



101 East Marine View Drive
Everett, Washington 98201
Tel (206) 339 2800
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RECEIVED

JUL 15 1997

Department of Ecology
Industrial Section

July 14, 1997

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

Re: Weyerhaeuser Everett West Site -- 1997; Tenth Round Compliance Ground Water Monitoring Data

Dear Mr. Skyllingstad:

Enclosed are two copies of the report titled "Tenth 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 (206) 339-2871.

Sincerely,

Stuart Triolo

Stuart Triolo
Environmental Engineer

ECO10GW.DOC

Circle:	Cop.	Rpt	Int.	Inf	Eng.
	Air	Water	DW/RCRA	HWCU	SW
Company Name					

*Weyerhaeuser
Everett
West Site*

Enclosure: Tenth 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

TENTH ROUND COMPLIANCE MONITORING GROUNDWATER SAMPLING RESULTS - WEYERHAEUSER EVERETT WEST SITE

This report summarizes the results of the tenth round sampling event for compliance monitoring groundwater sampling activities performed at the Weyerhaeuser Everett West Site (West Site) during May 1997. The West Site is located at 101 East Marine View Drive in Everett, Washington.

SAMPLING ACTIVITIES

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 May 28, 1997. One field duplicate sample was collected from monitoring well MW-1203 and designated 70528WSGMW-1800. One field blank was prepared and designated 70528WSGMW-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.

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.

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 detected in three samples. Concentrations ranged from 0.12 to 0.25 milligrams per liter (mg/L). TPH-O was detected in one sample at 0.18 mg/L. Dissolved arsenic was detected in two samples at 9 and 45 micrograms per liter ($\mu\text{g/L}$).

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 detections or trends were noted in the laboratory results for the tenth round of compliance groundwater monitoring. In general, the concentrations of compounds detected from the May 1997 sampling event were consistent with detections from previous rounds of sampling.

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



Steve Nelson, R.G.
Project Manager



Linda Dawson
Director of Environmental Services

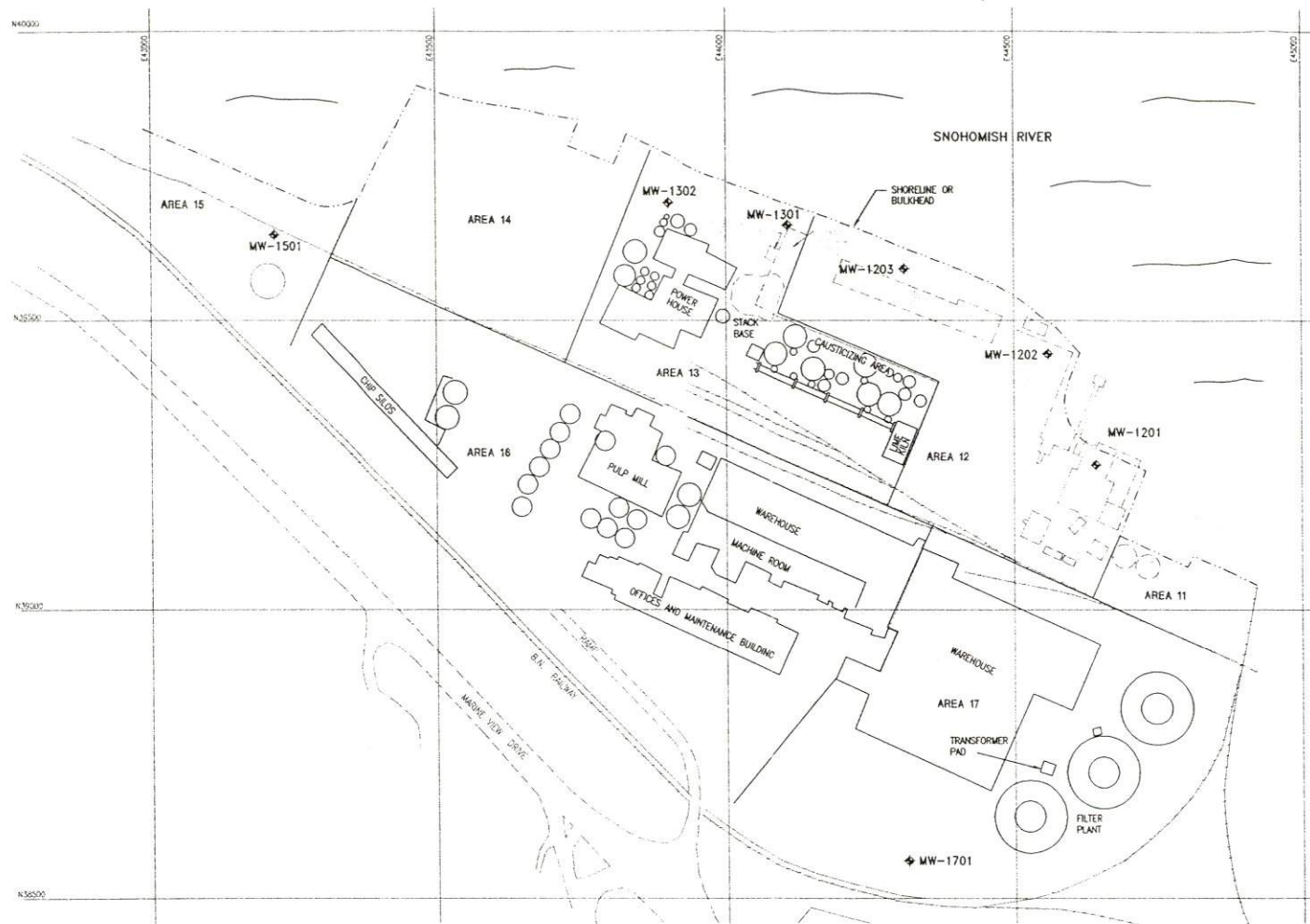
Attachments: Limitations

- Figure 1 - Site Map and Monitoring Well Locations
- Table 1 - Depth to Groundwater Measurements
- Table 2 - Summary of Groundwater Field Parameters
- Table 3 - May 1997 Sample Results
- Table 4 - May 1997 Duplicate Sample; Dissolved Arsenic Results
- Table 4a - May 1997 Duplicate Sample; TPH Results
- Table 5 - May 1997 Field Blank Sample; Dissolved Arsenic Results
- Table 5a - May 1997 Field Blank Sample; TPH 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.



LEGEND

- MW-1701 ◆ GROUNDWATER MONITORING WELL (EMCON 12/93)
- SHORELINE OR BULKHEAD
- FENCE



0 200 400
SCALE (ft)

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

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

Well Number	Date Collected	Time	Depth to Water (feet)
MW-1201	05/28/97	1045	12.20
MW-1202	05/28/97	1130	7.50
MW-1203	05/28/97	1220	5.35
MW-1301	05/28/97	1300	5.43
MW-1302	05/28/97	1326	5.91
MW-1501	05/28/97	1402	4.45
MW-1701	05/28/97	1006	4.25

Table 2

**Summary of Groundwater Field Parameters
Weyerhaeuser Everett West Site
May 1997**

Monitoring Well	Sample Designation	Date Collected	Time	pH	Conductivity (µmhos)	Temp (°C)
MW-1201	70528WSGMW-1201	05/28/97	1115	6.36	600	13.0
MW-1202	70528WSGMW-1202	05/28/97	1220	6.96	680	15.0
MW-1203	70528WSGMW-1203	05/28/97	1245	6.76	750	16.0
MW-1301	70528WSGMW-1301	05/28/97	1330	6.84	240	13.0
MW-1302	70528WSGMW-1302	05/28/97	1350	6.55	940	14.0
MW-1501	70528WSGMW-1501	05/28/97	1430	6.81	320	14.0
MW-1701	70528WSGMW-1701	05/28/97	1030	6.07	170	16.0
Field Dup.	70528WSGMW-1800	05/28/97	0900	6.76	750	16.0

May 1997 Duplicate Sample; Dissolved Arsenic
Weyerhaeuser Everett West Site

SAMPLE TYPE: Water
TCL ID: WEST-AS
PF CODE: Dissolved
LAB ID: WEYCO

[illegible]

< = Not detected at indicated reporting limit

May 1997 Duplicate Sample; TPH Results
Weyerhaeuser Everett West Site

< = Not detected at indicated reporting limit

Page: 1A

SAMPLING EVENT: 97-WE-2 (05/26/97 to 05/29/97)

[illegible]

Page: 1A

SAMPLING EVENT: 97-WE-2 (05/26/97 to 05/29/97)
SAMPLE TYPE: Water
TCL ID: WEST-ALL
PF CODE: Total
LAB ID: WEYCO

[illegible]

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 <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. <u>40141-037.1D</u>	Site ID <u>MW-1201</u>
Facility <u>Everett-West</u>		Date (m/d/y) <u>5-28-97</u>

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

Air Temp: <u>50.5</u> <input type="checkbox"/> °C <input checked="" type="checkbox"/> °F	Weather: <u>Rain</u>
Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	
Damaged/Repairs Needed: _____	
TOC <input type="checkbox"/> MP Description: <u>Stickup</u>	
TOC/MP Stickup: <input checked="" type="checkbox"/> ft <input type="checkbox"/> m above/below ground Well Inside Diameter (ID): <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 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: 19.8

	Initial	Confirmation	At Start of Purging	At End of Purging		Remarks
<input type="checkbox"/> E-Tape, # _____						
<input type="checkbox"/> Steel Tape <input type="checkbox"/> Other						
Time (hh:mm)	<u>1045</u>					
Depth to Water	<u>12.2</u>					
Tape Correction						
Water Level (WL)						
Product Thickness						
Product Recovery						
<input type="checkbox"/> gallons <input type="checkbox"/> 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: (.67) ☐ Grab ☐ Bailor ☒ Pump Description: Peristaltic

Casing Volume: $[19.8 \text{ (TD)} - 12.2 \text{ (WL)}] \cdot 2 \text{ (Well ID)}^2 \cdot 0.0408 \text{ (Conversion Factor)} = 1.24 \text{ gal}$ <input checked="" type="checkbox"/> gal <input type="checkbox"/> liters							Well Goes Dry <input type="checkbox"/> While Purging		
							(Final)	Meter Type	Remarks
<input checked="" type="checkbox"/> Cum. Vol. Purged	<u>1.25</u>	<u>2.50</u>	<u>3.75</u>						
<input type="checkbox"/> Pumping Rate									
Time Measured (hh:mm)	<u>1055</u>	<u>1107</u>	<u>1115</u>						
pH <input type="checkbox"/> Temp. Compensated	<u>6.42</u>	<u>6.41</u>	<u>6.36</u>				DSPH		
Temperature <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	<u>13</u>	<u>13</u>	<u>13</u>						
Dissolved Oxygen mg/l	<u>—</u>	<u>—</u>	<u>—</u>						
<input checked="" type="checkbox"/> SC or <input type="checkbox"/> EC $\mu\text{S/cm}$	<u>600</u>	<u>600</u>	<u>600</u>				DSPH		
Turbidity <input type="checkbox"/> NTU	<u>—</u>	<u>—</u>	<u>clear</u>						
Color/Tint	<u>—</u>	<u>—</u>	<u>none</u>						
Odor	<u>—</u>	<u>—</u>	<u>no noticeable</u>						

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volume 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 before sampling or average 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 ($\mu\text{S/cm}$ at 25°C); EC: Electrical Conductivity not corrected for temperature ($\mu\text{S/cm}$). $\mu\text{S/cm} = \mu\text{mho/cm}$. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon.

Sample Data Sample Depth: _____ ☐ Grab ☒ Bailor ☐ Pump Description: field filtered w/ pump

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
<u>70528WSGMW-1201</u>	<u>P0</u>	<u>5-28-97</u>	<u>1115</u>	<u>2</u>	<u>AS</u>				

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 mmdyy. 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) <u>Michelle Lange / Pete McK...</u>	Signature <u>Michelle Lange</u>	Date Entered into Database _____	Page _____ of _____
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WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. <u>40141-037.1D</u>	Site ID <u>MW-1202</u>
	Facility <u>Everett-West</u>	Date (m/d/y) <u>5-28-97</u>

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

Air Temp: <u>50s</u> <input type="checkbox"/> °C <input checked="" type="checkbox"/> °F	Weather: <u>Rain</u>
Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Damaged/Repairs Needed: <u>Replaced lock</u>
<input checked="" type="checkbox"/> TOC <input type="checkbox"/> MP Description: <u>Stickup</u>	
TOC/MP <u>Stickup</u> <input checked="" type="checkbox"/> ft <input type="checkbox"/> m above/below ground	Well Inside Diameter (ID): <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data		Measurement Units: <input checked="" type="checkbox"/> ft <input type="checkbox"/> m	Well or Borehole Total Depth (TD) from MP or TOC: <u>20'</u>				Remarks
<input type="checkbox"/> E-Tape, #	<input type="checkbox"/> Steel Tape <input type="checkbox"/> Other	Initial	Confirmation	At Start of Purging	At End of Purging		
Time (hh:mm)		<u>11:30</u>					
Depth to Water		<u>7.50</u>					
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery							
<input type="checkbox"/> gallons <input type="checkbox"/> 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:	<input type="checkbox"/> Grab <input type="checkbox"/> Bailor <input checked="" type="checkbox"/> Pump	Description: <u>Peristaltic</u>			Well Goes Dry While Purging <input type="checkbox"/>
Casing Volume: $[20 \text{ (TD)} - 7.50 \text{ (WL)}] \cdot [2 \text{ (Well ID)}]^2 \cdot [0.0408 \text{ (Conversion Factor)}] = 2.04 \text{ gal}$ <input type="checkbox"/> 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							
<input checked="" type="checkbox"/> Cum. Vol. Purged	<input type="checkbox"/> Pumping Rate				(Final)	Meter Type	Remarks
		<u>150</u>	<u>4</u>	<u>6</u>			
Time Measured (hh:mm)		<u>1:50</u>	<u>12:05</u>	<u>12:15</u>			
pH <input type="checkbox"/> Temp. Compensated		<u>6.81</u>	<u>6.80</u>	<u>6.96</u>		<u>DSPH</u>	
Temperature <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F		<u>16</u>	<u>16</u>	<u>15</u>			
Dissolved Oxygen mg/l		<u>—</u>	<u>—</u>	<u>—</u>			
<input type="checkbox"/> SC or <input type="checkbox"/> EC <input type="checkbox"/> μS/cm		<u>680</u>	<u>680</u>	<u>680</u>		<u>DSPH</u>	
Turbidity <input type="checkbox"/> NTU		<u>—</u>	<u>—</u>	<u>clear</u>			
Color/Tint		<u>—</u>	<u>—</u>	<u>none</u>			
Odor		<u>—</u>	<u>—</u>	<u>no notice</u>			

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volume 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 before sampling or average 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:	<input type="checkbox"/> Grab <input checked="" type="checkbox"/> Bailor <input type="checkbox"/> Pump	Description: <u>field filtered w/pump</u>					
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
<u>70528WSG-MW-1202</u>	<u>P0</u>	<u>5-28-97</u>	<u>12:20</u>	<u>2</u>	<u>AS</u>				

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 mmdyyy. 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) Michelle Lange / Pete McKelvey

Date Entered into Database

By

Page of

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. <u>40141-037.1R</u>	Site ID <u>MW-1203</u>
	Facility <u>Everett-West</u>	Date (m/d/y) <u>5-28-97</u>

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

Air Temp: <u>50°</u> <input type="checkbox"/> °C <input checked="" type="checkbox"/> °F	Weather: <u>Rain</u>
Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Damaged/Repairs Needed:
<input type="checkbox"/> TOC <input type="checkbox"/> MP Description: <u>Flush mount</u>	
TOC/MP Stickup: <u>1</u> ft <input type="checkbox"/> m above/below ground	Well Inside Diameter (ID): <u>2</u> -inch <input type="checkbox"/> 4-inch Other:
Site Remarks (neaby wells pumping, tide, stream stage, etc.)	

Water Level Data

Measurement Units: ☒ ft ☐ mWell or Borehole Total Depth (TD) from MP or TOC: 9.4'

<input type="checkbox"/> E-Tape, # <input type="checkbox"/> Steel Tape <input type="checkbox"/> Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	<u>12:20</u>						
Depth to Water	<u>5.35</u>						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery							
<input type="checkbox"/> gallons <input type="checkbox"/> 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 ☐ Bailor ☒ PumpDescription: Peristaltic

Casing Volume: <u>940</u> (TD) - <u>5.35</u> (WL) • <u>2</u> (Well ID) • <u>0.0408</u> (Conversion Factor) = <u>66</u> gal <input checked="" type="checkbox"/> liters	Well Goes Dry While Purging <input type="checkbox"/>
Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches	
<input checked="" type="checkbox"/> Cum. Vol. Purged	<u>0.7</u> <u>2230</u> <u>0.14</u> <u>1245</u> <u>2.1</u> <u>1245</u>
<input type="checkbox"/> Pumping Rate	
Time Measured (hh:mm)	<u>1230</u> <u>1238</u> <u>1245</u>
pH <input type="checkbox"/> Temp. Compensated	<u>6.84</u> <u>6.79</u> <u>6.76</u>
Temperature <input type="checkbox"/> °C <input type="checkbox"/> °F	<u>16</u> <u>16</u>
Dissolved Oxygen mg/l	<u>—</u> <u>—</u> <u>—</u>
<input type="checkbox"/> SC or <input type="checkbox"/> EC μ S/cm	<u>750</u> <u>750</u> <u>750</u>
Turbidity <input type="checkbox"/> NTU	<u>—</u> <u>—</u> <u>clear</u>
Color/Tint	<u>—</u> <u>—</u> <u>none</u>
Odor	<u>—</u> <u>—</u> <u>no noticeable</u>

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volume 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 before sampling or average 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 (μ S/cm at 25°C); EC: Electrical Conductivity not corrected for temperature (μ S/cm). μ S/cm = μ mho/cm. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon.

Sample Data

Sample Depth:

☐ Grab ☒ Bailor ☐ PumpDescription: field filtered w/pump

Field Sample ID (unique ID on bottles)	Result Code	Date (m/d/y)	Time (hh:mm)	Bottles (total to lab)	Filtered (0.45 μ m)	Lab ID	Case ID	SDG ID	Remarks
<u>70528WS6MW-1203 P0</u>		<u>5-28-97</u>	<u>1245</u>	<u>2</u>	<u>AS</u>				
<u>" -1800 "</u>		<u>"</u>	<u>0900</u>	<u>"</u>	<u>"</u>				<u>Duplicate</u>

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 mmdydy. 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) <u>Michelle Lange / Pete McK...</u>	Signature <u>Michelle Lange</u>
Date Entered into Database	Page of

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. <u>40141-037.1D</u>	Site ID <u>MW-1301</u>
Facility <u>Everett-West</u>		Date (m/d/y) <u>5-28-97</u>

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

Air Temp: <u>50.9</u> °C <input checked="" type="checkbox"/> °F Weather: <u>Rain</u>	Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Damaged/Repairs Needed: _____
TOC <input type="checkbox"/> MP <input type="checkbox"/> Description: <u>Flush</u>	
TOC/MP Stickup: <u>1</u> ft <input type="checkbox"/> m above/below ground Well Inside Diameter (ID): <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch Other: _____	
Site Remarks (neaby wells pumping, tide, stream stage, etc.) _____	

Water Level Data		Measurement Units:	Well or Borehole Total Depth (TD) from MP or TOC:				
		<input checked="" type="checkbox"/> ft <input type="checkbox"/> m	<u>9.4</u>				
<input type="checkbox"/> E-Tape, # _____ <input type="checkbox"/> Steel Tape <input type="checkbox"/> Other	Initial	Confirmation	At Start of Purging	At End of Purging			Remarks
Time (hh:mm)	<u>1300</u>						
Depth to Water	<u>5.43</u>						
Tape Correction							
Water Level (WL)							
Product Thickness							
Product Recovery							
<input type="checkbox"/> gallons <input type="checkbox"/> 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:			Description:		
		<input type="checkbox"/> Grab <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump			<u>Peristaltic</u>		
Casing Volume: $[9.4 \text{ (TD)} - 5.43 \text{ (WL)}] \cdot [2 \text{ (Well ID)}]^2 \cdot [0.0408 \text{ (Conversion Factor)}] = 0.65 \text{ gal}$ <input type="checkbox"/> gal <input type="checkbox"/> liters					Well Goes Dry <input type="checkbox"/> While Purging <input type="checkbox"/>		
<input checked="" type="checkbox"/> Cum. Vol. Purged <input type="checkbox"/> Pumping Rate	0.7	1.4	2.1		(Final)	Meter Type	Remarks
Time Measured (hh:mm)	<u>1308</u>	<u>1313</u>	<u>1318</u>				
pH <input type="checkbox"/> Temp. Compensated	<u>6.98</u>	<u>6.94</u>	<u>6.84</u>			<u>DSPH</u>	
Temperature °C °F	<u>13</u>	<u>13</u>	<u>13</u>				
Dissolved Oxygen mg/l	<u>—</u>	<u>—</u>	<u>—</u>				
<input checked="" type="checkbox"/> SC or <input type="checkbox"/> EC μS/cm	<u>230</u>	<u>240</u>	<u>240</u>			<u>DSPH</u>	
Turbidity <input type="checkbox"/> NTU	<u>—</u>	<u>—</u>	<u>clear</u>	<u>- threadlike organisms</u>			
Color/Tint	<u>—</u>	<u>—</u>	<u>none</u>	<u>is purgewater</u>			
Odor	<u>—</u>	<u>—</u>	<u>clear</u>				

Record time purging starts and ends in Water Level Data section. Cum. Vol. Purged: cumulative volume 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 before sampling or average 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:			Description:				
		<input type="checkbox"/> Grab <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Pump			<u>field filtered w/ pump</u>				
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
<u>70528WS6MW-1301P0</u>		<u>5-28-97</u>	<u>1330</u>	<u>2</u>	<u>AS</u>				

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 mnddy. 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) <u>Michelle Lange / Pete McKelvey</u>	Signature <u>Michelle Lange</u>
Date Entered into Database _____	By _____
Page _____	of _____

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. 40141-037.1D	Site ID MW-1302
	Facility Everett-West	Date (m/d/y) 5-28-97

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

Air Temp: 50's <input type="checkbox"/> °C <input checked="" type="checkbox"/> °F	Weather: Rain
Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Damaged/Repairs Needed:
<input type="checkbox"/> TOC <input type="checkbox"/> MP Description: Flush	
TOC/MP Stickup: <input checked="" type="checkbox"/> ft <input type="checkbox"/> m above/below ground	Well Inside Diameter (ID): <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 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'

<input type="checkbox"/> E-Tape, # <input type="checkbox"/> Steel Tape <input type="checkbox"/> Other	Initial	Confirmation	At Start of Purging	At End of Purging	Remarks
Time (hh:mm)	1326				
Depth to Water	5.91				
Tape Correction					
Water Level (WL)					
Product Thickness					
Product Recovery					
<input type="checkbox"/> gallons <input type="checkbox"/> 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 ☐ Bailor ☒ Pump Description: Peristaltic

Casing Volume: $[9.4 \text{ (TD)} - 5.91 \text{ (WL)}] \cdot 1.2 \text{ (Well ID)}^2 \cdot 0.0408 \text{ (Conversion Factor)} = 0.57 \text{ gal}$ <input type="checkbox"/> gal <input type="checkbox"/> 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 <input type="checkbox"/>	
<input checked="" type="checkbox"/> Cum. Vol. Purged <input type="checkbox"/> Pumping Rate	0.6	1.2	1.8	(Final)	Meter Type	Remarks		
Time Measured (hh:mm)	1335	1340	1345					
pH <input type="checkbox"/> Temp. Compensated	6.59	6.57	6.55		DSPH			
Temperature <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	14	14	14					
Dissolved Oxygen mg/l	—	—	—					
<input checked="" type="checkbox"/> SC or <input type="checkbox"/> EC μS/cm	920	940	940		DSPH			
Turbidity <input type="checkbox"/> NTU	—	—	clear					
Color/Tint	—	—	none					
Odor	—	—	no noticable					

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volume 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 before sampling or average 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 ☒ Bailor ☐ Pump Description: field filtered w/ pump

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
70528WISGMW-1302P0		5-28-97	1350	2	AS				
11 -1901 "		"	1000	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 mmdydy. 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) Michelle Lange / Pete McK...	Signature Michelle Lange
Date Entered into Database	By Page of

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. <u>40141-037.1R</u>	Site ID <u>MW-1501</u>
Facility <u>Everett-West</u>		Date (m/d/y) <u>5-28-97</u>

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

Air Temp: <u>50s</u> <input type="checkbox"/> °C <input checked="" type="checkbox"/> °F	Weather: <u>Rain</u>
Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Damaged/Repairs Needed: _____
TOC <input type="checkbox"/> MP Description: <u>Flush</u>	
TOC/MP Stickup: <u>1</u> ft <input type="checkbox"/> m above/below ground	Well Inside Diameter (ID): <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 4-inch Other: _____
Site Remarks (neaby wells pumping, tide, stream stage, etc.) _____	

Water Level Data		Measurement Units:	Well or Borehole Total Depth (TD) from MP or TOC:					Remarks
<input type="checkbox"/> E-Tape, # _____ <input type="checkbox"/> Steel Tape <input type="checkbox"/> Other		<input checked="" type="checkbox"/> ft <input type="checkbox"/> m	9.5					
	Initial	Confirmation	At Start of Purging	At End of Purging				
Time (hh:mm)	<u>1402</u>							
Depth to Water	<u>4.45</u>							
Tape Correction								
Water Level (WL)								
Product Thickness								
Product Recovery								
<input type="checkbox"/> gallons <input type="checkbox"/> 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:			Description:		
Casing Volume: $[9.5 \text{ (TD)} - 4.45 \text{ (WL)}] \cdot 1.2 \text{ (Well ID)}^2 \cdot 0.00408 \text{ (Conversion Factor)} = 0.82 \text{ gal}$		<input type="checkbox"/> Grab <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump			<u>Peristaltic</u>	<input type="checkbox"/> Well Goes Dry While Purging	
<input checked="" type="checkbox"/> Cum. Vol. Purged <input type="checkbox"/> Pumping Rate	<u>0.8</u>	<u>1.6</u>	<u>2.4</u>		(Final)	Meter Type	Remarks
Time Measured (hh:mm)	<u>1410</u>	<u>1418</u>	<u>1425</u>				
pH <input type="checkbox"/> Temp. Compensated	<u>6.90</u>	<u>6.87</u>	<u>6.81</u>			<u>DSPH</u>	
Temperature <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	<u>15</u>	<u>14</u>	<u>14</u>				
Dissolved Oxygen mg/l	<u>—</u>	<u>—</u>	<u>—</u>				
<input checked="" type="checkbox"/> SC or <input type="checkbox"/> EC μS/cm	<u>310</u>	<u>320</u>	<u>320</u>			<u>DSPH</u>	
Turbidity <input type="checkbox"/> NTU	<u>—</u>	<u>—</u>	<u>clear</u>				
Color/Tint	<u>—</u>	<u>—</u>	<u>none</u>				
Odor	<u>—</u>	<u>—</u>	<u>no noticeable</u>				

Record time purging starts and ends in Water Level Data section. Cum. Vol. Purged: cumulative volume 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 before sampling or average 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:			Description:					
<input type="checkbox"/> Grab <input checked="" type="checkbox"/> Bailer <input type="checkbox"/> Pump				<u>field filtered w/pump</u>						
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	
<u>70528WS6-MW-150</u>	<u>P0</u>	<u>5-28-97</u>	<u>1430</u>	<u>2</u>	<u>AS</u>					

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 mmdy. 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) Michelle Lange / Pete McKnight Signature Michelle Lange

Date Entered into Database _____

By _____

Page _____ of _____

WEYERHAEUSER GROUNDWATER SAMPLING RECORD

Company <input type="checkbox"/> ES&T/WTC <input type="checkbox"/> ES&T/NB	Project No. <u>40141-037.1D</u>	Site ID <u>MW-1701</u>
	Facility <u>Everett-West</u>	Date (m/d/y) <u>5-28-97</u>

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

Air Temp: <u>50.3</u> <input type="checkbox"/> °C <input checked="" type="checkbox"/> °F	Weather: <u>Rain</u>
Well Locked? <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Damaged/Repairs Needed:
<input type="checkbox"/> TOC <input type="checkbox"/> MP Description: <u>Flush</u>	
TOC/MP Stickup: <input checked="" type="checkbox"/> ft <input type="checkbox"/> m above/below ground	Well Inside Diameter (ID): <input checked="" type="checkbox"/> 2-inch <input type="checkbox"/> 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

<input type="checkbox"/> E-Tape, # <input type="checkbox"/> Steel Tape <input type="checkbox"/> Other	Initial	Confirmation	At Start of Purging	At End of Purging		Remarks
Time (hh:mm)	<u>1006</u>					
Depth to Water	<u>4.25</u>					
Tape Correction						
Water Level (WL)						
Product Thickness						
Product Recovery						
<input type="checkbox"/> gallons <input type="checkbox"/> 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 ☐ Bailor ☒ Pump Description: Peristaltic

Casing Volume: $[7.7(TD) - 4.25(WL)] \cdot [2(Well ID)]^2 \cdot [0.0408(Conversion Factor)] = 0.56 gal$ <input type="checkbox"/> liters							Well Goes Dry While Purging <input type="checkbox"/>	
Conversion Factor = 0.0408 for feet and gallons; 0.1544 for feet and liters; 0.5066 for meters and liters; Well ID in inches								
<input checked="" type="checkbox"/> Cum. Vol. Purged	<u>0.5</u>	<u>1.0</u>	<u>1.5</u>		(Final)	Meter Type	Remarks	
<input type="checkbox"/> Pumping Rate								
Time Measured (hh:mm)	<u>1020</u>	<u>1025</u>	<u>1030</u>					
pH <input type="checkbox"/> Temp. Compensated	<u>6.01</u>	<u>6.05</u>	<u>6.07</u>			<u>DSPH</u>		
Temperature <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	<u>16</u>	<u>16</u>	<u>16</u>					
Dissolved Oxygen mg/l	<u>—</u>	<u>—</u>	<u>—</u>					
<input checked="" type="checkbox"/> SC or <input type="checkbox"/> EC $\mu S/cm$	<u>180</u>	<u>180</u>	<u>170</u>			<u>DSPH</u>		
Turbidity <input type="checkbox"/> NTU	<u>—</u>	<u>—</u>	<u>clear</u>					
Color/Tint	<u>—</u>	<u>—</u>	<u>none</u>					
Odor	<u>—</u>	<u>—</u>	<u>no noticeable</u>					

Record time purging starts and ends in Water Level Data section. Cum. Vol Purged: cumulative volume 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 before sampling or average 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 ($\mu S/cm$ at 25°C); EC: Electrical Conductivity not corrected for temperature ($\mu S/cm$). $\mu S/cm = \mu mho/cm$. 1 gallon (US) = 3.785 L = 0.833 Imperial gallon.

 Sample Data Sample Depth: ☐ Grab ☒ Bailor ☐ Pump Description: field filtered w/pump

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
<u>70528WS6MW-1701</u>	<u>P0</u>	<u>5-28-97</u>	<u>1030</u>	<u>2</u>	<u>AS</u>				

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 mmdydy. 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) Michelle Lange / Pete McKelvey Signature Michelle Lange

Date Entered into Database

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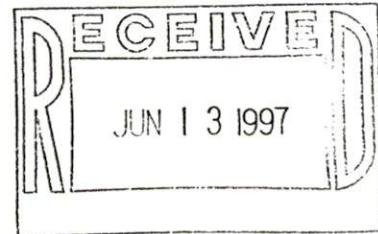
Facility <u>Everett-West Site</u> Sampler's Project No. <u>1202975-670</u> Weyerhaeuser Account No. _____ Sampled by: Consultant <u>EMCON</u> <input type="checkbox"/> Facility Address <u>8912 N. Creek Hwy</u> <input type="checkbox"/> E&AS/WTC <u>(706) 485-5000</u> <u>486-976000</u> <input type="checkbox"/> E&AS/NB Phone No. _____ FAX _____					Project Manager (print) <u>Steve Nelson</u> Sampler Name (print) <u>Michelle Lange</u> Recorded By (signed) <u>Michelle Lange</u>					Analyses Requested (circle or write in parameters)															Notes																	
Sample Description (ID, Date, Time are Required)					Matrix					Preservative					Number of Containers	pH Cond TDS TSS Color Tannins Volatile Organics / BTEX Semi-volatile Organics TPH: 418.1 TPH-G (TPH-D) <u>ex</u> 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 <u>Diss. As</u>																										
Method	Field Sample ID (15 characters max.)	Date (m/d/y)	Time (hh:mm)	Depth (ft / m)	Water	Soil/Sed	Oil	H ₂ SO ₄	HNO ₃ As	Na ₂ S ₂ O ₃	Filtered																															
	<u>70528WRCMW-1201</u>	<u>5/28/97</u>	<u>1115</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1202</u>		<u>1220</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1203</u>		<u>1245</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1301</u>		<u>1330</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1501</u>		<u>1430</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1701</u>		<u>1030</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1800</u>		<u>0900</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1901</u>		<u>1000</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
	<u>" -1302</u>	<u>✓</u>	<u>1350</u>		<u>X</u>			<u>X</u>	<u>X</u>																																	
Method: G, grab; D, depth composite; T, time composite. Depth required for soil or sediment samples.												Remarks/Detection Limit Requirements <u>* Diss. As was field filtered</u> <u>Report method blank results for diss. As analysis</u>																														
Reporting and QA/QC Requirements <input type="checkbox"/> Samples on Ice or Blue Ice Lab Turn-Around Time <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input checked="" type="checkbox"/> 7 Day <input type="checkbox"/> 2-3 wk Date Due: <u>Standard</u>												RESULTS TO: <u>Steve Nelson</u> <input type="checkbox"/> CLP Package <input type="checkbox"/> NPDES Permit <input type="checkbox"/> Other: _____ <input type="checkbox"/> Electronic Report												Sample Chain of Custody and Shipping Method Record																		
Laboratory <input type="checkbox"/> WATS/WTC <input type="checkbox"/> WATS/NB <input type="checkbox"/> Other: _____ Lab SR#: _____ Case ID: _____ SDG ID: _____												<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Relinquished By Sampler (signature): <u>Michelle Lange</u></td> <td>Date <u>5-28-97</u></td> <td>Time <u>1445</u></td> <td>Received By (signature):</td> <td rowspan="2">Shipping Method</td> </tr> <tr> <td>Relinquished By (signature):</td> <td>Date</td> <td>Time</td> <td>Received By (signature):</td> </tr> <tr> <td>Relinquished By (signature):</td> <td>Date</td> <td>Time</td> <td>Received For Laboratory By (signature):</td> <td>Airbill No.</td> </tr> <tr> <td colspan="3">Samples Received Intact:</td> <td colspan="2">Cooler Temp: _____ °C</td> </tr> </table>																												Relinquished By Sampler (signature): <u>Michelle Lange</u>	Date <u>5-28-97</u>	Time <u>1445</u>
Relinquished By Sampler (signature): <u>Michelle Lange</u>	Date <u>5-28-97</u>	Time <u>1445</u>	Received By (signature):	Shipping Method																																						
Relinquished By (signature):	Date	Time	Received By (signature):																																							
Relinquished By (signature):	Date	Time	Received For Laboratory By (signature):	Airbill No.																																						
Samples Received Intact:			Cooler Temp: _____ °C																																							



32901 Weyerhaeuser Way South
Federal Way, Washington 98003
Analytical Chemistry Laboratories
Tacoma, Washington 98477
Tel (206) 924 6872
Fax (206) 924 6654

June 12, 1997

ORIGINAL IS
IN PROJECT
FILING



Emcon
Attn: Mr. Steve Nelson
18912 N. Creek Parkway
Bothell, WA 98011

Subject: Service Request 04017 - Everett West Site Water Samples - 1202975670

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 04017. 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) 924-6521.

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

Sincerely,

Rich Bogar Hmf

Richard Bogar, Chromatography Team Leader
Weyerhaeuser Analytical and Testing Services



32901 Weyerhaeuser Way South
Federal Way, Washington 98003
Analytical Chemistry Laboratories
Tacoma, Washington 98477
Tel [206] 924 6872
Fax [206] 924 6654

SDG NARRATIVE

WEYERHAEUSER (WEYER)

ANALYTICAL AND TESTING SERVICES

Case Number 4017

SDG Number 82714

PROJECT: EVERETT WEST SITE WATER SAMPLES 1202975670 OOE #7043971

The samples from this SDG were received on 5/29/97. The SDG was composed of water samples for analysis of Petroleum Hydrocarbons by WTPH-D and Arsenic by AM1-3020/200.9. The following analyses were performed:

<u>SAMPLE ID</u>	<u>LAB ID</u>	<u>MATRIX</u>	<u>ANALYSIS</u>
70528WSGMW-1201	82714	WATER	WTPH-D;As
70528WSGMW-1201DUP	82714D	WATER	As
70528WSGMW-1202	82715	WATER	WTPH-D;As
70528WSGMW-1203	82716	WATER	WTPH-D;As
70528WSGMW-1301	82717	WATER	WTPH-D;As
70528WSGMW-1302	82718	WATER	WTPH-D;As
70528WSGMW-1501	82719	WATER	WTPH-D;As
70528WSGMW-1701	82720	WATER	WTPH-D;As
70528WSGMW-1800	82721	WATER	WTPH-D;As
70528WSGMW-1901	82722	WATER	WTPH-D;As
LCS 6/3/97	LCS 6/3/97	Fortified Blank	WTPH-D;As

000001

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.

2. Arsenic

a) No comments.

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

6/12/97
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

000002

Facility <u>Everett-West Sitz</u>				Analyses Requested (circle or write in parameters)				Notes	
Sampler's Project No. <u>1202975-670</u>				Project Manager (print) <u>Steve Nelson</u>				000003	
Weyerhaeuser Account No.				Sampler Name (print) <u>Michelle Lange</u>					
Sampled by: Consultant <u>EMCON</u>				Recorded By (signature) <u>Michelle Lange</u>					
<input type="checkbox"/> Facility Address <u>18912 N. Creek Hwy</u> <input type="checkbox"/> E&AS/WTC <u>(206) 485-5000</u> <u>486-9760</u> <input type="checkbox"/> E&AS/NB Phone No. FAX									
Sample Description (ID, Date, Time are Required)				Matrix		Preservative		Number of Containers	
Method	Field Sample ID (15 characters max.)	Date (m/d/y)	Time (hh:mm)	Depth (ft / m)	Water Soil/Sed Oil	H ₂ SO ₄ HNO ₃ AS Na ₂ S ₂ O ₃	Filtered	pH	Cond
	<u>70528WSGMW-1201</u>	<u>5/28/97</u>	<u>1115</u>		X	X			
	<u>" -1202</u>		<u>1220</u>		X	X			
	<u>" -1203</u>		<u>1245</u>		X	X			
	<u>" -1301</u>		<u>1330</u>		X	X			
	<u>" -1501</u>		<u>1430</u>		X	X			
	<u>" -1701</u>		<u>1030</u>		X	X			
	<u>" -1800</u>		<u>0900</u>		X	X			
	<u>" -1901</u>		<u>1000</u>		X	X			
	<u>" -1302</u>	✓	<u>1350</u>		X	X			
Method: G, grab; D, depth composite; T, time composite. Depth required for soil or sediment samples.									
Reporting and QA/QC Requirements					Remarks/Detection Limit Requirements				
<input type="checkbox"/> Samples on Ice or Blue Ice Lab Turn-Around Time: <input type="checkbox"/> 24 Hr <input type="checkbox"/> 48 Hr <input checked="" type="checkbox"/> 7 Day <input type="checkbox"/> 2-3 wk Date Due: <u>Standard</u>					RESULTS TO: <u>Steve Nelson</u> <input type="checkbox"/> CLP Package <input type="checkbox"/> NPDES Permit <input type="checkbox"/> Other: _____ <input type="checkbox"/> Electronic Report				
Laboratory <input type="checkbox"/> WATS/WTC <input type="checkbox"/> WATS/NB <input type="checkbox"/> Other: _____ Lab SR#: _____ Case ID: _____ SDG ID: _____					Sample Chain of Custody and Shipping Method Record				
Relinquished By Sampler (signature): <u>Michelle Lange</u>					Date: <u>5-28-97</u> Time: <u>1445</u>		Received By (signature): _____		
Relinquished By (signature): _____					Date: _____ Time: _____		Received By (signature): _____		
Relinquished By (signature): _____					Date: _____ Time: _____		Received For Laboratory By (signature): <u>B Chappel</u>		
							Shipping Method Airbill No.: <u>52997 0800</u> Cooler Temp: <u>4</u> °C		



Weyerhaeuser Company
Analytical Laboratories
Tacoma, Washington

Service Request 04017

Report

Everett West Site Water Samples

Sample Designation	Analytical Lab Code	Dissolved As
		(µg/L)
70528WSGMW-1201 05/28/97 1115	82714	< 3
Duplicate	82714D	< 3
70528WSGMW-1202 05/28/97 1220	82715	9
70528WSGMW-1203 05/28/97 1245	82716	< 3
70528WSGMW-1301 05/28/97 1330	82717	45
70528WSGMW-1302 05/28/97 1350	82718	< 3
70528WSGMW-1501 05/28/97 1430	82719	< 3
70528WSGMW-1701 05/28/97 1030	82720	< 3
70528WSGMW-1800 05/28/97 0900	82721	< 3
70528WSGMW-1901 05/28/97 1000	82722	< 3
Method Blank		< 3

Quantitation Limit:

3

Method Number:

AM1-3020/200.9

Approved

Julie Reimer

000004

Report Date 06/11/97

WTPH-D Extended

Service Request: 04017
 Analyst: C. Thomson

Sample ID Client ID	Blank 6/3/97	LCS 6/3/97	82714 70528WSG MW-1201	82715 70528WSG MW-1202	82716 70528WSG MW-1203	82717 70528WSG MW-1301
<u>Analytes</u>	<u>mg/L</u>	<u>% Rec.</u>	<u>mg/L</u>	<u>mg/L</u>	<u>mg/L</u>	<u>mg/L</u>
Diesel Fuel Range	U	116%	U	0.21	0.12	U
Motor Oil Range	U		U	0.18	U	U
Surrogate Recovery	108%	112%	105%	101%	114%	111%

Date Sampled			5/28/97	5/28/97	5/28/97	5/28/97
Date Extracted	6/3/97	6/3/97	6/3/97	6/3/97	6/3/97	6/3/97
Date Analyzed	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Holding Time Days			6	6	6	6

Reporting Limit

Diesel Range	0.082		0.079	0.077	0.087	0.077
Motor Oil Range	0.20		0.20	0.19	0.22	0.19

Approved by Clay Date 6/12/97

000005

WTPH-D Extended

Service Request: 04017
 Analyst: C. Thomson

Sample ID	82718	82719	82720	82721	82722
Client ID	70528WSG MW-1302	70528WSG MW-1501	70528WSG MW-1701	70528WSG MW-1800	70528WSG MW-1901
<u>Analytes</u>	<u>mg/L</u>	<u>mg/L</u>	<u>mg/L</u>	<u>mg/L</u>	<u>mg/L</u>
Diesel Fuel Range	0.25	U	U	0.14	U
Motor Oil Range	U	U	U	U	U
Surrogate Recovery	108%	108%	108%	115%	103%

Date Sampled	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97
Date Extracted	6/3/97	6/3/97	6/3/97	6/3/97	6/3/97
Date Analyzed	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Holding Time Days	6	6	6	6	6

Reporting Limit

Diesel Range	0.077	0.077	0.077	0.082	0.077
Motor Oil Range	0.19	0.19	0.19	0.20	0.19

000000

**DATA VALIDATION REPORT
TENTH ROUND GROUNDWATER COMPLIANCE MONITORING
MAY 1997
WEYERHAEUSER EVERETT WEST SITE**

DATA QUALIFICATIONS

The following report presents a summary of the Weyerhaeuser Everett West Site data validation review for seven groundwater samples, one field duplicate, and one field blank, collected on May 28, 1997. Samples were analyzed by Weyerhaeuser Analytical and Testing Services in Tacoma, Washington and reported under service request number 04017. 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 "70528WSGMW-1201"). The field duplicate sample, collected from well MW-1203, was labeled 70528WSGMW-1800. The field blank sample was labeled 70528WSGMW-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 results were non-detect. Analytes were not detected in the field blank. Data qualifiers were not assigned to sample results based on blank contamination.

SURROGATE RECOVERY

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

DUPLICATE RESULTS

Samples 70528WSGMW-1203 and 70528WSGMW-1800 were field duplicates. Dissolved arsenic results were not detected in either the sample or the field duplicate. Diesel fuel-range petroleum hydrocarbons were detected at concentrations of 0.12 mg/L

and 0.14 mg/L. Motor oil-range petroleum hydrocarbons were not detected in either the sample or the field duplicate.

OVERALL ASSESSMENT OF DATA

All requested analyses were conducted and the data are 100 percent complete. Data qualifiers were not assigned to sample results based on the data validation review, and the data are judged to be acceptable for their intended use.

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

REP_DATE	REP_NAME	PRJ_NAME	STA_TYPE	STA_USE	WTR_USE	DATA_REL	STA_ID
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1201
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1202
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1203
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1301
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1302
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1501
7/10/97	Weyerhaeuser Company	Groundwater Compliance Monitoring, West Site	Ground water	O	W	C	MW-1701

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

PRI_STA	SEC_STA1	SEC_STA2	SEC_STA3	STATE_FIPS	COUNTYFIPS	STATE_CHAR	COUNTYCHAR	OWN_NAME	OWN_DT
				53	061	WA	Snohomish	Weyerhaeuser Company	
				53	061	WA	Snohomish	Weyerhaeuser Company	
				53	061	WA	Snohomish	Weyerhaeuser Company	
				53	061	WA	Snohomish	Weyerhaeuser Company	
				53	061	WA	Snohomish	Weyerhaeuser Company	
				53	061	WA	Snohomish	Weyerhaeuser Company	
				53	061	WA	Snohomish	Weyerhaeuser Company	

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

OWN_ADD	DRILLER	STA_DESC	LOC_METHD	LAT	LONG	STPCO_NOR
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			373554
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			373747
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			373901
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			373987
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			374038
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			373939
101 E Marine View Drive Everett Washington 98201			Clark M. Leeman Land Surveying, Various			372854

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

STPCO_EAST	STPCO_ZONE	LAND_NET	UTM_NORT	UTM_EAST	UTM_ZON	MAP_NAME	BORE_DEP	WELL_DEP	WTR_ELEV1
1308299	N	SW1/4NW1/4T29NR5E				Marysville	15.00	15.00	3.93
1308193	N	SW1/4NW1/4T29NR5E				Marysville	15.00	15.00	6.26
1307959	N	SW1/4NW1/4T29NR5E				Marysville	10.00	10.00	5.25
1307726	N	SW1/4NW1/4T29NR5E				Marysville	10.00	10.00	6.55
1307514	N	SW1/4NW1/4T29NR5E				Marysville	10.00	10.00	7.29
1306923	N	SW1/4NW1/4T29NR5E				Marysville	11.50	10.00	6.19
1308027	N	SW1/4NW1/4T29NR5E				Marysville	9.00	8.00	8.21

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

WLEV_DAT1	ELEV_UNITS	MEAS_ELEV	MEAS_DESC	DATUM	LEV_COMM	ALTITUDE
6/14/93	FEET	15.43	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		12.43
6/10/93	FEET	13.26	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		10.26
6/9/93	FEET	10.75	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		10.75
6/9/93	FEET	11.55	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		11.55
6/9/93	FEET	12.29	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		12.29
6/10/93	FEET	10.19	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		10.19
6/9/93	FEET	11.71	TOP OF WELL CASING	USC&G.S. BENCH MARK M-296, NGVD-1929		12.00

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

DEPTOWTR1	CONST_DT	MOREINT	UP_DEPTH	LOW_DEPTH	DEPT_UNITS	CONST_COMM	MTD_CON	FILT_LEN	FILT_MAT
8.50		N	8	18			B	11.00	10-20 Colorado Silica Sand
4.00		N	6	18			B	13.00	10-20 Colorado Silica Sand
5.50		N	3	10			B	8.00	10-20 Colorado Silica Sand
5.00		N	3	10			B	8.00	10-20 Colorado Silica Sand
5.00		N	3	10			B	8.00	10-20 Colorado Silica Sand
4.00		N	3	10			B	8.00	10-20 Colorado Silica Sand
3.50		N	2	8			B	7.50	10-20 Colorado Silica Sand

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

DIA_BOR	DIA_CAS	CAS_MAT	DIA_OPN	LEN_OPN	TYP_OPN	TYP_OMT	INT_COMM	LOG_AVAIL	TYP_LOG
8	2	P	2	10.00	P	P			
8	2	P	2	12.00	P	P			
8	2	P	2	7.00	P	P			
8	2	P	2	7.00	P	P			
8	2	P	2	7.00	P	P			
8	2	P	2	7.00	P	P			
8	2	P	2	6.00	P	P			

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

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

LOG_LOC	AQUI_TEST	PUMP_DATA	ANDAT_AVAL	PROGRAM	GEN_COMM	HUCODE	AGN_USE
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
MAY 1997
LAB SAMPLE FILE

PRI_STA	STA_ID	SAMPLE_DAT	ANALYZ_DAT	SAMPLE_ID	LAB_NAME	LABSAMP_ID	CONSTITUEN	CAS_ID
	MW-1201	5/28/97	6/12/97	70528WSGMW-1201	WEYERHAEUSER	82714	TPH AS DIESEL	68334-30-5
	MW-1201	5/28/97	6/12/97	70528WSGMW-1201	WEYERHAEUSER	82714	TPH AS MOTOR OIL	GIS-130-114
	MW-1201	5/28/97	6/11/97	70528WSGMW-1201	WEYERHAEUSER	82714	ARSENIC	7440-38-2
	MW-1202	5/28/97	6/12/97	70528WSGMW-1202	WEYERHAEUSER	82715	TPH AS DIESEL	68334-30-5
	MW-1202	5/28/97	6/12/97	70528WSGMW-1202	WEYERHAEUSER	82715	TPH AS MOTOR OIL	GIS-130-114
	MW-1202	5/28/97	6/11/97	70528WSGMW-1202	WEYERHAEUSER	82715	ARSENIC	7440-38-2
	MW-1203	5/28/97	6/12/97	70528WSGMW-1203	WEYERHAEUSER	82716	TPH AS DIESEL	68334-30-5
	MW-1203	5/28/97	6/12/97	70528WSGMW-1203	WEYERHAEUSER	82716	TPH AS MOTOR OIL	GIS-130-114
	MW-1203	5/28/97	6/11/97	70528WSGMW-1203	WEYERHAEUSER	82716	ARSENIC	7440-38-2
	MW-1301	5/28/97	6/12/97	70528WSGMW-1301	WEYERHAEUSER	82717	TPH AS DIESEL	68334-30-5
	MW-1301	5/28/97	6/12/97	70528WSGMW-1301	WEYERHAEUSER	82717	TPH AS MOTOR OIL	GIS-130-114
	MW-1301	5/28/97	6/11/97	70528WSGMW-1301	WEYERHAEUSER	82717	ARSENIC	7440-38-2
	MW-1302	5/28/97	6/12/97	70528WSWMW-1302	WEYERHAEUSER	82718	TPH AS DIESEL	68334-30-5
	MW-1302	5/28/97	6/12/97	70528WSWMW-1302	WEYERHAEUSER	82718	TPH AS MOTOR OIL	GIS-130-114
	MW-1302	5/28/97	6/11/97	70528WSWMW-1302	WEYERHAEUSER	82718	ARSENIC	7440-38-2
	MW-1501	5/28/97	6/12/97	70528WSGMW-1501	WEYERHAEUSER	82719	TPH AS DIESEL	68334-30-5
	MW-1501	5/28/97	6/12/97	70528WSGMW-1501	WEYERHAEUSER	82719	TPH AS MOTOR OIL	GIS-130-114
	MW-1501	5/28/97	6/11/97	70528WSGMW-1501	WEYERHAEUSER	82719	ARSENIC	7440-38-2
	MW-1701	5/28/97	6/12/97	70528WSGMW-1701	WEYERHAEUSER	82720	TPH AS DIESEL	68334-30-5
	MW-1701	5/28/97	6/12/97	70528WSGMW-1701	WEYERHAEUSER	82720	TPH AS MOTOR OIL	GIS-130-114
	MW-1701	5/28/97	6/11/97	70528WSGMW-1701	WEYERHAEUSER	82720	ARSENIC	7440-38-2

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

RESULT	UNITS	QUAL	QA_QUAL	LIMIT	DILUTION	FILTERED	ANAL_MTHOD	MATRIX	PRJ_NAME
0.000000	MG/L	U		0.079		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.20		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
0.210000	MG/L			0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.180000	MG/L			0.19		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.009000	MG/L			0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
0.120000	MG/L			0.087		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.22		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.19		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.045000	MG/L			0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
0.250000	MG/L			0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.19		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.19		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.077		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.19		FALSE	WTPH-D	10	Groundwater Compliance Monitoring, West Site
0.000000	MG/L	U		0.003		FALSE	EPA 200.9	11	Groundwater Compliance Monitoring, West Site

WEYERHAEUSER EVERETT WEST SITE
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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	12.20
	MW-1201	373554	1308299	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	12.20
	MW-1202	373747	1308193	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	7.50
	MW-1202	373747	1308193	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	7.50
	MW-1203	373901	1307959	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.35
	MW-1203	373901	1307959	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.35
	MW-1301	373987	1307726	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.43
	MW-1301	373987	1307726	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.43
	MW-1302	374038	1307514	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.91
	MW-1302	374038	1307514	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	5.91
	MW-1501	373939	1306923	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.45
	MW-1501	373939	1306923	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.45
	MW-1701	372854	1308027	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.25
	MW-1701	372854	1308027	N	1929	USC&G.S. BENCH MARK M-296, NGVD-1929	4.25

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UP_DEPTH	DEPT_UNITS	LOW_DEPTH	WTR_ELEV	AGENCY	SAMPLE_DAT	SAMP_TIME	SAMPLE_ID	FILTERED	ANAL_MTHOD
8.00	FEET	18.00	3.23	ECOLOGY	5/28/97	1115		FALSE	WTPH-D
8.00	FEET	18.00	3.23	ECOLOGY	5/28/97	1115		TRUE	EPA 200.9
6.00	FEET	18.00	5.76	ECOLOGY	5/28/97	1220		FALSE	WTPH-D
6.00	FEET	18.00	5.76	ECOLOGY	5/28/97	1220		TRUE	EPA 200.9
3.00	FEET	10.00	5.40	ECOLOGY	5/28/97	1245		FALSE	WTPH-D
3.00	FEET	10.00	5.40	ECOLOGY	5/28/97	1245		TRUE	EPA 200.9
3.00	FEET	10.00	6.12	ECOLOGY	5/28/97	1330		FALSE	WTPH-D
3.00	FEET	10.00	6.12	ECOLOGY	5/28/97	1330		TRUE	EPA 200.9
3.00	FEET	10.00	6.38	ECOLOGY	5/28/97	1350		FALSE	WTPH-D
3.00	FEET	10.00	6.38	ECOLOGY	5/28/97	1350		TRUE	EPA 200.9
3.00	FEET	10.00	5.74	ECOLOGY	5/28/97	1430		FALSE	WTPH-D
3.00	FEET	10.00	5.74	ECOLOGY	5/28/97	1430		TRUE	EPA 200.9
2.00	FEET	8.00	7.46	ECOLOGY	5/28/97	1030		FALSE	WTPH-D
2.00	FEET	8.00	7.46	ECOLOGY	5/28/97	1030		TRUE	EPA 200.9

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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	6.36	600	13
15.43	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.36	600	13
13.26	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.96	680	15
13.26	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.96	680	15
10.75	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.76	750	16
10.75	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.76	750	16
11.55	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.84	240	13
11.55	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.84	240	13
12.29	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.55	940	14
12.29	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.55	940	14
10.19	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.81	320	14
10.19	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.81	320	14
11.71	FEET	TOP OF WELL CASING	NGVD-1929	10	23	29	6.07	170	16
11.71	FEET	TOP OF WELL CASING	NGVD-1929	11	23	29	6.07	170	16

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PURGE_METH	PURGE_VOL	PRJ_NAME	COMMENTS
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1201
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1201
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1202
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1202
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1203
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1203
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1301
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1301
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1302
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1302
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1501
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1501
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1701
P	3	Groundwater Compliance Monitoring, West Site	Sample_id = 70528WSGMW-1701