Weyerhaeuser

101 East Marine View Drive
Everett, Washington 98201
Tel (425) 339 2800
Fax (425) 339 2786

March 11, 1998

Paul Skyllingstad
Industrial Section
Department of Ecology
PO Box 47706
Olympia, WA 98504-7706

Re: Weyerhaeuser Everett West Site -- 1997 Annual Evaluation including Twelfth Round Compliance Ground Water Monitoring Data

Dear Mr. Skyllingstad:

Enclosed are two copies of the report titled "1997 Annual Evaluation including Twelfth Round Compliance Monitoring Ground Water Sampling Results - Weyerhaeuser Everett West Site," and a computer floppy disk containing sample results.

This data is being submitted according to the terms and schedule outlined in the Consent Decree between Ecology and Weyerhaeuser. Compliance ground water monitoring at the Everett West Site began in January 1995. The sampling and analytical methods, data evaluation, and report format were performed according to methods specified in the Ecology-approved Ground Water Compliance Monitoring Plan for Weyerhaeuser Everett West Site (March 2, 1995).

Should you require further information, please contact me at (425) 339-2871.

Sincerely,

Stuart Triolo

Stuart Triolo

Environmental Engineer

ECO12GW.DOC

Enclosure: 1997 Annual Evaluation including Twelfth Round Compliance Monitoring Ground Water Sampling Results - Weyerhaeuser Everett West Site (2 copies); and Computer Floppy Disk with laboratory data.

pc: John Gross CH 1K29 - data w/out floppy disk

Glen Wyatt WTC2G2 - floppy disk w/out hard copy data

Mike Elmer - NWPE - data w/out floppy disk

file: CLEANW01

1997 ANNUAL EVALUATION INCLUDING TWELFTH ROUND COMPLIANCE MONITORING GROUNDWATER SAMPLING RESULTS - WEYERHAEUSER EVERETT WEST SITE

This report summarizes the 1997 annual results and the twelfth round sampling event (November 1997) for compliance monitoring groundwater sampling activities performed at the Weyerhaeuser Everett West Site (West Site), at 101 East Marine View Drive in Everett, Washington.

QUARTERLY SAMPLING ACTIVITIES (TWELFTH ROUND)

EMCON collected groundwater samples from seven West Site monitoring wells (MW-1201, MW-1202, MW-1203, MW-1301, MW-1302, MW-1501, and MW-1701) on November 26, 1997. One field duplicate sample was collected from monitoring well MW-1203 and designated 71126WSGMW-1800. One field blank was prepared and designated 71126WSGMW-1901. The samples were submitted to Weyerhaeuser Analytical Testing Services (WATS) for analyses. A site map including the seven groundwater monitoring well locations is shown in Figure 1.

QUARTERLY LABORATORY ANALYSES

Seven groundwater samples, one field duplicate, and one field blank were analyzed for total petroleum hydrocarbons as diesel and motor oil (TPH-D and TPH-O) by Washington State Department of Ecology Method WTPH-D extended, and for dissolved arsenic by U.S. Environmental Protection Agency Method 200.9. The groundwater samples that were analyzed for dissolved arsenic were filtered before laboratory submittal.

Weyerhaeuser field sampling data sheets were completed at the time of sampling. Copies of the field sampling data sheets, chain-of-custody and request for analyses forms, and laboratory reports are appended to the back of this report. Also included are two diskettes with data files for submittal to Ecology.

QUARTERLY LABORATORY RESULTS

Table 1 shows the depth to water measurements taken from each well before sampling. Table 2 summarizes the groundwater quality field parameters obtained at the time of sampling. Table 3 summarizes the laboratory results in the GIS/Key™ format.

TPH-D was reported in three groundwater samples at concentrations ranging from 0.20 to 0.30 milligrams per liter (mg/L). TPH-O was reported in the sample collected from MW-1202 at a concentration of 0.30 mg/L. Dissolved arsenic was reported in five samples at concentrations ranging from 3 to 45 micrograms per liter (µg/L).

EMCON performed data validation on the WATS laboratory data. A copy of the data validation report is attached at the back of this report.

No unusual concentration values or trends were noted in the laboratory results for the twelfth round of compliance groundwater monitoring. In general, the concentrations of compounds detected from the November 1997 sampling event were consistent with detections from previous rounds of sampling.

ANNUAL EVALUATION

Time-trend plots for TPH-D, TPH-O, and dissolved arsenic concentrations reported for groundwater samples from West Site monitoring wells are presented on Figures 2, 3, and 4, respectively. Time-trend plots for West Site groundwater elevations are presented on Figure 5.

The 1997 West Site compliance groundwater monitoring results were evaluated and the highest values for each parameter were compared to site historic reference values identified in the Consent Decree. During the 1997 monitoring period, TPH-D, TPH-O, and dissolved arsenic concentrations did not exceed the parameter-specific reference values by a factor of five. In general, detections during 1997 were consistent throughout the year and with data associated with past groundwater monitoring results at the West Site.

This report was prepared by EMCON. For additional information, contact EMCON at (425) 485-5000.

Michelle Lange
Geologist

Steve Nelson, R.G.
Senior Project Hydrogeologist

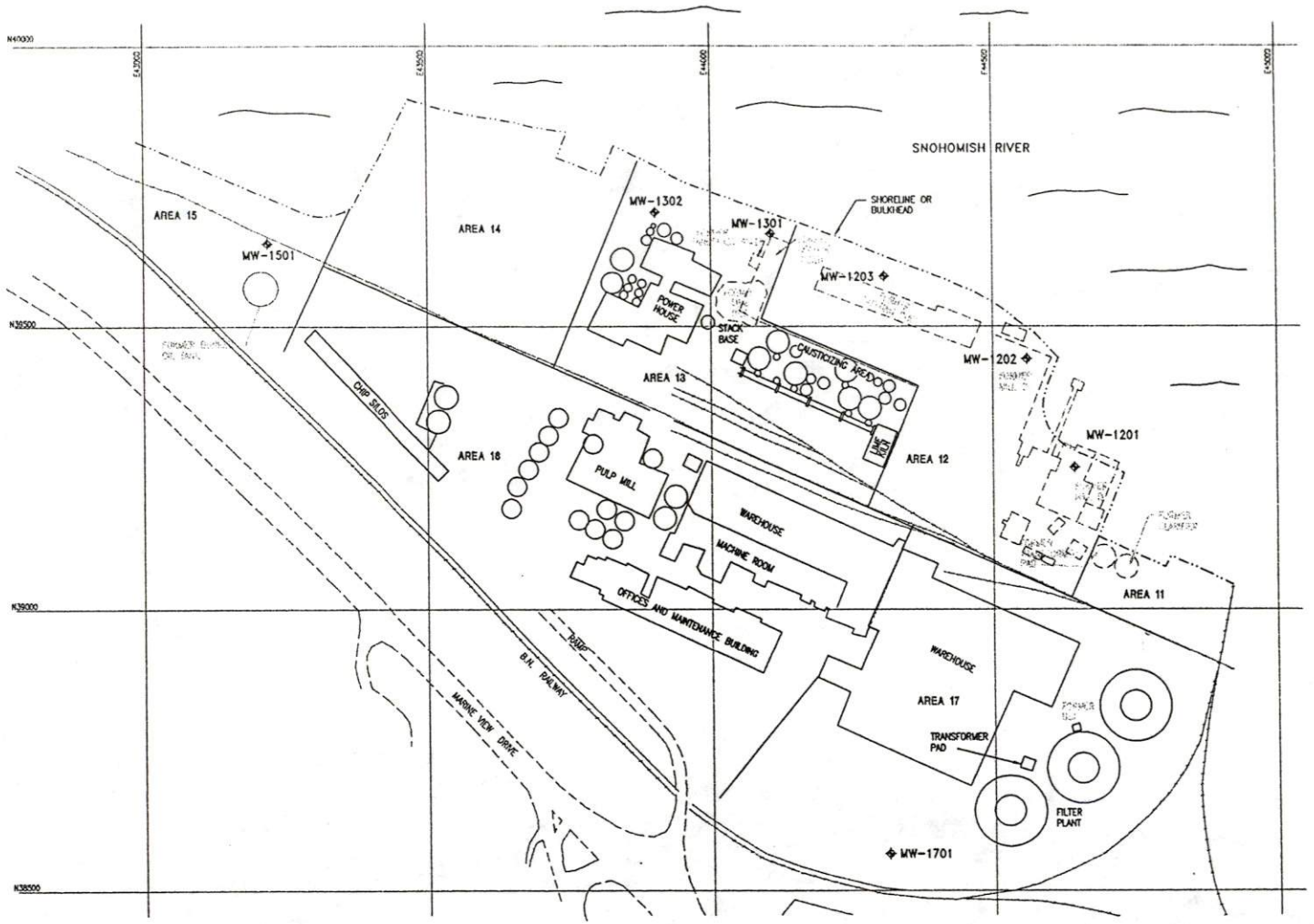
Attachments: Limitations

Figure 1	-	Site Map and Monitoring Well Locations
Figure 2	-	TPH-D Concentrations
Figure 3	-	TPH-O Concentrations
Figure 4	-	Dissolved Arsenic Concentrations
Figure 5	-	Groundwater Elevations
Table 1	-	Depth to Groundwater Measurements
Table 2	-	Summary of Groundwater Field Parameters
Table 3	-	November 1997 Sample Results
Table 4	-	November 1997 Field Blank Sample Results
Attachment A	-	Field Sampling Data Sheets, Chain-of-Custody and Request for Analyses Forms, Laboratory Reports, and Data Validation Report
Diskettes	-	Data Files for Submittal to Ecology

LIMITATIONS

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.



emcon

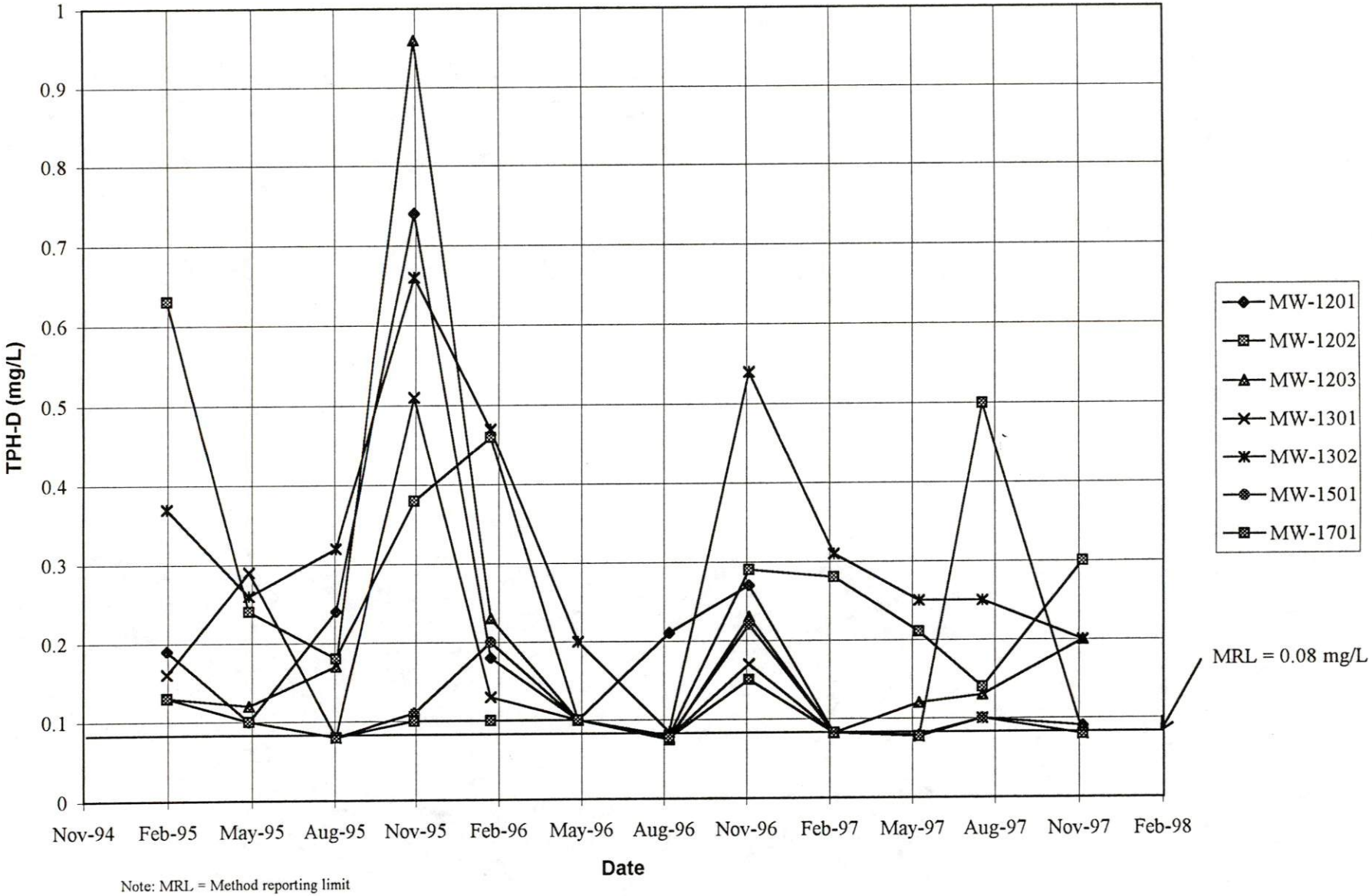
DATE 8-96
DWN. MLP
REV.
APPR.
PROJECT NO.
40141-037.085

Figure 1
WEYERHAEUSER EVERETT WEST SITE
EVERETT, WASHINGTON

SITE MAP AND MONITORING WELL LOCATIONS

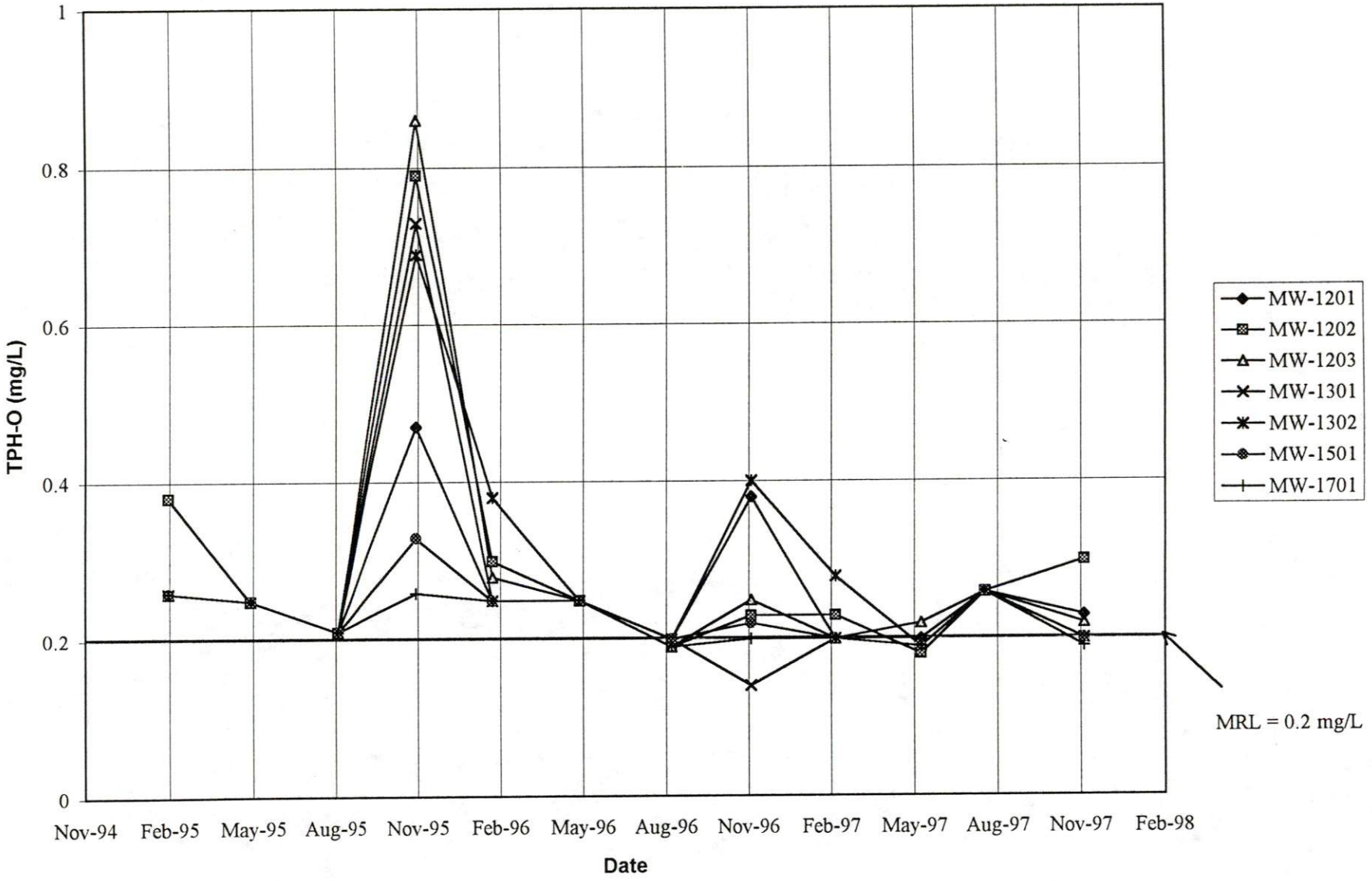
1=200 8-02-96 G:\DWG\0141\037\085\B0085R01

FIGURE 2
WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
TPH-D CONCENTRATIONS



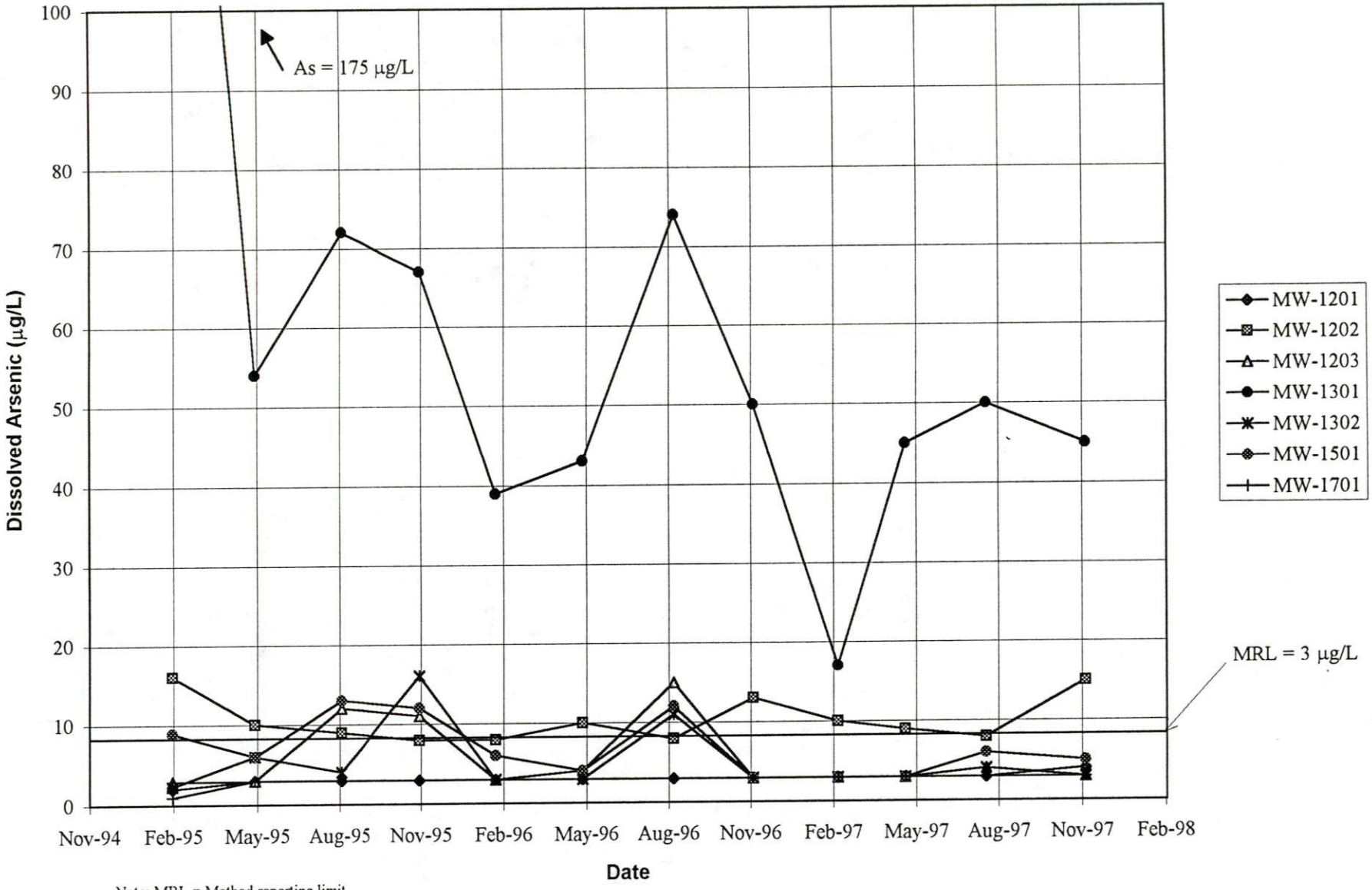
Note: MRL = Method reporting limit

FIGURE 3
WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
TPH-O CONCENTRATIONS



Note: MRL = Method reporting limit

FIGURE 4
WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
DISSOLVED ARSENIC CONCENTRATIONS



Note: MRL = Method reporting limit

FIGURE 5
WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
GROUNDWATER ELEVATIONS

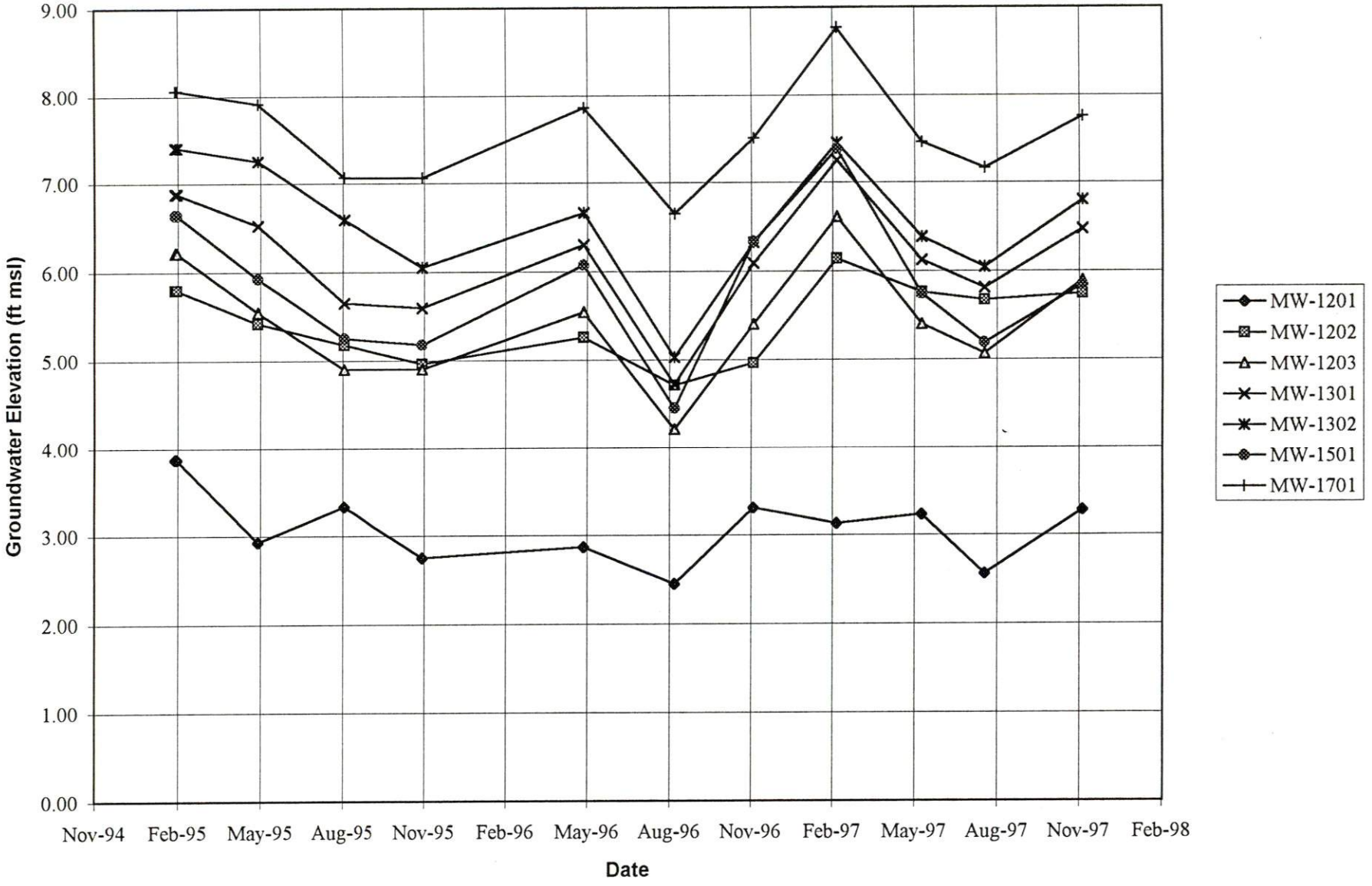


Table 1
Depth to Groundwater Measurements
Weyerhaeuser Everett West Site
November 1997

Well Number	Date Collected	Time	Depth to Water (feet)
MW-1201	11/26/97	1135	12.15
MW-1202	11/26/97	1210	7.52
MW-1203	11/26/97	NR	4.86
MW-1301	11/26/97	1310	5.08
MW-1302	11/26/97	1340	5.49
MW-1501	11/26/97	1410	4.35
MW-1701	11/26/97	1100	3.96
NR = not recorded			

Table 2

Summary of Groundwater Field Parameters
Weyerhaeuser Everett West Site
November 1997

Monitoring Well	Sample Designation	Date Collected	Time	pH	Conductivity (µmhos)	Temp (°C)
MW-1201	71126WSGMW-1201	11/26/97	1150	6.57	1,477	14.0
MW-1202	71126WSGMW-1202	11/26/97	1230	7.25	953	16.0
MW-1203	71126WSGMW-1203	11/26/97	1300	7.15	979	16.0
MW-1301	71126WSGMW-1301	11/26/97	1330	7.56	529	11.0
MW-1302	71126WSGMW-1302	11/26/97	1400	6.42	1,600	12.0
MW-1501	71126WSGMW-1501	11/26/97	1430	6.78	452	11.0
MW-1701	71126WSGMW-1701	11/26/97	1130	6.86	195	12.0
Field Dup.[a]	71126WSGMW-1800	11/26/97	1500	7.15	979	16.0

[a] Duplicate of MW-1203

Table 3

November 1997

Weyerhaeuser Everett West Site

SITE	DATE	TPH (as diesel) (mg/l)	TPH (as motor oil) (mg/l)	Dissolved Arsenic (mg/l)
MW-1201	11/26/97	<0.09	<0.23	0.004
MW-1202	11/26/97	0.3	0.3	0.015
MW-1203	11/26/97	0.2	<0.22	<0.003
MW-1301	11/26/97	<0.08	<0.20	0.045
MW-1302	11/26/97	0.2	<0.20	0.003
MW-1501	11/26/97	<0.08	<0.20	0.005
MW-1701	11/26/97	<0.08	<0.19	<0.003

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Table 4a

November 1997 Duplicate Sample; TPH Results

Weyerhaeuser Everett West Site

SAMPLING EVENT: 97-WE-4 (11/25/97 to 11/27/97)
SAMPLE TYPE: Water
TCL ID: WEST-ALL
PF CODE: Total
LAB ID: WEYCO

	SAMPLE INFORMATION	PRIMARY SAMPLE	FIRST DUPLICATE		PRECISION SUMMARY	
	SITE	MW-1302	MW-1302		RELATIVE PERCENT DIFFERENCE (RPD)	
	DATE	11/26/97	11/26/97			
	TIME	14:00	14:00			
	FIELD SAMPLE ID	71126WSGMW-1302	71126WSGMW-1800			
	LAB SAMPLE ID	90712	90715		RPD MEASURED	RPD GOAL
	BATCH NO					
COMPOUNDS		(mg/l)	(mg/l)		%	%
TPH (as diesel)		0.2	0.2		0	0
TPH (as motor oil)		<0.20	<0.20		0	0

< = Not detected at indicated reporting limit

Table 4

November 1997 Duplicate Sample; Dissolved Arsenic
Weyerhaeuser Everett West Site

SAMPLING EVENT: 97-WE-4 (11/25/97 to 11/27/97)
SAMPLE TYPE: Water
TCL ID: WEST-AS
PF CODE: Dissolved
LAB ID: WEYCO

	SAMPLE INFORMATION	PRIMARY SAMPLE	FIRST DUPLICATE		PRECISION SUMMARY	
	SITE	MW-1302	MW-1302		RELATIVE PERCENT DIFFERENCE (RPD)	
	DATE	11/26/97	11/26/97			
	TIME	14:00	14:00			
	FIELD SAMPLE ID	71126WSGMW-1302	71126WSGMW-1800			
	LAB SAMPLE ID	90712	90715		RPD MEASURED	RPD GOAL
	BATCH NO					
COMPOUNDS		(mg/l)	(mg/l)		%	%
Arsenic		0.003	0.003		0	0

Table 5

November 1997 Field Blank Sample; Dissolved Arsenic
Weyerhaeuser Everett West Site

SAMPLING EVENT: 97-WE-4 (11/25/97 to 11/27/97)
SAMPLE TYPE: Water
TCL ID: WEST-AS
PF CODE: Dissolved
LAB ID: WEYCO

	SAMPLE INFORMATION	FIELD BLANK 1			
	CASE ID	05405			
	BLANK ID	71126WSGMW-1901			
	FIELD SAMPLE ID	71126WSGMW-1901			
	LAB SAMPLE ID	90716			
COMPOUNDS		(mg/l)			
Arsenic		<0.003			

< = Not detected at indicated reporting limit

BLANK ID: Field Blank = Field Blank Id
Rinsate Blank = SDG No
Travel Blank = Custody Id
Method Blank = Batch No
Lab Blank = Batch No

Table 5a

November 1997 Field Blank Sample; TPH Results
Weyerhaeuser Everett West Site

SAMPLING EVENT: 97-WE-4 (11/25/97 to 11/27/97)
SAMPLE TYPE: Water
TCL ID: WEST-ALL
PF CODE: Total
LAB ID: WEYCO

	SAMPLE INFORMATION	FIELD BLANK 1			
	CASE ID	05405			
	BLANK ID	71126WSGMW-1901			
	FIELD SAMPLE ID	71126WSGMW-1901			
	LAB SAMPLE ID	90716			
COMPOUNDS		(mg/l)			
TPH (as diesel)		<0.08			
TPH (as motor oil)		<0.19			

< = Not detected at indicated reporting limit

BLANK ID: Field Blank = Field Blank Id
Rinsate Blank = SDG No
Travel Blank = Custody Id
Method Blank = Batch No
Lab Blank = Batch No

ATTACHMENT A

FIELD SAMPLING DATA SHEETS, CHAIN-OF-CUSTODY AND REQUEST FOR ANALYSES FORMS, LABORATORY REPORTS, AND DATA VALIDATION REPORT

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID MW-1201
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather: 55 sunny
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☐ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC:

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	11 35						
Depth to Water	12.15						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: ~~Peristaltic~~ Bailer

Casing Volume: [19.8 (TD) - 12.15 (WL)] • [_____ (Well ID)]^2 • [_____ (Conversion Factor)] = 1.24 ☐ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☒ Cum. Vol. Purged ☐ Pumping Rate	1.25	2.5	3.75			(Final)	Meter Type	Remarks
Time Measured (hh:mm)								
pH ☐ Temp. Compensated	6.52	6.58	6.57				DSPH	
Temperature ☐°C ☐°F	14	14	14					
Dissolved Oxygen mg/l								
☑ SC or ☐ EC µS/cm	1608	1492	1477				DSPH	
Turbidity ☐ NTU			slt. turbid					
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☒ Bailer ☐ Pump Description: Bailer

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
71126-WSG-MW1201	PO	11/26/97	1150	2	AS				

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: PO, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, a cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM 18900 (8/94) Printing Services TP-1 Tacoma

Date Entered into Database_____ By_____ Page ___ of ___

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID mw-1202
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather: 55 sunny
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☒ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC: 20

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	1210						
Depth to Water	7.52						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: Peristaltic

Casing Volume: [20 (TD) - 7.52 (WL)] • [____ (Well ID)]^2 • [____ (Conversion Factor)] = 2.03 ☐ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☐ Cum. Vol. Purged ☐ Pumping Rate	2	4	6			(Final)	Meter Type	Remarks
Time Measured (hh:mm)							~~DSP~~	
pH ☐ Temp. Compensated	7.26	7.23	7.25				DSPH	
Temperature ☐°C ☐°F	16	16	16					
Dissolved Oxygen mg/l								
☒ SC or ☐ EC µS/cm	930	942	953				DSPH	
Turbidity ☐ NTU			slt turbid					
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☐ Bailer ☐ Pump Description:

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
71126WSG-mw-1202	P0	11/26/97	12:30	2	AS				

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: P0, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, a cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM 18900 (8/94) Printing Services TP-1 Tacoma

Date Entered into Database_____ By_____

* Dup

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID MW-1203
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather: 55 sunny
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☐ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC: 9.4

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	— DR	(SU)					
Depth to Water	4.86						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: Peristaltic

Casing Volume: [9.40 (TD) - 4.86 (WL)]•[____(Well ID)]^2•[____(Conversion Factor)] = 0.74 ☐ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☒ Cum. Vol. Purged ☐ Pumping Rate	.75	1.5	2.25			(Final)	Meter Type	Remarks
Time Measured (hh:mm)								
pH ☐ Temp. Compensated	7.32	7.13	7.15				DSPH	
Temperature ☐°C ☐°F	16	16	16					
Dissolved Oxygen mg/l								
☒ SC or ☐ EC µS/cm	990	987	979				DSPH	
Turbidity ☐ NTU		clear	some	sus. solids				
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☐ Bailer ☐ Pump Description:

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
WSG 71126 ~~EGW~~-mw1203	P0	11/26/97	1300	2	AS				
71126 ~~EGW~~-mw1800			1500						Duplicate
WSG									

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: P0, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, a cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM 18900 (8/94) Printing Services TP 1 Tacoma

Date Entered into Database_____ By_____

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID MW-1301
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather:
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☐ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC: 9.40

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	1310						
Depth to Water	5.08						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: Peristaltic

Casing Volume: [9.4 (TD) - 5.08 (WL)] • [____ (Well ID)]² • [____ (Conversion Factor)] = .70 ☒ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☒ Cum. Vol. Purged ☐ Pumping Rate	.75	1.5	2.25			(Final)	Meter Type	Remarks
Time Measured (hh:mm)								
pH ☐ Temp. Compensated	7.78	7.60	7.56				DSPH	
Temperature ☐°C ☐°F	11	11	11					
Dissolved Oxygen mg/l								
☒ SC or ☐ EC µS/cm	518	531	529				DSPH	
Turbidity ☐ NTU								
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☐ Bailer ☐ Pump Description:

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
71126-~~EGW~~WSG-mw1301	P0	11/26/97	1330	2	AS				

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: P0, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, a cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM:16900 (8/94) Printing Services TP-1 Tacoma

Date Entered into Database_____ By_____ Page ___ of ___

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID MW-1302
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather:
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☐ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC: 9.40

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	1340						
Depth to Water	5.49						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: Peristaltic

Casing Volume: [9.4 (TD) - 5.49 (WL)] • [____ (Well ID)]^2 • [____ (Conversion Factor)] = 0.63 ☐ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☐ Cum. Vol. Purged ☐ Pumping Rate						(Final)	Meter Type	Remarks
Time Measured (hh:mm)								
pH ☐ Temp. Compensated	6.52	6.46	6.42				DSPH	
Temperature ☒ °C ☐ °F	12	12	12					
Dissolved Oxygen mg/l								
☒ SC or ☐ EC µS/cm	1635	1610	1600				DSPH	
Turbidity ☐ NTU		clear						
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☐ Bailer ☐ Pump Description:

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
71126~~000~~-mw1302	P0	11/26/97	1400						
WSG									

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: P0, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, a cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM 18900 (8/94) Printing Services TP-1 Tacoma

Date Entered into Database_____ By_____ Page ___ of ___

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID MW-1501
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather:
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☐ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC: 9.5

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	1410						
Depth to Water	4.35						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: Peristaltic

Casing Volume: [9.5 (TD) - 4.35 (WL)] • [____(Well ID)]^2 • [____(Conversion Factor)] = .83 ☐ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☐ Cum. Vol. Purged ☐ Pumping Rate	1	2	3			(Final)	Meter Type	Remarks
Time Measured (hh:mm)								
pH ☐ Temp. Compensated	6.91	6.82	6.78				DSPH	
Temperature ☐°C ☐°F	11	11	11					
Dissolved Oxygen mg/l								
☒ SC or ☐ EC µS/cm	516	487	452				DSPH	
Turbidity ☐ NTU								
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☐ Bailer ☐ Pump Description:

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
71126 WS6 ~~EGW~~ MW1501	P0	11/26/97	1430	2	As				
71126 WS6 - MW1901		11/26/97	1445	2	As				Field Blank

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: P0, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, a cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM 18900 (8/94) Printing Services TP-1 Tacoma

Date Entered into Database_____ By_____ Page ___ of ___

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company ☐ ES&T/WTC ☐ ES&T/NB	Project No. 40141-037.091	Site ID MW-1701
EMCON	Facility Everett - West	Date (m/d/y) 11/26/97

Site Description ☒ Monitoring Well ☐ Extraction Well ☐ Irrigation Well ☐ Spring ☐ Borehole ☐ Probe Other:

Air Temp: ☐ °C ☒ °F	Weather: 50 sunny
Well Locked? ☐ yes ☐ no	Damaged/Repairs Needed:
☐ TOC ☐ MP Description:	flush
TOC/MP Stickup: ☐ ft ☐ m above/below ground	Well Inside Diameter (ID): ☒ 2-inch ☐ 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data Measurement Units: ☐ ft ☐ m Well or Borehole Total Depth (TD) from MP or TOC: 7.70

☐ E-Tape, #_____ ☐ Steel Tape ☐ Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	1100						
Depth to Water	3.96						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery ☐ gallons ☐ liters							

Measure water level from fixed measuring point (MP) or top of well casing (TOC). Record water depth to nearest 0.01 ft or 0.002 m, with minus (-) sign if level is above MP or TOC. If no mark on MP or TOC, measure water level from north side of casing. Measure static or pre-purging water level twice; record initial and confirmation measurements and measurement times (in 24-hour clock format). MP/TOC Stickup measurement is from ground surface to nearest 0.1 ft or 0.01 m. Depth to Water codes: N - not measured; D - dry; O - obstructed; P - pumping; F - flowing (artesian well); R - recently pumped; C - cascading. Water Level (WL) = Depth to Water - Tape Correction factor. Record free product presence at time of water level measurement; use "S" for free product thickness if sheen observed. If free product removed from well, record volume removed in gallons or liters, list product type in "Remarks" column.

Field WQ Data Purge Depth: ☐ Grab ☐ Bailer ☒ Pump Description: Peristaltic

Casing Volume: [7.7 (TD) - 3.96 (WL)] • [_____ (Well ID)]^2 • [_____ (Conversion Factor)] = 0.61 ☐ gal ☐ liters

Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches

Well Goes Dry While Purging ☐

☒ Cum. Vol. Purged ☐ Pumping Rate	.75	1.5	2.25			(Final)	Meter Type	Remarks
Time Measured (hh:mm)	1115							
pH ☐ Temp. Compensated	7.17	6.85	6.86				DSPH	
Temperature ☒ °C ☐ °F	12	12	12					
Dissolved Oxygen mg/l								
☒ SC or ☐ EC µS/cm	215	207	195				DSPH	
Turbidity ☐ NTU								
Color/Tint								
Odor								

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volumed removed before sampling, in gallons or liters. Pumping Rate is gpm or Lpm, depending on box checked in casing volume calculation. Use "Final" column above for recording sample field measurements, total volume purged befored sampling or avearage pumping rate during purging. Record equipment calibration methods, decontamination procedures, equipment failures, purge water disposal method, etc. in daily field notes. SC: Specific Conductance corrected for temperature (µS/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (µS/cm). µS/cm = µmho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon

Sample Data Sample Depth: ☐ Grab ☐ Bailer ☐ Pump Description:

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 µm)	Lab ID	Case ID	SDG ID	Remarks
71126-~~EKG~~-MW1701	P0	11/26/97	11:30	2	AS				

Sample ID may be up to 15 characters. **Sample Result Code, Date, and Time must be entered.** Result Codes: P0, Primary Sample; D#, Duplicate Sample; S#, Split Sample (sent to second lab); BF#, Field Blank; BR#, Equipment Rinsate; BT#, Trip Blank; SF#, Field Spike (# = 1 to 9). Lab ID (up to 5 characters) is name of laboratory that will analyze the sample. Case ID (up to 5 characters) and SDG ID (sample delivery group, up to 15 characters) are required for blanks. Case ID may be the lab service request number or yy-mm. SDG may be lab's SDG, cooler ID number, or mmddyy. Enter sample preservation and handling data on chain-of-custody form. Also record detailed information about duplicate, split, rinsate, spike, and/or blank sample collection/handling in daily field notes.

Sampled By (print)	Signature

FORM 18900 (8/94) Printing Services TP-1 Tacoma

Date Entered into Database_____ By_____ Page ___ of ___

Weyerhaeuser

32901 Weyerhaeuser Way South
Federal Way WA 98003
Tel (253) 924-6872
Fax (253) 924-6654

December 16, 1997

Emcon
Attn: Steve Nelson
18912 North Creek Parkway, Suite 100
Bothell, WA 98011

Subject: **Service Request 05405 - Everett/Emcon West Site Water Samples**
1202975670 40141-037.091 OOE# 7043971

Dear Steve:

Attached is a copy of our final report for the samples you requested we analyze for you. These are from our service request number 05405. Invoicing for this work will be directly to Weyerhaeuser. If you have any questions concerning this report, please feel free to contact me at (253) 924-6242.

Thank you for the opportunity to be of service. I look forward to working with you on future projects.

Sincerely,

Dennis M. Catalano /kmd.

Dennis M. Catalano, Project Manager
Weyerhaeuser Analytical and Testing Services

Weyerhaeuser

32901 Weyerhaeuser Way South
Federal Way WA 98003
Tel (253) 924-6872
Fax (253) 924-6654

SDG NARRATIVE

WEYERHAEUSER (WEYER)

ANALYTICAL AND TESTING SERVICES

Case Number 5405

SDG Number 90708

PROJECT: EVERETT/EMCON WEST SITE WATER SAMPLES 1202975670 40141-037.091 OOE #7043971

The samples from this SDG were received on 11/29/97. The SDG was composed of water samples for analysis of diesel and motor oil range hydrocarbons by WTPH-D and dissolved As. The following analyses were performed:

SAMPLE ID	LAB ID	MATRIX	ANALYSIS
71126WSGMW-1201	90708	WATER	As; WTPH-D
71126WSGMW-1202	90709	WATER	As; WTPH-D
71126WSGMW-1203	90710	WATER	As; WTPH-D
71126WSGMW-1301	90711	WATER	As; WTPH-D
71126WSGMW-1302	90712	WATER	As; WTPH-D
71126WSGMW-1501	90713	WATER	As; WTPH-D
71126WSGMW-1701	90714	WATER	As; WTPH-D
71126WSGMW-1800	90715	WATER	As; WTPH-D
71126WSGMW-1901	90716	WATER	As; WTPH-D
Laboratory Control Spike	WLCS1203	Fortified Blank	WTPH-D

Laboratory comments for this sample delivery group are listed below. The comments are broken up into categories for ease of explanation.

1. WTPH-D

   a) No comments for this sample delivery group.

2. Metals

   a) No comments for this sample delivery group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Richard Bogar
Chromatography Team Leader

12/16/97
Date

Please feel free to contact me with any questions concerning this data report. I can be reached at (253) 924-6521

Sincerely,

Richard Bogar
Weyerhaeuser Analytical & Testing Services

Weyerhaeuser Analytical & Testing Services
32901 Weyerhaeuser Way South
Federal Way, WA 98003

Service Request 05405

Report

Everett/EMCON West Site Water Samples

Client ID	Date Sampled	Time Sampled	Lab ID	Dissolved As
				(µg/L)
71126WSGMW-1201	11/26/97	1150	90708	4
71126WSGMW-1202	11/26/97	1230	90709	15
71126WSGMW-1203	11/26/97	1300	90710	< 3
71126WSGMW-1301	11/26/97	1330	90711	45
71126WSGMW-1302	11/26/97	1400	90712	3
71126WSGMW-1501	11/26/97	1430	90713	5
71126WSGMW-1701	11/26/97	1130	90714	< 3
71126WSGMW-1800	11/26/97	1500	90715	3
71126WSGMW-1901	11/26/97	1445	90716	< 3
Method Blank				< 3

Quantitation Limit: 3

Method Number: AM1-3020/200.9

Water Laboratory Control Sample Report

Element	Sample Found	True Value	Lower Limit	Upper Limit	% Recovery
		(µg/L)			
As	50	50	44	54	100

Approved: Mary Beth Lanza
Telephone: (253) 924-6013

Revised Date: 1/27/98

Weyerhaeuser Analytical & Testing Services
32901 Weyerhaeuser Way South
Federal Way, WA 98003

Service Request: 05405

Report

erett/EMCON West Site Water Samples
2975670 40141-037.091 OOE#7043971

Client ID	Date Sampled	Time Sampled	Date Extracted	Date Analyzed	Lab ID	Diesel Organics mg/L	Motor Oil Organics mg/L	Diesel Rpt. Limit mg/L	Motor Oil Rpt. Limit mg/L	Surr. % Recovery
71126WSG										
MW-1201	11/26/97	11:50 AM	12/3/97	12/4/97	90708	< 0.09	< 0.23	0.09	0.23	94%
MW-1202	11/26/97	12:30 PM	12/3/97	12/4/97	90709	0.3	0.3	0.08	0.19	85%
MW-1203	11/26/97	1:00 PM	12/3/97	12/4/97	90710	0.2	< 0.22	0.09	0.22	89%
MW-1301	11/26/97	1:30 PM	12/3/97	12/4/97	90711	< 0.08	< 0.20	0.08	0.20	94%
MW-1302	11/26/97	2:00 PM	12/3/97	12/4/97	90712	0.2	< 0.20	0.08	0.20	96%
MW-1501	11/26/97	2:30 PM	12/3/97	12/4/97	90713	< 0.08	< 0.20	0.08	0.20	99%
MW-1701	11/26/97	11:30 AM	12/3/97	12/4/97	90714	< 0.08	< 0.19	0.08	0.19	89%
MW-1800	11/26/97	3:00 PM	12/3/97	12/4/97	90715	0.2	< 0.20	0.08	0.20	92%
MW-1901	11/26/97	2:45 PM	12/3/97	12/4/97	90716	< 0.08	< 0.19	0.08	0.19	88%
Method Blank					WBLK1203	< 0.08	<0.19	0.08	0.19	91%
Laboratory Control Spike					WLCS1203	78%	NS			86%

NS : Not spiked

Method: WTPH-D

Approved: Rick Bogar
Telephone: (253) 924-6521

Date: 12/5/97

0005

Weyerhaeuser

Analytical & [illegible] g Services

Sample Analysis Request/Chain of Custody Form

Date 11/ /97

Page 1 of 1

Facility: Everett - West Site

Sampler's Project No.: 40141-037.091

Weyerhaeuser Account No.: 1202975670

Project Manager (print): Steve Nelson

Sampler Name (print): Pete McKillop

Recorded By (signed): Pete McKillop

Sampled by:
- ☐ Facility
- ☐ E&AS/WTC
- ☐ E&AS/NB

Consultant: EMCON
Address: 18912 N. Creek Pkwy
Bothell Wa 98112
Phone No: (425) 485-5000 FAX (425) 486-9766

Sample Description (ID, Date, Time are Required)

Method	Field Sample ID (15 characters max.)	Date (m/d/y)	Time (hh:mm)	Depth (ft / m)	Matrix: Water	Matrix: Soil/Sed	Matrix: Oil	Preservative: HCl	Preservative: H_2SO_4	Preservative: HNO_3 (As)	Preservative: $Na_2S_2O_3$	Preservative: Filtered	Number of Containers
	71126WSGmw-1201	11/26/97	1150		X					X			
	1202	"	1230		X					X			
	1203	"	1300		X					X			
	1301	"	1330		X					X			
	1302	"	1400		X					X			
	1501	"	1430		X					X			
	1701	"	1130		X					X			
	1800	"	1500		X					X			
	1901	"	1445		X					X			

Method: G, grab; D, depth composite; T, time composite. Depth required for soil or sediment samples.

Analyses Requested (circle or write in parameters)

pH Cond TDS TSS Color Tannins	Volatile Organics / BTEX	Semi-volatile Organics	TPH: 418.1 TPH-G (TPH-Dext)	Ca Mg Na K Fe Mn	Metals (list below)	NH_3 HCO_3 CO_3 Cl F NO_3 SO_4	AOX	TCLP: Metals VOA SVOA Pest Herb PCBs *	Dioxin: Total / 2,3,7,8-TCDD / 2,3,7,8-TCDF	CN	BOD P-ortho	TKN P-total TOC COD	Dissolved As ①	Notes
			X										X	
			X										X	
			X										X	
			X										X	
			X										X	
			X										X	
			X										X	
			X										X	
			X										X	
													X	
													X	

☐ Samples on Ice or Blue Ice

Lab Turn-Around Time

☐ 24 Hr ☐ 48 Hr ☐ 7 Day

☐ 2-3 wk . Date Due: Standard

Reporting and QA/QC Requirements

RESULTS TO: Steve Nelson

CC:

☐ CLP Package
☐ NPDES Permit
☐ Other: _____
☐ Electronic Report

Remarks/Detection Limit Requirements

① Diss As was field filtered

* Report method blank results for Diss As analysis

Laboratory

☐ WATS/WTC ☐ WATS/NB

☐ Other:

Lab SR#:

Case ID:

SDG ID:

Sample Chain of Custody and Shipping Method Record

Relinquished By Sampler (signature):	Date	Time	Received By (signature):	Shipping Method
Pete McKillop	11/26/97	1500		
Relinquished By (signature):	Date	Time	Received By (signature):	Airbill No.
Relinquished By (signature):	Date	Time	Received For Laboratory By (signature):	
			Dana L. Schafer	11/29/97 1500

Samples Received Intact: yes

Cooler Temp: 4.0 °C

WATS/WTC: 33[illegible] Weyerhaeuser Way South, Federal Way, WA 98003 (206-924-6293)

WATS/NB: New Bern R&D Field Station, Highway 43 North, New Bern, NC 28563 [illegible]-633-7238)

Form 16307 (2/[illegible] Printing Services TP-1 Tacoma

200000

DATA VALIDATION REPORT
WEYERHAEUSER EVERETT WEST SITE
TWELFTH ROUND GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997

DATA QUALIFICATIONS

The following report summarizes the Weyerhaeuser Everett West Site data validation review for seven groundwater samples plus one field duplicate collected on November 26, 1997. Samples were analyzed by Weyerhaeuser Analytical and Testing Services in Tacoma, Washington and reported under service request number 05405. All of the groundwater samples were analyzed for dissolved arsenic and total petroleum hydrocarbons as diesel (TPH-D) and motor oil (TPH-O). Data validation was conducted following procedures specified in the Compliance Monitoring Plan. Samples were labeled as directed by Weyerhaeuser (e.g., the sample from monitoring well MW-1201 was labeled "71126WSGMW-1201"). The field duplicate sample, collected from well MW-1203, was labeled "71126WSGMW-1800". The field blank sample was labeled "71126WSGMW-1901".

HOLDING TIMES

All arsenic and TPH analyses were conducted within holding time limits.

METHOD BLANKS AND FIELD BLANKS

The TPH and dissolved arsenic method blank and field blank results were non-detect.

SURROGATE RECOVERY

All of the surrogate recoveries reported with the TPH analyses were within QC criteria.

DUPLICATE RESULTS

Samples 71126WSGMW-1203 and 71126WSGMW-1800 were field duplicates. Dissolved arsenic was reported in the duplicate sample (3 µg/L) but not in sample MW-1203.

TPH-D was reported in sample MW-1203 and the duplicate sample at a concentration of 0.20 mg/L. TPH-O was not detected in the sample or the duplicate sample. Per EPA guidelines, no qualifiers were assigned to the data based on field duplicate results.

No laboratory duplicate results were recorded.

OVERALL ASSESSMENT OF DATA

All requested analyses were conducted and the data are 100 percent complete. The data are judged to be acceptable for their intended use.

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

REP_DATE	REP_NAME	PRJ_NAME	STA_TYPE	STA_USE	WTR_USE	DATA_REL	STA_ID
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1201
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1202
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1203
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1301
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1302
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1501
3/9/98	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1701

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

STATE_FIPS	COUNTYFIPS	STATE_CHAR	COUNTYCHAR	OWN_NAME	OWN_ADD
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201
53	061	WA	Snohomish	Weyerhaeuser Company	101 E Marine View Drive Everett Washington 98201

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

LOC_METHD	STPCO_NOR	STPCO_EAST	STPCO_ZONE	LAND_NET	MAP_NAME	BORE_DEP
Clark M. Leeman Land Surveying, Various	373554	1308299	N	SW1/4NW1/4T29NR5E	Marysville	15.00
Clark M. Leeman Land Surveying, Various	373747	1308193	N	SW1/4NW1/4T29NR5E	Marysville	15.00
Clark M. Leeman Land Surveying, Various	373901	1307959	N	SW1/4NW1/4T29NR5E	Marysville	10.00
Clark M. Leeman Land Surveying, Various	373987	1307726	N	SW1/4NW1/4T29NR5E	Marysville	10.00
Clark M. Leeman Land Surveying, Various	374038	1307514	N	SW1/4NW1/4T29NR5E	Marysville	10.00
Clark M. Leeman Land Surveying, Various	373939	1306923	N	SW1/4NW1/4T29NR5E	Marysville	11.50
Clark M. Leeman Land Surveying, Various	372854	1308027	N	SW1/4NW1/4T29NR5E	Marysville	9.00

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

WELL_DEP	WTR_ELEV1	WLEV_DAT1	ELEV_UNITS	MEAS_ELEV	MEAS_DESC	DATUM
15.00	3.93	6/14/93	FEET	15.43	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929
15.00	6.26	6/10/93	FEET	13.26	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929
10.00	5.25	6/9/93	FEET	10.75	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929
10.00	6.55	6/9/93	FEET	11.55	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929
10.00	7.29	6/9/93	FEET	12.29	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929
10.00	6.19	6/10/93	FEET	10.19	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929
8.00	8.21	6/9/93	FEET	11.71	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

ALTITUDE	DEPTOWTR1	MOREINT	UP_DEPTH	LOW_DEPTH	MTD_CON	FILT_LEN	FILT_MAT	DIA_BOR	DIA_CAS	CAS_MAT
12.43	8.50	N	8	18	B	11.00	10-20 Colorado Silica Sand	8	2	P
10.26	4.00	N	6	18	B	13.00	10-20 Colorado Silica Sand	8	2	P
10.75	5.50	N	3	10	B	8.00	10-20 Colorado Silica Sand	8	2	P
11.55	5.00	N	3	10	B	8.00	10-20 Colorado Silica Sand	8	2	P
12.29	5.00	N	3	10	B	8.00	10-20 Colorado Silica Sand	8	2	P
10.19	4.00	N	3	10	B	8.00	10-20 Colorado Silica Sand	8	2	P
12.00	3.50	N	2	8	B	7.50	10-20 Colorado Silica Sand	8	2	P

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

DIA_OPN	LEN_OPN	TYP_OPN	TYP_OMT
2	10.00	P	P
2	12.00	P	P
2	7.00	P	P
2	7.00	P	P
2	7.00	P	P
2	7.00	P	P
2	6.00	P	P

LOG_DOC	OTHER_DOC
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	
Compilation of Assessment Documents for Weyerhaeuser Everett West Site. Prepared for Weyerhaeuser Company by EMCON	

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
SITE DESCRIPTION FILE

LOG_LOC	ANDAT_AVAL	PROGRAM	
Ecology Northwest Regional Office	Y		
Ecology Northwest Regional Office	Y		
Ecology Northwest Regional Office	Y		
Ecology Northwest Regional Office	Y		
Ecology Northwest Regional Office	Y		
Ecology Northwest Regional Office	Y		
Ecology Northwest Regional Office	Y		

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
FIELD SAMPLE FILE

PRI_STA	STA_ID	X_LOCATION	Y_LOCATION	STPLNZONE	LO_DAT_U	LOC_DATUM	DEPT_WATER
	MW-1201	373554	1308299	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	12.15
	MW-1201	373554	1308299	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	12.15
	MW-1202	373747	1308193	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	7.52
	MW-1202	373747	1308193	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	7.52
	MW-1203	373901	1307959	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.86
	MW-1203	373901	1307959	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.86
	MW-1301	373987	1307726	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.08
	MW-1301	373987	1307726	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.08
	MW-1302	374038	1307514	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.49
	MW-1302	374038	1307514	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.49
	MW-1501	373939	1306923	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.35
	MW-1501	373939	1306923	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.35
	MW-1701	372854	1308027	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	3.96
	MW-1701	372854	1308027	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	3.96

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
FIELD SAMPLE FILE

UP_DEPTH	DEPT_UNITS	LOW_DEPTH	WTR_ELEV	AGENCY	SAMPLE_DAT	SAMP_TIME	SAMPLE_ID	FILTERED	ANAL_MTHOD
8.00	FEET	18.00	3.28	ECOLOGY	11/26/97	1135	comment	FALSE	WTPH-D
8.00	FEET	18.00	3.28	ECOLOGY	11/26/97	1135	comment	TRUE	EPA 200.9
6.00	FEET	18.00	5.74	ECOLOGY	11/26/97	1210	comment	FALSE	WTPH-D
6.00	FEET	18.00	5.74	ECOLOGY	11/26/97	1210	comment	TRUE	EPA 200.9
3.00	FEET	10.00	5.89	ECOLOGY	11/26/97		comment	FALSE	WTPH-D
3.00	FEET	10.00	5.89	ECOLOGY	11/26/97		comment	TRUE	EPA 200.9
3.00	FEET	10.00	6.47	ECOLOGY	11/26/97	1310	comment	FALSE	WTPH-D
3.00	FEET	10.00	6.47	ECOLOGY	11/26/97	1310	comment	TRUE	EPA 200.9
3.00	FEET	10.00	6.80	ECOLOGY	11/26/97	1340	comment	FALSE	WTPH-D
3.00	FEET	10.00	6.80	ECOLOGY	11/26/97	1340	comment	TRUE	EPA 200.9
3.00	FEET	10.00	5.84	ECOLOGY	11/26/97	1410	comment	FALSE	WTPH-D
3.00	FEET	10.00	5.84	ECOLOGY	11/26/97	1410	comment	TRUE	EPA 200.9
2.00	FEET	8.00	7.75	ECOLOGY	11/26/97	1100	comment	FALSE	WTPH-D
2.00	FEET	8.00	7.75	ECOLOGY	11/26/97	1100	comment	TRUE	EPA 200.9

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
FIELD SAMPLE FILE

MEAS_ELEV	ELEV_UNITS	MEAS_DESC	DATUM	MATRIX	SOURCE_COD	COLLECTMET	FIELD_PH	FIELD_COND	FIELD_TEMP
15.43	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.57	1477	14
15.43	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.57	1477	14
13.26	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	7.25	953	16
13.26	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	7.25	953	16
10.75	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	7.15	979	16
10.75	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	7.15	979	16
11.55	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	7.56	529	11
11.55	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	7.56	529	11
12.29	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.42	1600	12
12.29	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.42	1600	12
10.19	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.78	452	11
10.19	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.78	452	11
11.71	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.86	195	12
11.71	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.86	195	12

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
FIELD SAMPLE FILE

PURGE_METH	PURGE_VOL	PRJ_NAME	COMMENTS
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1201
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1201
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1202
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1202
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1203
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1203
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1301
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1301
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1302
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1302
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1501
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1501
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1701
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 71126WSGMW-1701

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
LAB SAMPLE FILE

PRI_STA	STA_ID	SAMPLE_DAT	ANALYZ_DAT	SAMPLE_ID	LAB_NAME	LABSAMP_ID	CONSTITUEN	CAS_ID
	MW-1201	11/26/97		71126WSGMW-1201	WEYERHAEUSER	85589	TPH AS DIESEL	68334-30-5
	MW-1201	11/26/97		71126WSGMW-1201	WEYERHAEUSER	85589	TPH AS MOTOR OIL	GIS-130-114
	MW-1201	11/26/97		71126WSGMW-1201	WEYERHAEUSER	85589	ARSENIC	7440-38-2
	MW-1202	11/26/97		71126WSGMW-1202	WEYERHAEUSER	85590	TPH AS DIESEL	68334-30-5
	MW-1202	11/26/97		71126WSGMW-1202	WEYERHAEUSER	85590	TPH AS MOTOR OIL	GIS-130-114
	MW-1202	11/26/97		71126WSGMW-1202	WEYERHAEUSER	85590	ARSENIC	7440-38-2
	MW-1203	11/26/97		71126WSGMW-1203	WEYERHAEUSER	85591	TPH AS DIESEL	68334-30-5
	MW-1203	11/26/97		71126WSGMW-1203	WEYERHAEUSER	85591	TPH AS MOTOR OIL	GIS-130-114
	MW-1203	11/26/97		71126WSGMW-1203	WEYERHAEUSER	85591	ARSENIC	7440-38-2
	MW-1301	11/26/97		71126WSGMW-1301	WEYERHAEUSER	85592	TPH AS DIESEL	68334-30-5
	MW-1301	11/26/97		71126WSGMW-1301	WEYERHAEUSER	85592	TPH AS MOTOR OIL	GIS-130-114
	MW-1301	11/26/97		71126WSGMW-1301	WEYERHAEUSER	85592	ARSENIC	7440-38-2
	MW-1302	11/26/97		71126WSGMW-1800	WEYERHAEUSER	85593	TPH AS DIESEL	68334-30-5
	MW-1302	11/26/97		71126WSGMW-1800	WEYERHAEUSER	85593	TPH AS MOTOR OIL	GIS-130-114
	MW-1302	11/26/97		71126WSGMW-1800	WEYERHAEUSER	85593	ARSENIC	7440-38-2
	MW-1501	11/26/97		71126WSGMW-1501	WEYERHAEUSER	85594	TPH AS DIESEL	68334-30-5
	MW-1501	11/26/97		71126WSGMW-1501	WEYERHAEUSER	85594	TPH AS MOTOR OIL	GIS-130-114
	MW-1501	11/26/97		71126WSGMW-1501	WEYERHAEUSER	85594	ARSENIC	7440-38-2
	MW-1701	11/26/97		71126WSGMW-1701	WEYERHAEUSER	85595	TPH AS DIESEL	68334-30-5
	MW-1701	11/26/97		71126WSGMW-1701	WEYERHAEUSER	85595	TPH AS MOTOR OIL	GIS-130-114
	MW-1701	11/26/97		71126WSGMW-1701	WEYERHAEUSER	85595	ARSENIC	7440-38-2

WEYERHAEUSER EVERETT WEST SITE
GROUNDWATER COMPLIANCE MONITORING
NOVEMBER 1997
LAB SAMPLE FILE

P_CODE	RESULT	UNITS	QUAL	QA_QUAL	LIMIT	DILUTION	FILTERED	ANAL_MTHOD	MATRIX	PRJ_NAME
	0	MG/L	U		0.09		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.23		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0.004	MG/L			0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
	0.3	MG/L			0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0.3	MG/L			0.20		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0.015	MG/L			0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
	0.2	MG/L			0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.22		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.08		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.20		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0.045	MG/L			0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
	0.2	MG/L			0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.20		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0.003	MG/L			0.0025		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.08		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.20		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0.005	MG/L			0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.08		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.19		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
	0	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site