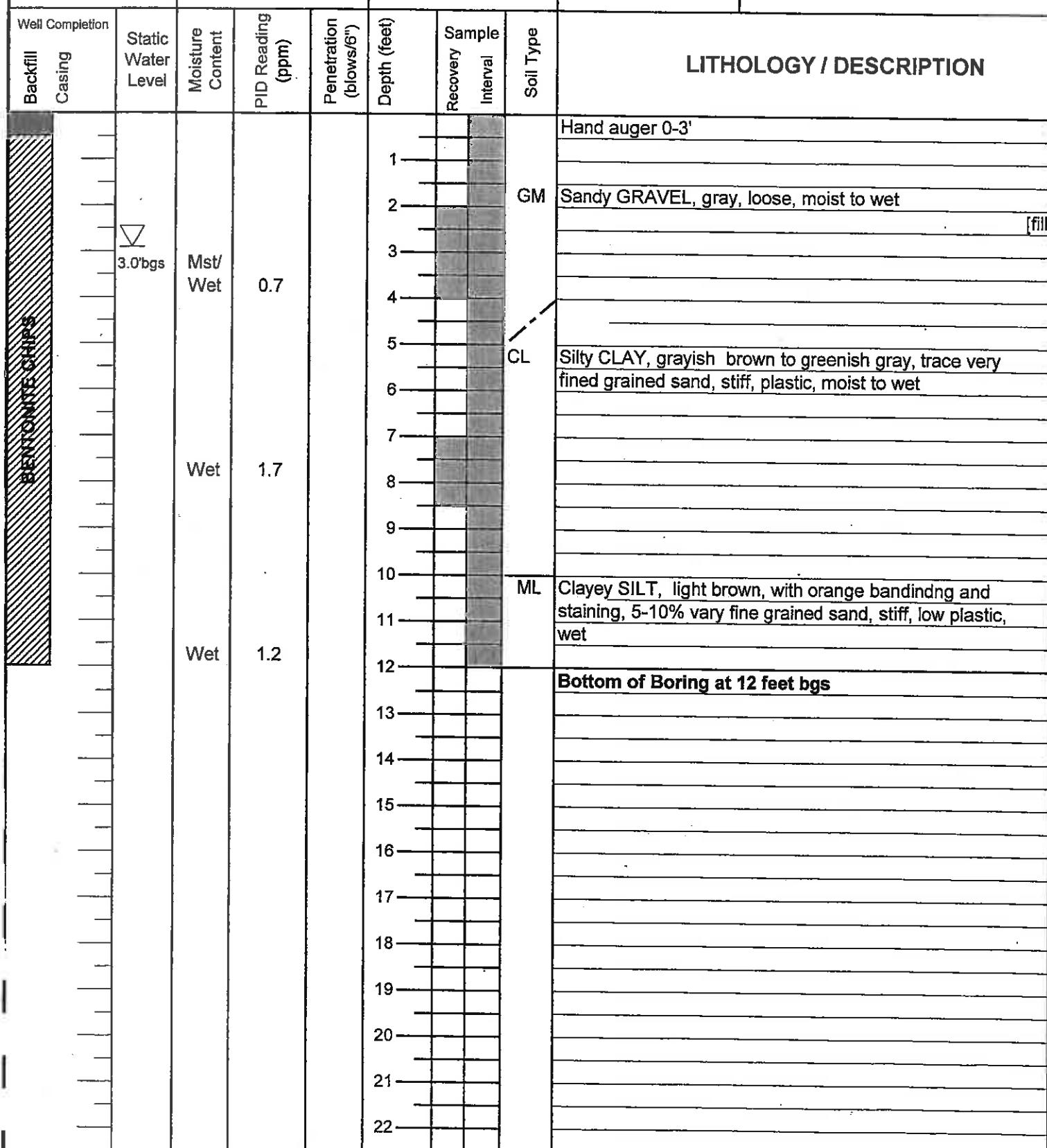
ELEVATION	NORTHING	EASTING
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**Delta**  
Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-3
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	12'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

ELEVATION	NORTHING	EASTING
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## **Environmental Consultants, Inc.**

**Delta**  
Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-5
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

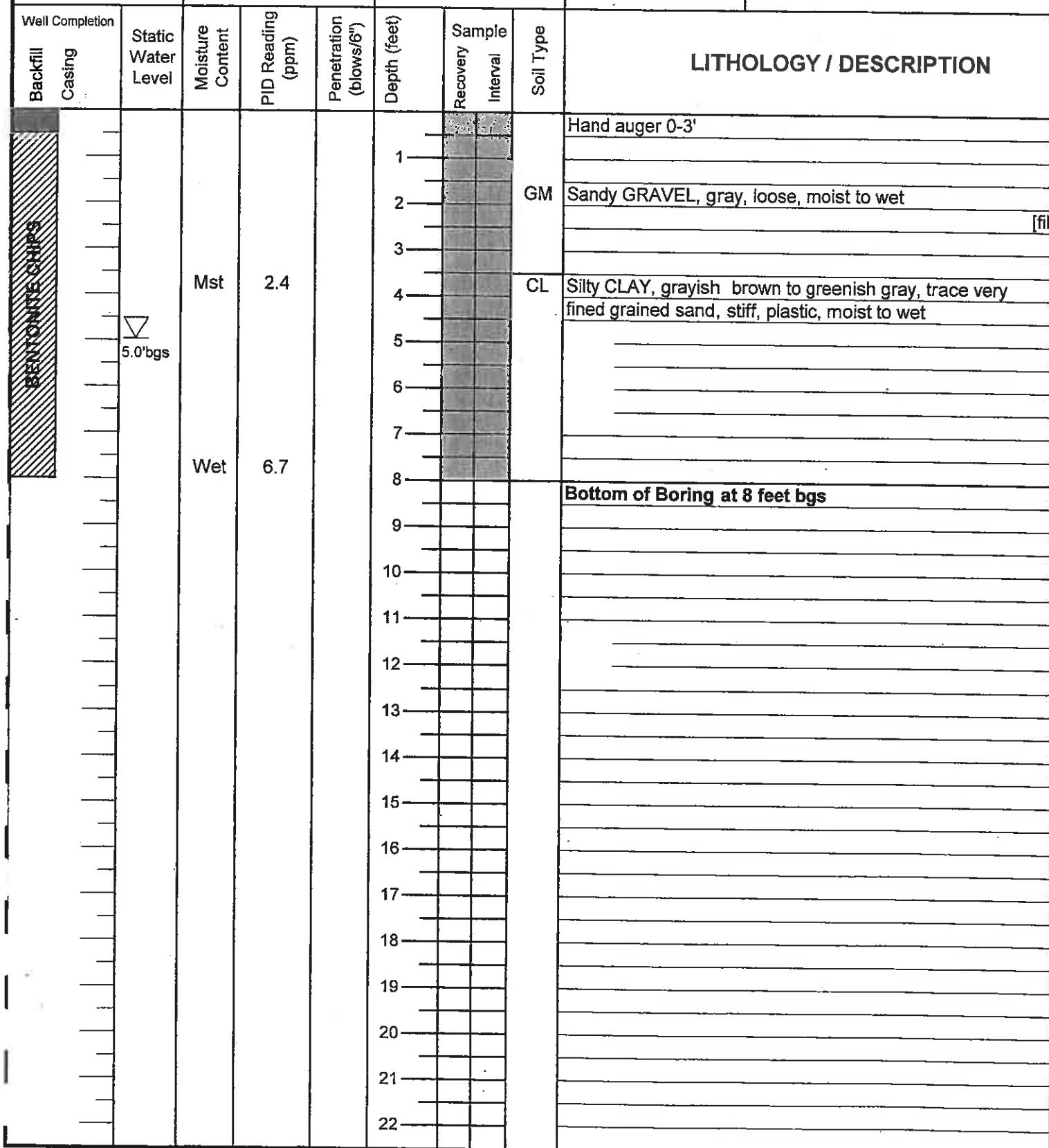
Well Completion Backfill	Casing	Static Water Level	ELEVATION		NORTHING		EASTING		LITHOLOGY / DESCRIPTION
			Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery Interval	Soil Type	
									Hand auger 0-3'
						1			
						2			
						3	GM	Sandy GRAVEL, gray, loose, moist to wet	[fill]
						4	CL	Silty CLAY, grayish brown to greenish gray, trace very fine grained sand, stiff, plastic, moist to wet	
						5			
						6			
						7			
						8			Bottom of Boring at 8 feet bgs
						9			
						10			
						11			
						12			
						13			
						14			
						15			
						16			
						17			
						18			
						19			
						20			
						21			
						22			

# Delta

Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-6
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

ELEVATION	NORTHING	EASTING
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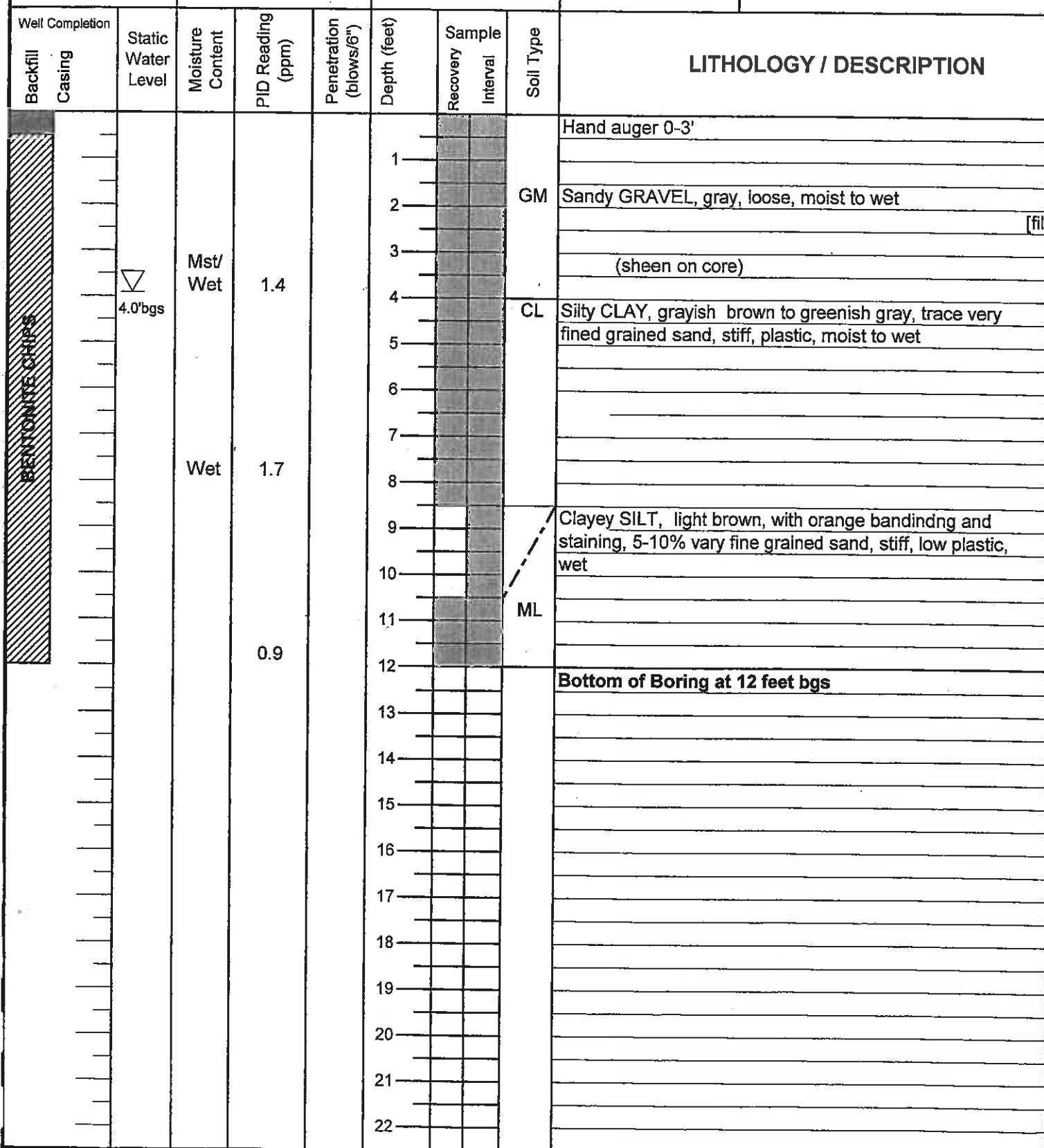
# Delta

**Environmental  
Consultants, Inc.**

**Delta**  
Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-8
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	12'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

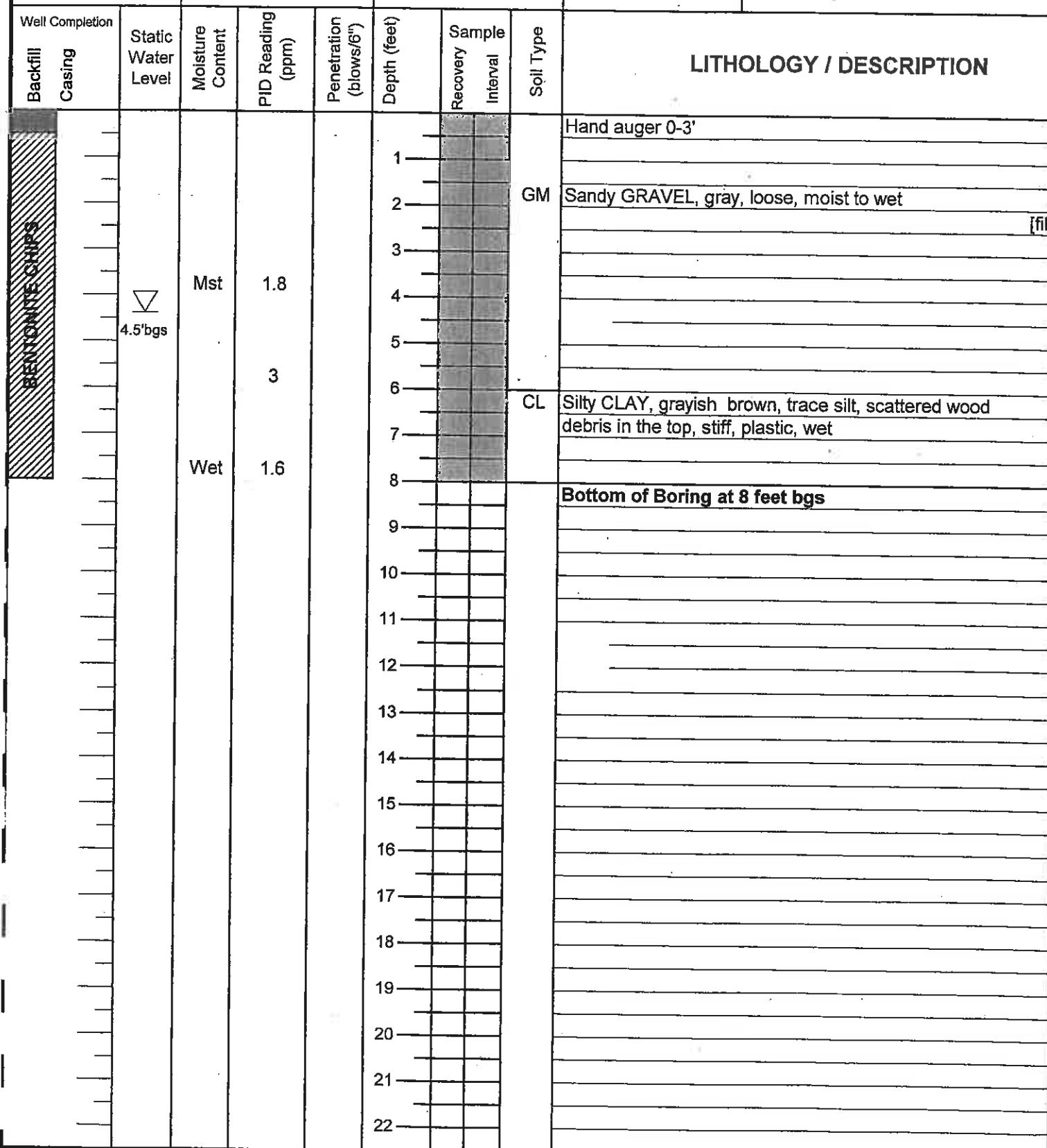
ELEVATION	NORTHING	EASTING
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**Delta**  
Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-9
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

ELEVATION	NORTHING	EASTING
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## **Environmental Consultants, Inc.**

Delta Environmental Consultants, Inc.		PROJECT NO: LOGGED BY: DRILLER: DRILLING METHOD: SAMPLING METHOD: CASING TYPE: SLOT SIZE: GRAVEL PACK:		PT05-300-5 Olga Popova Cascade Geoprobe Macrocore N/A N/A N/A		CLIENT: Weyerhaeuser LOCATION: 7001, 396 th Dr, SE, Snoqualmie, WA DATE DRILLED: 4/1/2005 HOLE DIAMETER: 2" HOLE DEPTH: 12' WELL DIAMETER: N/A WELL DEPTH: N/A CASING STICKUP: N/A		BORING/WELL NO: SB2-10 PAGE 1 OF 1 Location Map
		ELEVATION		NORTHING		EASTING		
Well Completion Backfill Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
					1			Hand auger 0-3'
					2			
					3			Sandy GRAVEL, gray, loose, moist to wet
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			Silty SAND, gray, 20/5 very fine to fine grained sand, loose to medium dense, wet
					12			SP
					13			Bottom of Boring at 12 feet bgs
					14			
					15			
					16			
					17			
					18			
					19			
					20			
					21			
					22			

# Delta

**Environmental  
Consultants, Inc.**

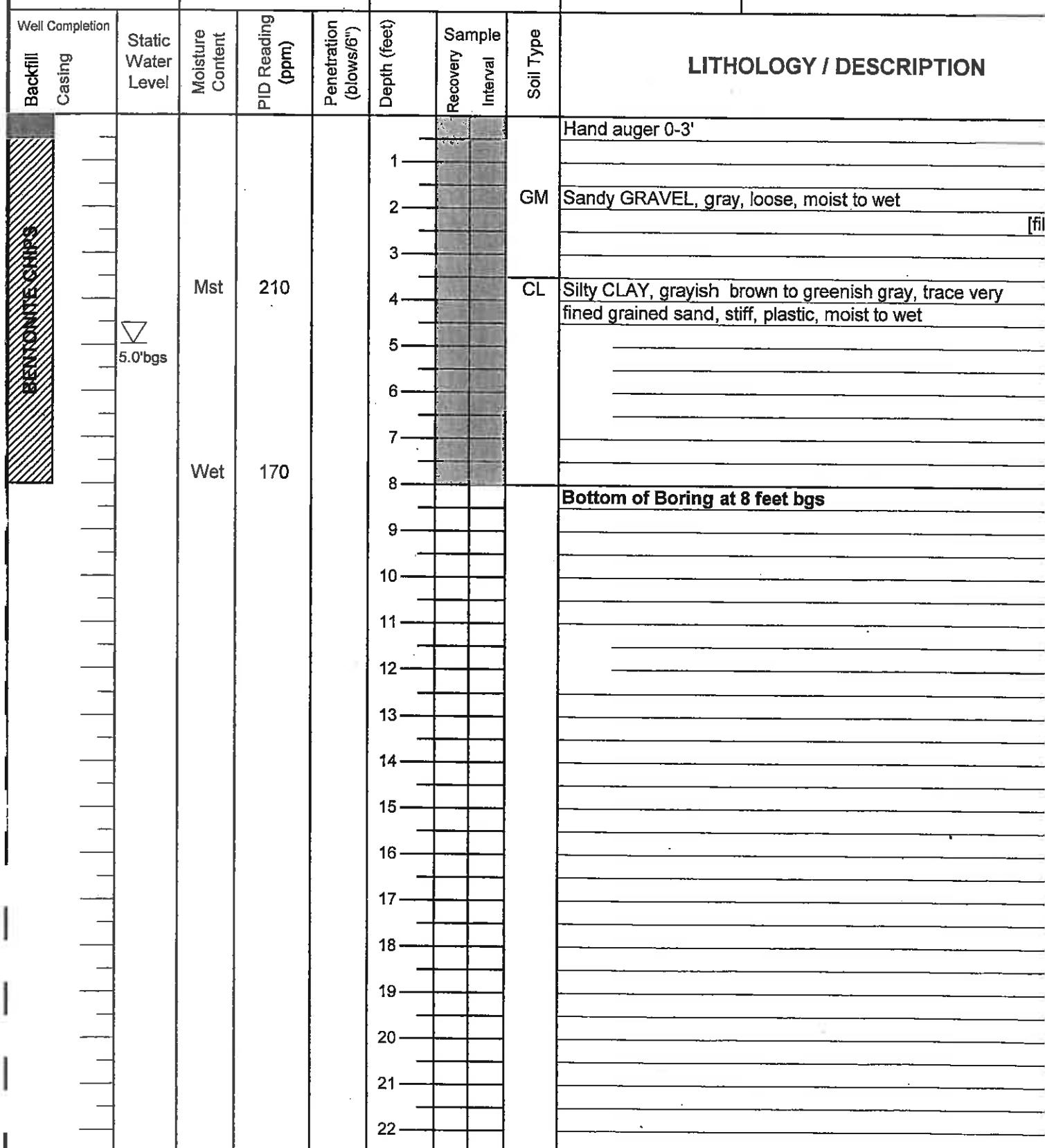
Delta Environmental Consultants, Inc.		PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO:	SB2-11		
		LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1			
Well Completion	Backfill	DRILLER:	Cascade	DATE DRILLED:	4/1/2005	Location Map			
	Casing	DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"				
		SAMPLING METHOD:	Macrocore	HOLE DEPTH:	12'				
		CASING TYPE:	N/A	WELL DIAMETER:	N/A				
		SLOT SIZE:	N/A	WELL DEPTH:	N/A				
		GRAVEL PACK:	N/A	CASING STICKUP:	N/A				
		ELEVATION		NORTHING		EASTING			
Backfill	Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
<b>BENTONITE CHIPS</b>									
5.0'bgs									
Mst		150				1			Hand auger 0-3'
Wet		69				2			
Wet		1.2				3			
						4			(sheen on core)
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			Clayey SILT, light brown, with orange banding and staining, 5-10% vary fine grained sand, stiff, low plastic, wet
						13			
						14			
						15			
						16			
						17			
						18			
						19			
						20			
						21			
						22			

# Delta

Environmental  
Consultants, Inc.

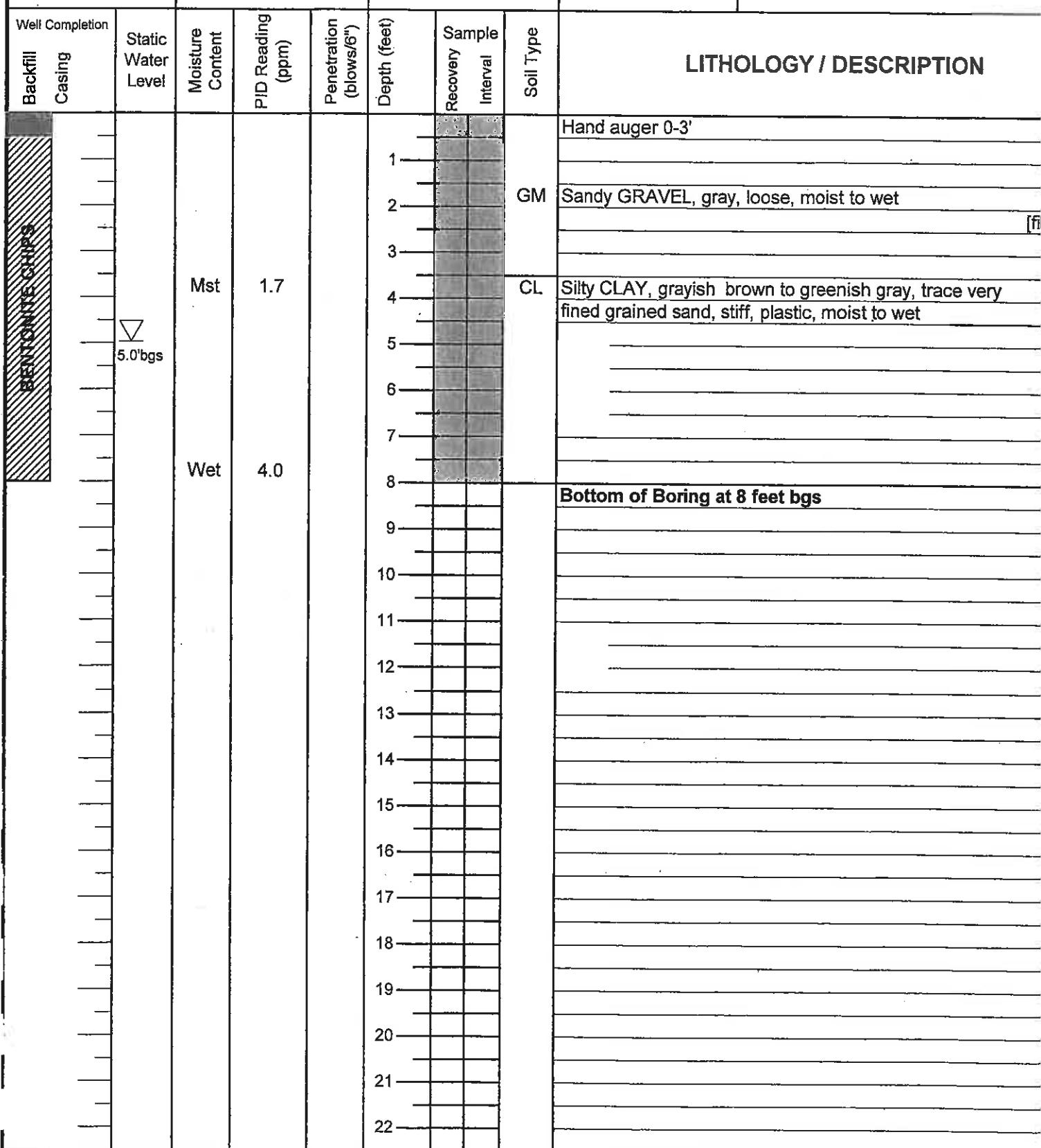
PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-12
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

ELEVATION	NORTHING	EASTING
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**Delta**  
Environmental  
Consultants, Inc.

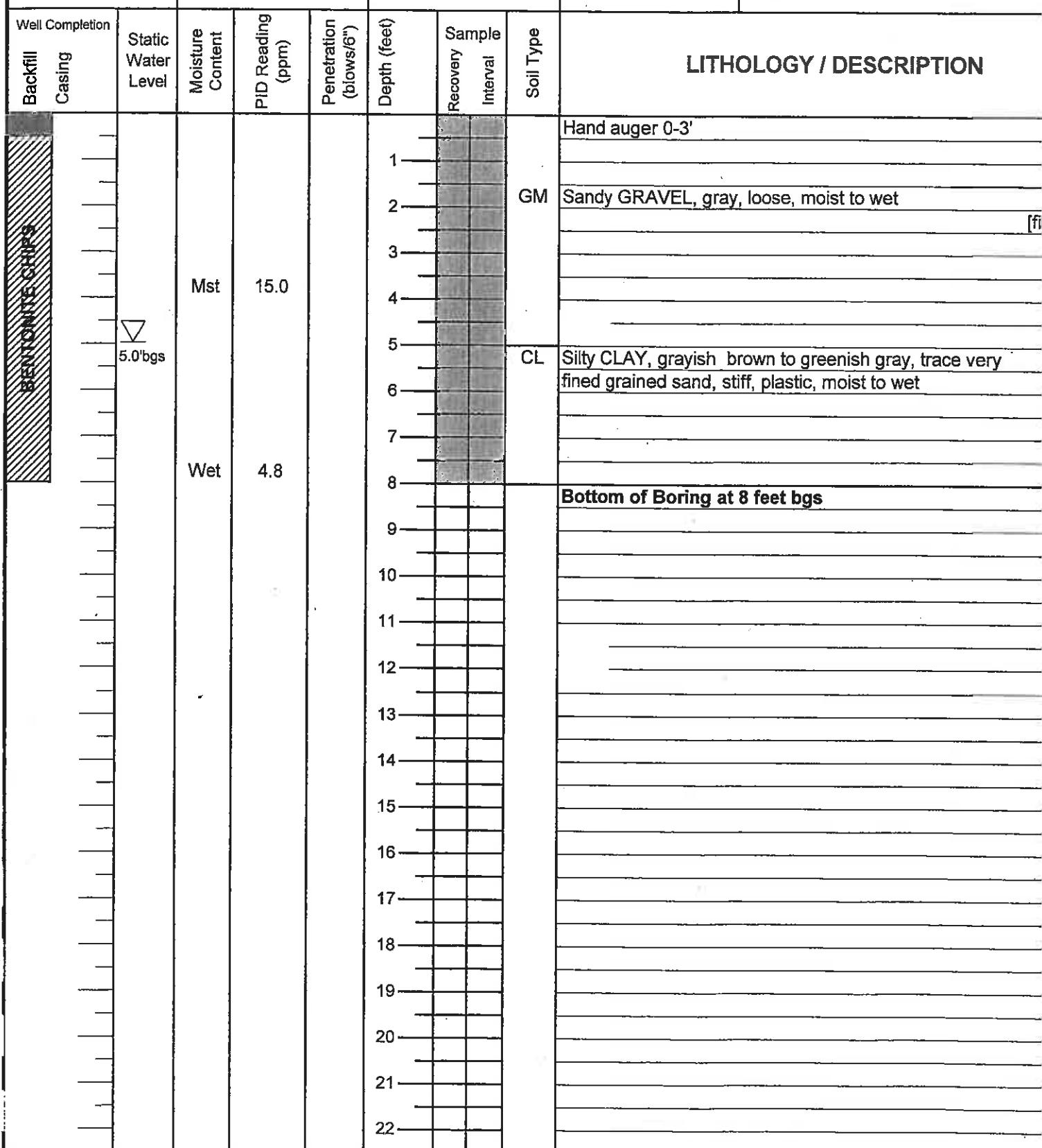
PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-13
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	3/31/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	



**Delta**  
Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-14
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	4/1/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

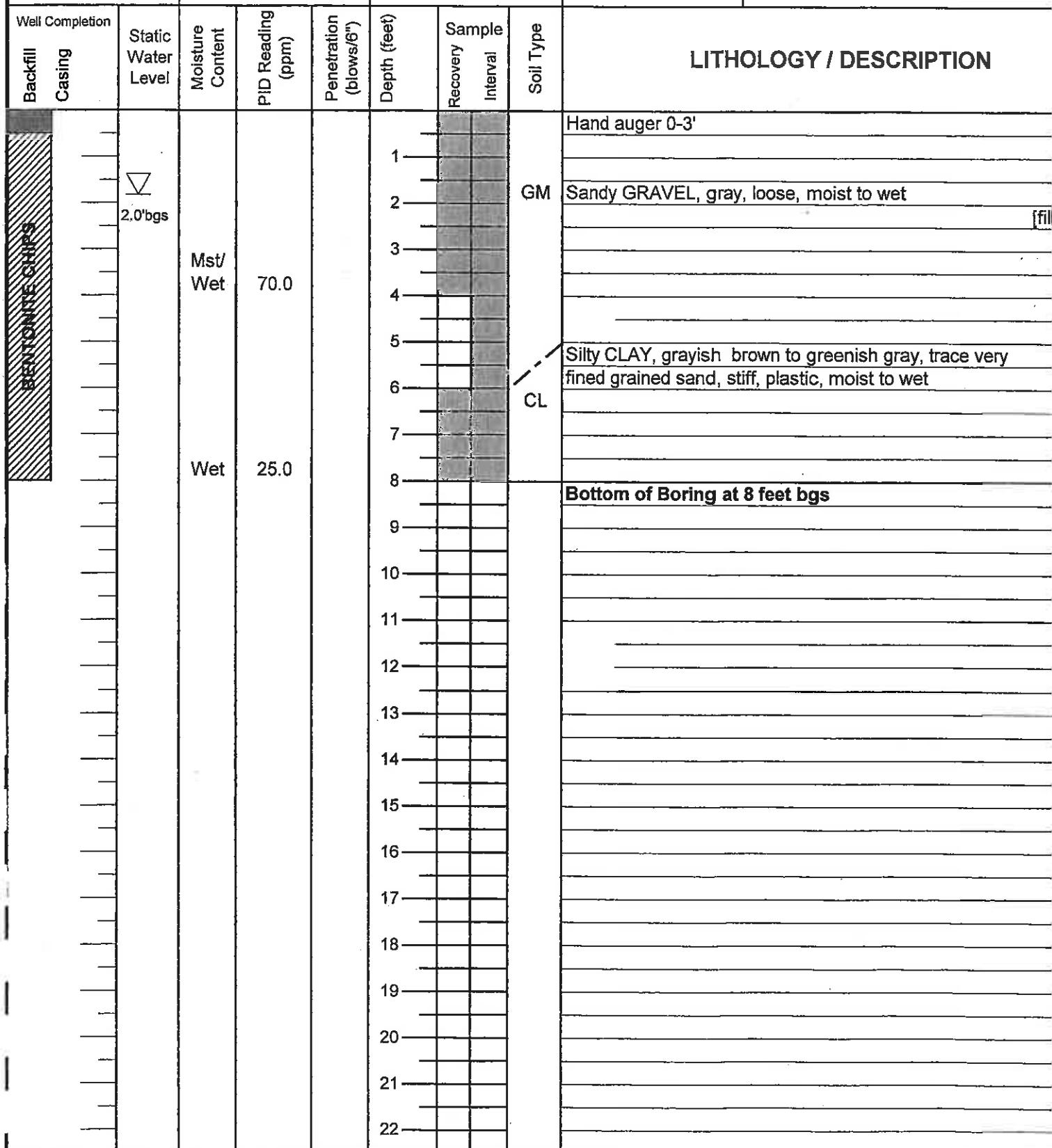
ELEVATION	NORTHING	EASTING
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# Delta

Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-15
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	4/1/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	
	ELEVATION	NORTHING	EASTING	

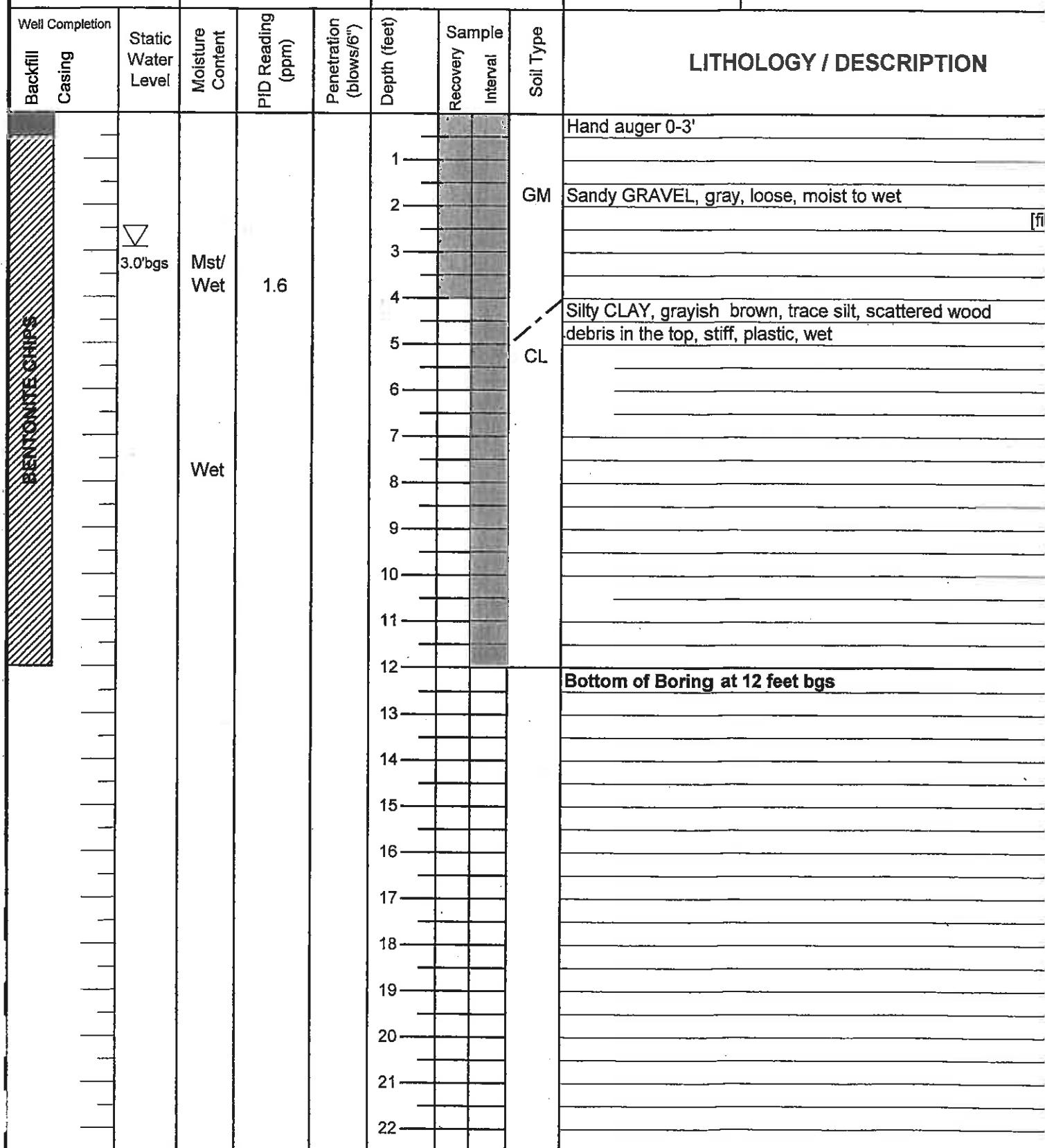


# Delta

Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-16
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	4/1/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	12'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

ELEVATION	NORTHING	EASTING
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**Delta**  
Environmental  
Consultants, Inc.

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-17
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	4/1/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	

ELEVATION	NORTHING	EASTING
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Well Completion Backfill Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
					1			Hand auger 0-3'
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			
					13			
					14			
					15			
					16			
					17			
					18			
					19			
					20			
					21			
					22			

2.0'bgs

BENTONITE CHIPS

GM

Hand auger 0-3'

Sandy GRAVEL, gray, loose, moist to wet

(inside excavation)

Bottom of Boring at 8 feet bgs

**Delta  
Environmental  
Consultants, Inc.**

PROJECT NO:	PT05-300-5	CLIENT:	Weyerhaeuser	BORING/WELL NO: SB2-18
LOGGED BY:	Olga Popova	LOCATION:	7001, 396 th Dr, SE, Snoqualmie, WA	PAGE 1 OF 1
DRILLER:	Cascade	DATE DRILLED:	4/1/2005	Location Map
DRILLING METHOD:	Geoprobe	HOLE DIAMETER:	2"	
SAMPLING METHOD:	Macrocore	HOLE DEPTH:	8'	
CASING TYPE:	N/A	WELL DIAMETER:	N/A	
SLOT SIZE:	N/A	WELL DEPTH:	N/A	
GRAVEL PACK:	N/A	CASING STICKUP:	N/A	
ELEVATION:		DEPTH:		