First Semi-Annual 2005 Groundwater Monitoring Report

Arcata Redwood Company (Former)
Smith River Sawmill
Smith River, California
Case No. 1TDN007

Prepared for:

Arcata Redwood Company, LLC

Consulting Engineers & Geologists, Inc.

812 W. Wabash Avenue
Eureka, CA 95501-2138
707/441-8855

March 2005
093047

CONSULTING ENGINEERS & GEOLOGISTS, INC.
812 W. Wabash • Eureka, CA 95501-2138 • 707-441-8855 • Fax 707-441-8877 • info@shn-eureka.com

Reference: 093047

March 22, 2005

Mr. Cody Walker
California Regional Water Quality
Control Board, North Coast Region
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403

Subject: First Semi-Annual 2005 Groundwater Monitoring Report, Arcata Redwood Company (Former) Smith River Sawmill, Smith River, California; Case No. 1TDN007

Dear Mr. Walker:

This First Semi-Annual 2005 Groundwater Monitoring Report is being submitted by SHN Consulting Engineers & Geologists, Inc., on behalf and with the approval of, Arcata Redwood Company, LLC, in accordance with the California Regional Water Quality Control Board, North Coast Region's reporting requirements.

If you have questions or comments, please call me at 707/441-8855.

Sincerely,

SHN Consulting Engineers & Geologists, Inc.

Frans B. Lowman, R.G.
Senior Groundwater Hydrologist

FBL:med
Attachment: Report

copy w/attach: Jeff Lane, Arcata Redwood Company, LLC
Galen Schuler, Esq., Representative for Arcata Redwood Company, LLC

Reference: 093047

First Semi-Annual 2005 Groundwater Monitoring Report

Arcata Redwood Company (Former)
Smith River Sawmill
Smith River, California
Case No. 1TDN007

Prepared for:

Arcata Redwood Company, LLC

Prepared by:

Consulting Engineers & Geologists, Inc.
812 W. Wabash Avenue
Eureka, CA 95501-2138
707-441-8855

March 2005

QA/QC: JJA___

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Abbreviations and Acronyms

<	denotes a value that is "less than" the method detection limit
mV	millivolts
ppm	parts per million
ug/L	micrograms per Liter

ARCO	Arcata Redwood Company, LLC
AVOC	Aromatic Volatile Organic Compound
BTEX	Benzene, Toluene, Ethylbenzene, and total Xylenes
DCO_2	Dissolved Carbon Dioxide
DO	Dissolved Oxygen
EC	Electrical Conductivity
EPA	U.S. Environmental Protection Agency
HVOC	Halogenated Volatile Organic Compounds
MSL	Mean Sea Level
MTBE	Methyl Tertiary-Butyl Ether
MW	Monitoring Well
NA	Not Analyzed
ND	Not Detected
ORP	Oxidation-Reduction Potential
RWQCB	California Regional Water Quality Control Board, North Coast Region
SHN	SHN Consulting Engineers & Geologists, Inc.
TPHD	Total Petroleum Hydrocarbons as Diesel
TPHG	Total Petroleum Hydrocarbons as Gasoline
TPHMO	Total Petroleum Hydrocarbons as Motor Oil
vs.	versus
WP	Well Point

1.0 Introduction

This report presents the results of groundwater monitoring activities for the first semi-annual 2005 event, conducted at the former Arcata Redwood Company, Smith River Sawmill (Case No. 1TDN007). This report was submitted by SHN Consulting Engineers & Geologists, Inc. (SHN), on behalf and with the approval of Arcata Redwood Company, LLC (ARCO), in accordance with the California Regional Water Quality Control Board, North Coast Region's (RWQCB) reporting requirements. SHN completed the groundwater monitoring event on January 26 and 27, 2005. A site location map is presented as Figure 1.

This report is presented in five sections. This section introduces the reader to the site. Section 2.0 discusses the scope of work completed at the site during the first semi-annual groundwater monitoring event of 2005. Section 3.0 presents the results of the groundwater monitoring program. Section 4.0 presents conclusions regarding the nature of the site, as well as recommendations for future activities. Section 5.0 presents references cited.

2.0 Field Activities

2.1 Monitoring Well Sampling

SHN conducted the groundwater monitoring event on January 26 and 27, 2005. As part of the monitoring program, all 26 of the existing groundwater monitoring wells were measured for depth to water. Monitoring wells MW-4, MW-7, MW-19, MW-21, and MW-22, and well points WP-1 through WP-3, were sampled during this monitoring event. The remaining groundwater monitoring wells were not sampled. Figure 2 shows monitoring well locations.

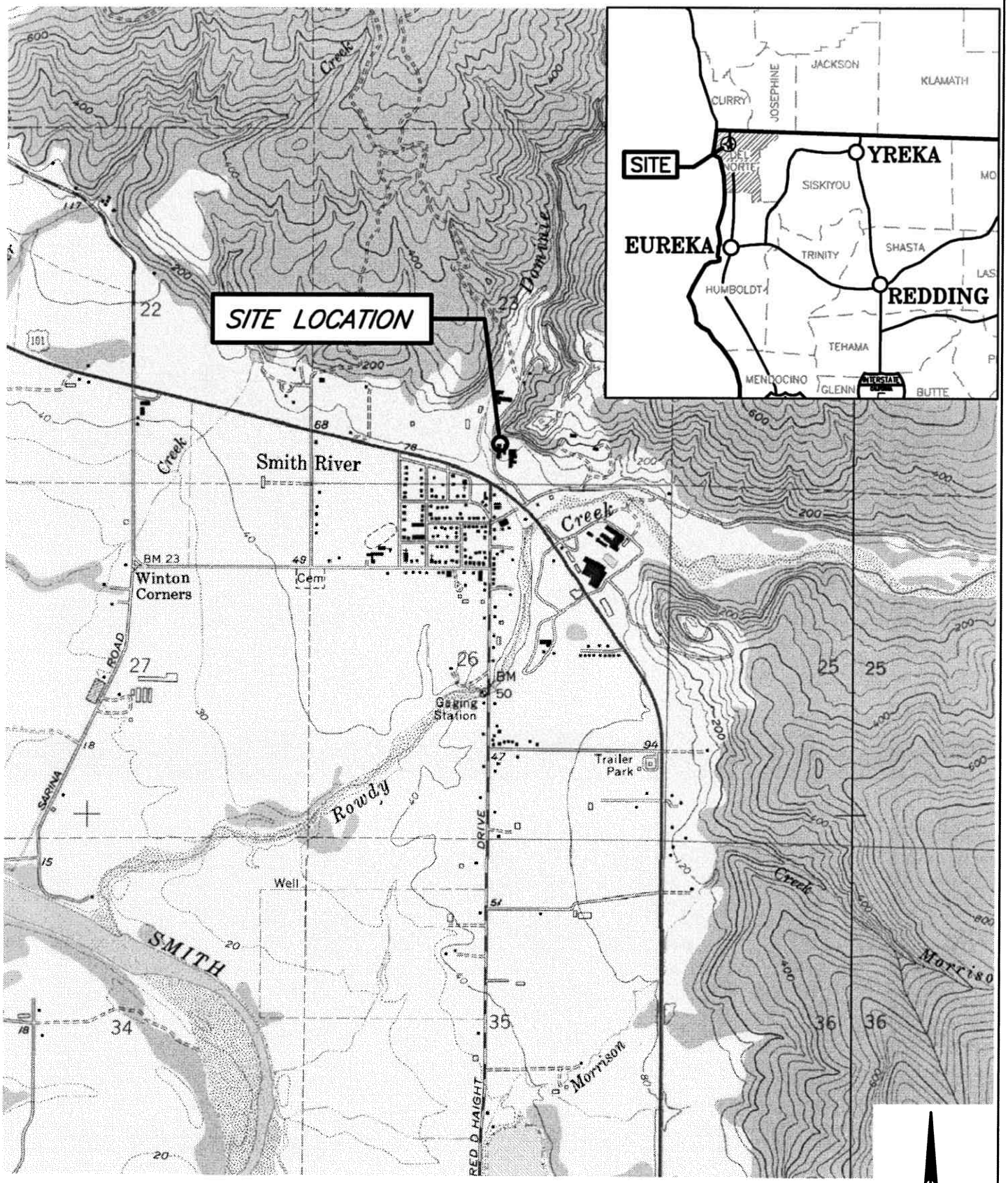
Prior to purging, monitoring wells MW-4, MW-7, MW-19, MW-21, and MW-22 were measured for depth to water, and checked for the presence of free product (none was observed). Electrical Conductivity (EC), pH, and temperature were monitored periodically during purging activities using portable instrumentation. All five wells and the three well points were also measured for Dissolved Oxygen (DO), Oxidation-Reduction Potential (ORP), and Dissolved Carbon Dioxide (DCO_2). This information was used to determine when purging was complete.

A groundwater sample was then collected from monitoring wells MW-4, MW-7, MW-19, MW-21, and MW-22, and well points WP-1, WP-2, and WP-3, utilizing disposable polyethylene bailers. The water samples were immediately placed in an ice-filled cooler, and submitted to the laboratory for analyses under appropriate chain-of-custody. Field notes and water sampling data sheets from the January 2005, monitoring event are included in Appendix A.

2.2 Laboratory Analysis

Each groundwater sample was analyzed for one or more of the following constituents:

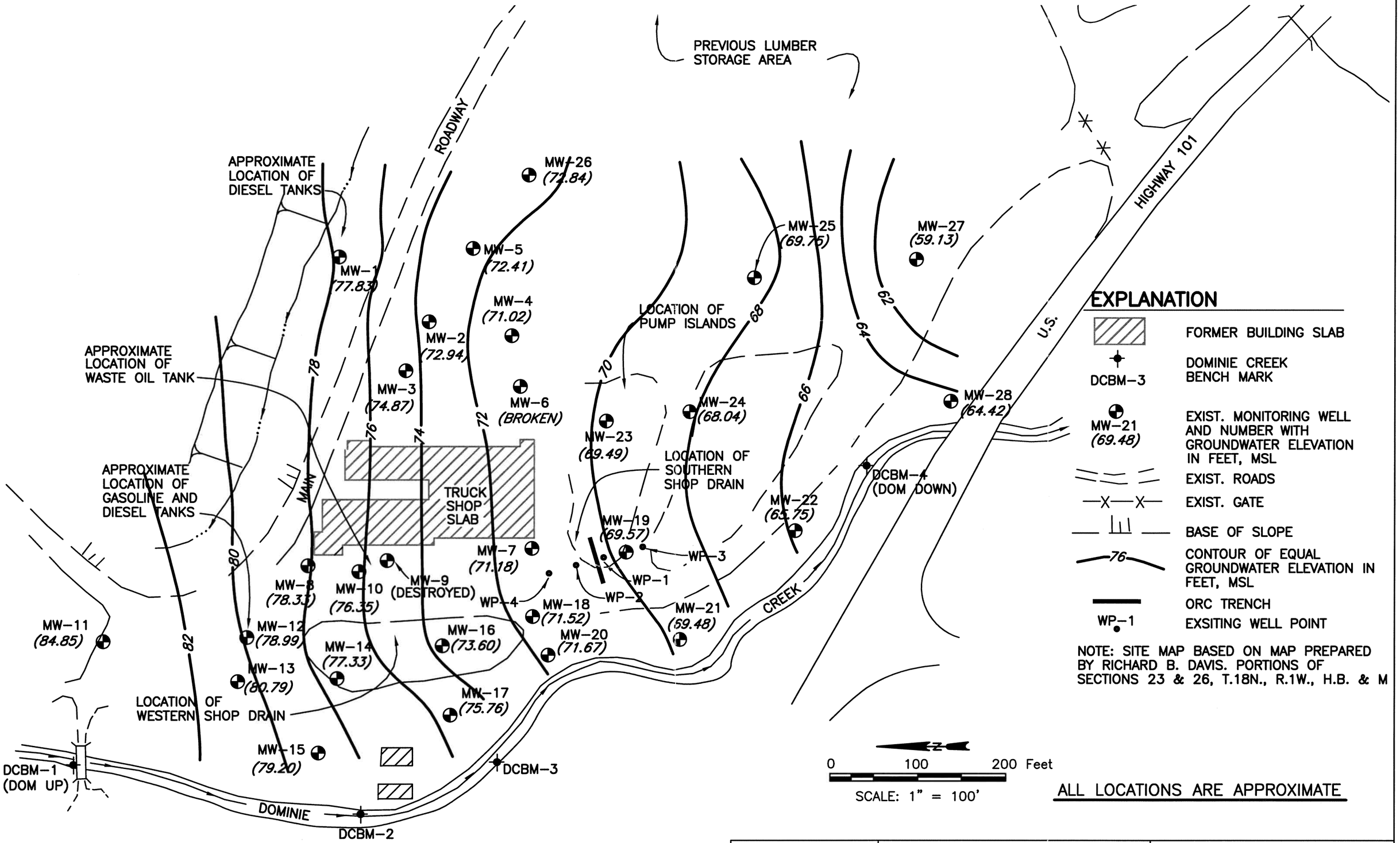
- Total Petroleum Hydrocarbons as Diesel and as Motor Oil (TPHD/TPHMO), in general accordance with U.S. Environmental Protection Agency (EPA) Method Nos. 3510/GCFID/8015B
- Total Petroleum Hydrocarbons as Gasoline (TPHG), in general accordance with EPA Method Nos. 5030/GCFID/8015B



SOURCE: SMITH RIVER
USGS 7.5 MINUTE
QUADRANGLE

1"=2000'±

SHN Consulting Engineers & Geologists, Inc.	Arcata Redwood Smith River, California		Site Location Map SHN 093047
	March, 2005	093047-LOCATION	Figure 1



SHN Consulting Engineers & Geologists, Inc.	Arcata Redwood Smith River, California	Groundwater Contours January 26, 2005 SHN 093047
	March, 2005	093047-GWC-JAN-05	Figure 2

- Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), and Methyl Tertiary-Butyl Ether (MTBE), in general accordance with EPA Method Nos. 5030/8021B
- The groundwater sample from monitoring well MW-19 was also analyzed for Halogenated Volatile Organic Compounds (HVOCs), and Aromatic Volatile Organic Compounds (AVOCs), in general accordance with EPA Method No. 8021B

All analyses were performed by North Coast Laboratories, Ltd., a state-certified analytical laboratory located in Arcata, California.

2.3 Equipment Decontamination Procedures

All well purging and sampling equipment was cleaned prior to being transported to the site. All smaller equipment was initially washed in a water solution containing Liquinox® cleaner, followed by a distilled water rinse, then by a second distilled water rinse. The groundwater samples were collected using pre-cleaned, disposable bailers, and transferred into laboratory-supplied containers.

2.4 Investigation-Derived Waste Management

All rinse water utilized for decontaminating field-sampling equipment, and the well purge water, was temporarily stored on site in 5-gallon plastic buckets and 50-gallon plastic drums. The water was then transported to SHN's 1,000-gallon purge water storage tank located at 812 West Wabash Avenue in Eureka, California. Approximately 77 gallons of decontamination and purge water from the January 2005, monitoring event are being stored at SHN, and will be discharged, under permit, to the City of Eureka municipal sewer system. A discharge receipt will be included in the next groundwater monitoring report. Appendix A in this report contains the discharge receipt for the 58 gallons of water that were generated from the June 2004, monitoring event.

3.0 Groundwater Monitoring Results

3.1 Hydrogeology

SHN measured depth-to-groundwater in all accessible monitoring wells during the first 2005, semi-annual monitoring event (Table 1). Monitoring well MW-6 had previously been damaged by heavy equipment being operated on site and could not be monitored. On January 26, 2005, the groundwater flow beneath the site was to the south/southeast, with an approximate gradient of 0.019. The groundwater flow configuration for the site has historically been consistent; however, groundwater elevations increased in site wells in January 2005, when compared to groundwater elevations in June 2004. This increase is a seasonal fluctuation due to an increase in precipitation. Figure 2 presents a groundwater contour map for the January 26, 2005, monitoring event.

Table 1 Groundwater Elevations, January 26, 2005 Arcata Redwood Company, Smith River, California			
Sample Location	**Top of Casing Elevation (feet MSL)[1]**	**Depth to Groundwater (feet)[2]**	**Groundwater Elevation (feet MSL)**
MW-1	90.00	12.17	77.83
MW-2	89.44	16.50	72.94
MW-3	88.59	13.72	74.87
MW-4	87.13	16.11	71.02
MW-5	87.13	14.72	72.41
MW-7	85.35	14.17	71.18
MW-8	91.34	13.01	78.33
MW-10	89.73	13.38	76.35
MW-11	90.62	5.77	84.85
MW-12	90.59	11.60	78.99
MW-13	88.92	8.13	80.79
MW-14	86.61	9.28	77.33
MW-15	86.69	7.49	79.20
MW-16	85.58	11.98	73.60
MW-17	85.04	9.28	75.76
MW-18	82.63	11.11	71.52
MW-19	80.08	10.51	69.57
MW-20	82.74	11.07	71.67
MW-21	79.69	10.21	69.48
MW-22	79.40	13.65	65.75
MW-23	84.18	14.69	69.49
MW-24	82.03	13.99	68.04
MW-25	79.56	9.81	69.75
MW-26	83.92	11.08	72.84
MW-27	76.40	17.27	59.13
MW-28	82.61	18.19	64.42
1. MSL: Mean Sea Level		2. Below top of casing	

3.2 Groundwater Analytical Results

Table 2 summarizes the laboratory analytical results from the January 2005, groundwater monitoring event. TPHG was detected in the groundwater samples collected from well points WP-1, WP-2, and WP-3, and monitoring well MW-19, at concentrations of 12,000, 43,000, 7,400, and 4,000 micrograms per Liter (ug/L), respectively. TPHD was present in the groundwater samples from all three well points, and monitoring wells MW-19 and MW-21, at concentrations ranging from 63 ug/L in well MW-21, to 660 ug/L in well point WP-2. Detectable concentrations of toluene, ethylbenzene, and total xylenes were present in the groundwater samples collected from all three well points, and monitoring well MW-19. MTBE and TPHMO were not detected in any of the groundwater samples

that were collected during this monitoring event. Historically, TPHMO as only been detected in the well points on an occasional basis. HVOCs and AVOCs (with the exception of xylenes) were not present above the laboratory method detection limits in the water sample collected from well MW-19.

Table 2
Groundwater Analytical Results, January 26 and 27, 2005
Arcata Redwood Company, Smith River, California
(in ug/L)[1]

Sample Location	TPHMO[2]	TPHG[3]	TPHD[4]	B[5]	T[5]	E[5]	X[5]	MTBE[6]	VOCs[7]
WP-1	<170[8]	**12,000**[9]	**420**[10,11]	<0.50	**0.64**	**0.65**	**234.3**	<3.0	NA[12]
WP-2	<170	**43,000**[9]	**660**[10,11]	<0.50	**0.92**	**2.6**	**889**	<3.0	NA
WP-3	<170	**7,400**[9]	**320**[10,11]	<0.50	<0.50	<0.50	**132**	<3.0	NA
MW-4	NA	NA	<50	NA	NA	NA	NA	NA	NA
MW-7	NA	<50	<50	<0.50	<0.50	<0.50	<0.50	<3.0	NA
MW-19	NA	**4,000**[9]	**140**[10]	<0.50	<0.50	<0.50	**94.6**	<3.0	ND[13]
MW-21	NA	<50	**63**[14]	<0.50	<0.50	<0.50	<0.50	<3.0	NA
MW-22	NA	<50	<50	<0.50	<0.50	<0.50	<0.50	<3.0	NA

1. ug/L: micrograms per Liter
2. TPHMO: Total Petroleum Hydrocarbons as Motor Oil, analyzed in general accordance with U.S. Environmental Protection Agency (EPA) Method Nos. 3510/GCFID/8015B.
3. TPHG: Total Petroleum Hydrocarbons as Gasoline, analyzed in general accordance with EPA Method Nos. 3510/GCFID/8015B.
4. TPHD: Total Petroleum Hydrocarbons as Diesel, analyzed in general accordance with EPA Method Nos. 3510/GCFID/8015B.
5. BTEX: Benzene, Toluene, Ethylbenzene, and total Xylenes, analyzed in general accordance with EPA Method Nos. 5030/8021B.
6. MTBE: Methyl Tertiary-Butyl Ether, analyzed in general accordance with EPA Method Nos. 5030/8021B.
7. VOCs: Volatile Organic Compounds, analyzed in general accordance with EPA Method No. 8021B. See laboratory analytical reports for constituent list and method detection limits.
8. <: denotes a value that is "less than" the method detection limit.
9. The reported value includes the reported gasoline components in addition to other peaks in the gasoline range.
10. Sample contains material similar to degraded or weathered diesel oil.
11. Sample contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.
12. NA: Not Analyzed
13. ND: Not Detected
14. Sample contains material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

As shown in Figures 3 and 4, the TPHG concentrations continue to decrease over time in monitoring wells MW-19 and MW-22, and in well points WP-1 through WP-3, respectively. The TPHG concentrations in well MW-19 and well point WP-2, however, increased slightly during this monitoring period, when compared to those reported during the June 2004, monitoring event.

Figure 5 presents the TPHG concentration trend through the contaminated plume, from the plume midpoint (well point WP-1) to the downgradient portion (well point WP-3). There is a significant decrease in TPHG concentrations when comparing the downgradient concentrations to midpoint concentrations.

Appendix C presents the complete laboratory analytical reports and corresponding chain-of-custody documentation from the January 2005, groundwater monitoring event. Tables B-1 and B-2 in Appendix B present historic groundwater analytical data.

Figure 3
TPHG Concentrations vs Time, Wells MW-19 and MW-22,
Arcata Redwood Company, Smith River, California

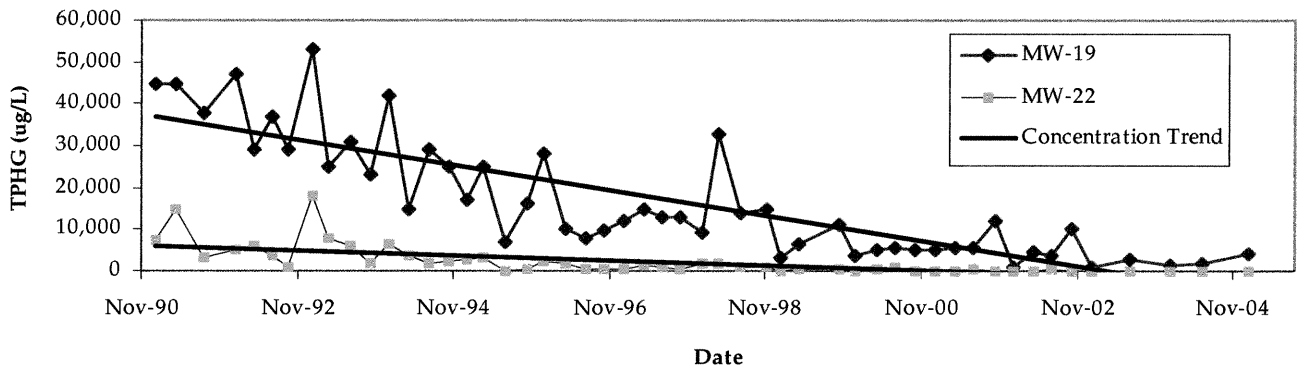


Figure 4
TPHG Concentrations vs Time, Well Points WP-1 Through WP-3
Arcata Redwood Company, Smith River, California

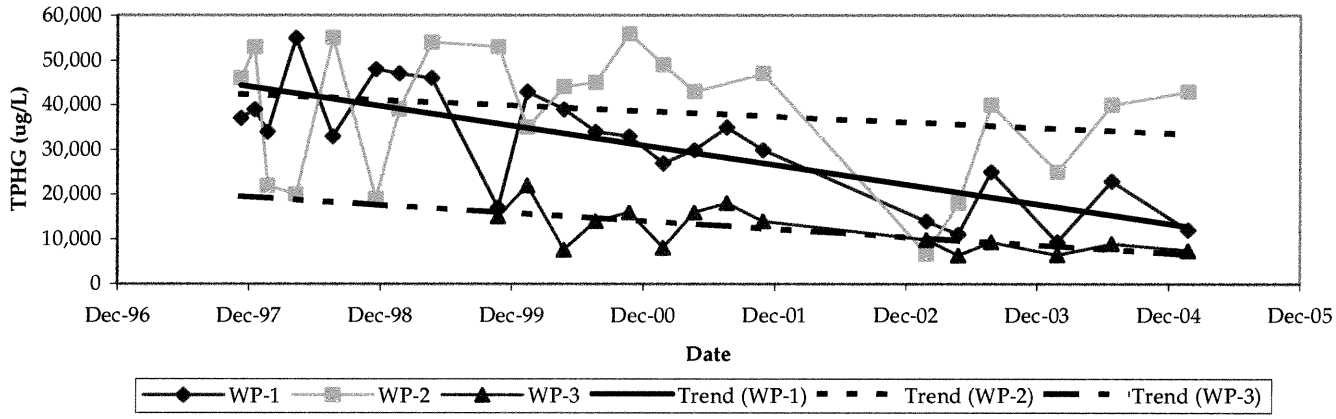
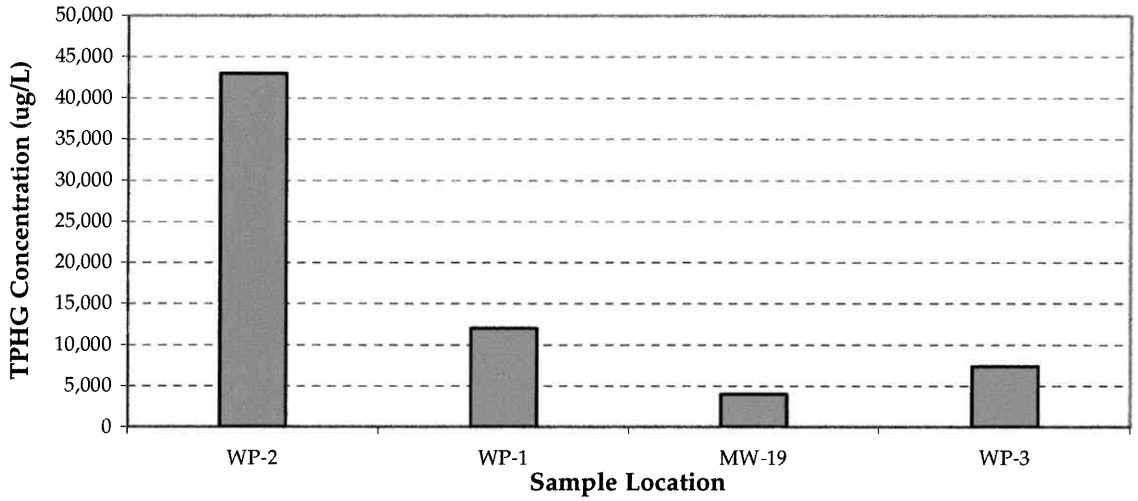


Figure 5
TPHG Concentration Cross-Section Area III,
Arcata Redwood Company, Smith River, California



3.3 Natural Attenuation Parameters

DO, DCO_2, and ORP were measured in well points WP-1 through WP-3, and monitoring wells MW-7 and MW-19, prior to sampling, and are summarized in Table 3. During the January 2005, monitoring event, DO concentrations ranged from 0.89 parts per million (ppm) in well MW-19, to 2.17 ppm in well point WP-3. DCO_2 concentrations ranged from 30 ppm in monitoring well MW-7, to 120 ppm in well points WP-1 and WP-2. ORP measurements ranged from 72 millivolts (mV) in well point WP-1, to 127 mV in monitoring well MW-7. The natural attenuation measurements collected during this monitoring event indicate that mild aerobic conditions exist beneath the site, and that biodegradation is occurring.

Table 3
Natural Attenuation Parameters, January 26 and 27, 2005
Arcata Redwood Company (Former), Smith River, California

Sample Location	DO[1] (ppm)[2]	DCO_2[3] (ppm)	ORP[4] (mV)[5]
WP-1	2.03	120	72
WP-2	1.84	120	83
WP-3	2.17	90	77
MW-7	1.89	30	127
MW-19	0.89	70	112

1. DO: Dissolved Oxygen, field measured using portable instrumentation.
2. ppm: Measurement concentration, in parts per million.
3. DCO_2: Dissolved Carbon Dioxide, field measured using a field test kit.
4. ORP: Oxidation-Reduction Potential, field measured using portable instrumentation.
5. mV: millivolts

4.0 Discussion and Recommendations

TPHG is present in the area of well points WP-1, WP-2, and WP-3, and monitoring well MW-19 (Area 3). During this monitoring event, the TPHG concentrations in well point WP-2 and monitoring well MW-19 were slightly higher, relative to those reported during the June 2004, groundwater monitoring event. The analytical results of groundwater samples collected from Area 3 indicate that petroleum hydrocarbon concentrations continue to decrease over time. Additionally, the general decrease in TPHG concentrations in the downgradient direction (Figure 5) indicates that natural attenuation is occurring in this area. The TPHD plume present in Area 3 has been following a similar decreasing concentration trend as TPHG.

Groundwater elevations were generally higher during the January 2005, monitoring event, when compared with water level elevations in the second quarter of 2004. The groundwater flow direction during the January 2005, monitoring event was to the south/southeast, and has remained consistent with historic flow patterns.

Groundwater monitoring has been conducted at the site on a quarterly basis since January 1991. Petroleum hydrocarbon concentrations have generally shown a continual decreasing trend since the inception of groundwater monitoring, indicating that the petroleum hydrocarbons present are decreasing as a result of biodegradation. Groundwater elevation data collected from the site has demonstrated that the direction of groundwater flow does not change during the hydrologic cycle.

SHN had previously recommended that the site be considered for closure. The recommendation for closure was presented in the report First Quarter 2003 Groundwater Monitoring Report and Request for Closure. In response to the request for closure, the RWQCB stated in a letter dated December 1, 2003, that the site would not be closed at that time; however, groundwater monitoring could be reduced to a biannual schedule. Accordingly, SHN has implemented a biannual monitoring program. The next biannual monitoring event is scheduled to occur in June 2005.

5.0 References Cited

California Regional Water Quality Control Board, North Coast Region. (December 1, 2003). "*Arcata Redwood Company (Former) Smith River Sawmill, Smith River, California.*" Santa Rosa: RWQCB.

SHN Consulting Engineers & Geologists, Inc. (April 8, 2003). *First Quarter 2003 Groundwater Monitoring Report and Request for Closure, Arcata Redwood Company (Former) Smith River Sawmill, Smith River, California.* Eureka: SHN.

Appendix A

Field Notes

CONSULTING ENGINEERS & GEOLOGISTS, INC.
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812 W. Wabash • Eureka, CA 95501 • Tel: 707.441.8855 • FAX: 707.441.8877 •E-mail: shninfo@shn-engr.com

DAILY FIELD REPORT

JOB NO 093047

PROJECT NAME: Smith River	CLIENT/OWNER: Arcata Redwood Co. LLC.	DAILY FIELD REPORT SEQUENCE NO: 1	
GENERAL LOCATION OF WORK: Smith River, CA	OWNER/CLIENT REPRESENTATIVE: Jeff Lane	DATE: 1-26-05	DAY OF WEEK: Wednesday
TYPE OF WORK: Semi-annual Sampling	WEATHER: Overcast	PROJECT ENGINEER/ SUPERVISOR: Frans Lowman	
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN: David R. Pains	

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

1039	arrived at site, removed lids and caps on all 2~~0~~ wells.
1121	started taking water levels decoming the sounder after each well by scrubbing it with liquinox then rinsing it with DI water. secured all wells with caps and lids except mw-7 and mw-19.
1315	started purging WP-3 with the PERISTALIC pump, purge water was caught in a graduated 5 gal. bucket.
1345	sampled WP-3 out of 1/4" poly hose discharge.
1352	started purging WP-1 with the PERISTALIC pump, purge water was caught in a graduated 5 gal. bucket.
1445	sampled WP-1 out of 1/4" poly hose discharge.
1516	started purging WP-2 with the PERISTALIC pump, purge water was caught in a graduated 5 gal. bucket.
1535	sampled WP-2 out of 1/4" poly hose discharge.
1616	OFF SITE
Note	All decon water and purge water was caught then poured into a 50 gal. plastic drum that I brought in the trailer, secured wells mw-7 and mw-19 with caps and lids.

COPY GIVEN TO:

REPORTED BY: David R. Pains

CONSULTING ENGINEERS & GEOLOGISTS, INC.
480 Hemsted Drive • Redding, CA 96002• Tel: 530.221.5424 • FAX: 530.221.0135 •E-mail: shninfo@shn-redding.com
812 W. Wabash • Eureka, CA 95501 • Tel: 707.441.8855 • FAX: 707.441.8877 •E-mail: shninfo@shn-engr.com

DAILY FIELD REPORT

JOB NO 093047

PROJECT NAME: Smith River	CLIENT/OWNER: Arcata Redwood Co. LLC.	DAILY FIELD REPORT SEQUENCE NO: 2
GENERAL LOCATION OF WORK: Smith River, CA	OWNER/CLIENT REPRESENTATIVE: Jeff Lane	DATE: 1-27-05 / DAY OF WEEK: Thursday
TYPE OF WORK: Semi-annual Sampling	WEATHER: Overcast	PROJECT ENGINEER/ SUPERVISOR: Frans Lowman
SOURCE & DESCRIPTION OF FILL MATERIAL	KEY PERSONS CONTACTED	TECHNICIAN: David R. Paine

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING, & COMPACTING

0802 arrived at site, removed lids and caps on the 5 wells to be sampled.
0819 started purging MW-4 with the air compressor and the dedicated bladder pump in the well, purge water was caught in a graduated 5 gal. bucket.
0855 sampled MW-4 out of 1/2" poly hose discharge, secured well with cap and lid.
0908 started taking DO Readings on MW-7 and MW-19.
0918 took CO_2 and ORP Reading on MW-7 with a disposable bailer.
0926 started purging MW-7 with the air compressor and the dedicated bladder pump in the well, purge water was caught in a graduated 5 gal. bucket.
0936 took CO_2 and ORP Readings on MW-19 with the disposable bailer.
1040 sampled MW-7 out of the 1/2" poly hose discharge, secured well with cap and lid.
1049 started purging MW-19 with the air compressor and the dedicated bladder pump in the well, purge water was caught in a graduated 5 gal. bucket.
1140 sampled MW-19 out of the 1/2" poly hose discharge, secured well with cap and lid.
1149 started purging MW-21 with the air compressor and the dedicated bladder pump in the well, purge water was caught in a graduated 5 gal. bucket.
1230 sampled MW-21 out of the 1/2" poly hose discharge, secured well with cap and lid.
1238 started purging MW-22 with the air compressor and the dedicated bladder pump in the well, purge water was caught in a graduated 5 gal. bucket.
1320 sampled MW-22 out of the 1/2" poly hose, discharge, secured well with cap and lid.
1332 OFF SITE

Note All decon water and purge water was caught then poured into 2-50 gal. plastic drums that I brought in the trailer, then transported to SHN's 1,000 gal. PWST located at 812 W. Wabash Avenue Eureka, CA 77 gallons total.

COPY GIVEN TO:

REPORTED BY: David R. Paine

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Groundwater Elevations

Job No.: 093047 Name: David R. Paine

Client: ARCATA REDWOOD COMPANY Date: 1-26-05

Location: SMITH RIVER, CA Weather: Overcast

Sample Location	Time of Reading	Top of Casing Elevation (feet)	Depth To Water (feet)	Water Surface Elevation (feet)
MW-1	1157	90.00	12.17	77.83
MW-2	1159	89.44	16.50	72.94
MW-3	1201	88.59	13.72	74.87
MW-4	1205	87.13	16.11	71.02
MW-5	1135	87.13	14.72	72.41
MW-6	—	86.38	Broken	—
MW-7	1243	85.35	14.17	71.18
MW-8	1216	91.34	13.01	78.33
MW-10	1218	89.73	13.38	76.35
MW-11	1210	90.62	5.77	84.85
MW-12	1213	90.59	11.60	78.99
MW-13	1224	88.92	8.13	80.79
MW-14	1228	86.61	9.28	77.33
MW-15	1222	86.69	7.49	79.20
MW-16	1235	85.58	11.98	73.60
MW-17	1233	85.04	9.28	75.76
MW-18	1241	82.63	11.11	71.52
MW-19	1254	80.08	10.51	69.57
MW-20	1239	82.74	11.07	71.67
MW-21	1246	79.69	10.21	69.48
MW-22	1250	79.40	13.65	65.75
MW-23	1151	84.18	14.69	69.49
MW-24	1153	82.03	13.99	68.04
MW-25	1124	79.56	9.81	69.75
MW-26	1133	83.92	11.08	72.84
MW-27	1121	76.40	17.27	59.13
MW-28	1129	82.61	18.19	64.42

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EQUIPMENT CALIBRATION SHEET

Name: David R. Paine

Project Name: Smith River

Reference No.: 093047

Date: 1/26-27/05

Equipment: [X] pH & EC [ ] PID [ ] $GTCO_2$ [ ] GTLEL
[ ] Turbidity [X] Other Dissolved Oxygen Meter YS195

Description of Calibration Procedure and Results:

pH & EC meter is calibrated using a 2 buffer method with 7.01 and 4.01, the EC (conductivity) is set at 1413 µS.

DO meter is self calibrating with the Altimeter set at 0.

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	1-26-05
Project No.:	093047	Sampler Name:	David R. Paina
Location:	Smith River	Sample Type:	Ground water
Well #:	WP-3	Weather	Overcast
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	No

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
	-		=		x		=	

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1315							0 gal.	start
1321				217	57.3°	6.13	1 gal.	
1326				224	57.4°	6.15	2 gal.	
1332				232	57.2°	6.14	3 gal.	
1337	2.17	90	77				3.25 gal.	
1346							4 gal.	stop
	No Flow							
	thru cell							
1345	sample	Time						

Purge Method: Peristaltic pump

Total Volume Removed: 4.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
WP-3	3-40ml VOAs	YES HCL	NCL	TPHG / BTEX
WP-3	2-60 ml VOAs	NO	NCL	TPHD / MO

Well Condition: Fair

Remarks:

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Water Sampling Data Sheet

Project Name: Smith River
Date/Time: 1-26-05
Project No.: 093047
Sampler Name: David R. Paina
Location: Smith River
Sample Type: Ground water
Well #: WP-1
Weather: Overcast
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: No

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
	-		=		x		=	

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1356							0 gal.	start
1421				263	59.3°	6.17	1 gal.	
1427				265	59.4°	6.17	2 gal.	
1435				264	59.3	6.19	3 gal.	
1438	2.03	120	72				3.25 gal.	
1448							4.50 gal.	stop
	No flow							
	thru cell							
1445	sample	Time						

Purge Method: Peristaltic pump
Total Volume Removed: 4.50 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
WP-1	3-40ml VOAs	YES HCL	NCL	TPHG / BTEX
WP-1	2-60ml VOAs	NO	NCL	TPHD / MO

Well Condition: Fair
Remarks:

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Water Sampling Data Sheet

Project Name: Smith River
Date/Time: 1-26-05
Project No.: 093047
Sampler Name: David R. Paina
Location: Smith River
Sample Type: Ground water
Well #: WP-2
Weather: Overcast
Hydrocarbon Thickness/Depth (feet): NA
Key Needed: No

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
	-		=		x		=	

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1516							0 gal.	start
1525				203	60.1°	6.04	1 gal.	
1534				201	59.8°	6.07	2 gal.	
1542				202	59.7	6.06	3 gal.	
1545	1.84	120	83				3.25 gal.	
1558							4.25 gal.	stop
	No flow							
	than cell							
1555	sample	Time						

Purge Method: Peristaltic pump
Total Volume Removed: 4.25 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
WP-2	3-40ml VOA's	YES HCL	NCL	TPHG / BTEX
WP-2	2-60ml VOA's	NO	NCL	TPHD / MO

Well Condition: Fair

Remarks:

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	1-27-05
Project No.:	093047	Sampler Name:	David R. Paine
Location:	Smith River	Sample Type:	Ground water
Well #:	MW-4	Weather	Overcast
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
20.55	-	16.11	=	4.44	x	0.653	=	2.90

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0819							0 gal	start
0832				165	56.9°	6.11	3 gal.	
0841				165	56.8°	6.12	6 gal	
0848				165	56.9°	6.14	9 gal.	
0855	Sample Time							

Purge Method: Dedicated bladder pump and Air compressor

Total Volume Removed: 10.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-4	2 - 60ml VOA's	No	NCL	TPHD

Well Condition: Good

Remarks:

Recharged to 16.32 at sampling Time

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	1-27-05
Project No.:	093047	Sampler Name:	David R. Paine
Location:	Smith River	Sample Type:	Ground water
Well #:	MW-7	Weather	Overcast
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
16.45	-	14.17	=	2.28	x	0.653	=	1.49

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0918	1.89	30	127				0.25 gal.	
0926	↓						0.25 gal.	start
0959	↓			94	57.2°	5.67	1.50 gal.	
1015	No Flow			103	57.3°	5.70	3 gal.	
1029	thru cell			108	57.5°	5.67	4.50 gal.	
1040	Sample	Time						

Purge Method: Dedicated bladder pump and Air compression

Total Volume Removed: 4.75 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-7	3-40ml VOA's	YES HCL	NCL	TPHG/BTEX
MW-7	2-60ml VOA's	NO	NCL	TPHD

Well Condition: Good

Remarks: Recharged to 14.69 at sampling Time

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	1-27-05
Project No.:	093047	Sampler Name:	David R. Paine
Location:	Smith River	Sample Type:	Ground water
Well #:	MW-19	Weather	Overcast
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
17.30	-	10.51	=	6.79	x	0.653	=	4.43

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
0936	0.89	70	112				0.25 gal.	
1047	↓						0.25 gal.	start
1110	↓			194	57.3°	6.00	4.50 gal.	
1122	No flow			198	57.7°	5.97	9 gal.	
1132	thru cell			196	58°	5.95	13.50 gal.	
1140	Sample Time							

Purge Method: Dedicated bladder pump and Air compressor Total Volume Removed: 17.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-19	3 - 40ml VOA's	YES HCL	NCL	8010/8020
MW-19	3 - 40 ml VOA's	YES HCL	NCL	TPHG/BTEX
MW-19	2 - 60ml VOA's	No	NCL	TPHD

Well Condition: Good

Remarks:

Recharged to 10.77 at sampling Time

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	1-27-05
Project No.:	093047	Sampler Name:	David R. Paine
Location:	Smith River	Sample Type:	Ground water
Well #:	MW-21	Weather	Overcast
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
17.10	-	10.21	=	6.89	x	0.653	=	4.50

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1149							0 gal	start
1159				145	56°	5.95	4.50 gal	
1211				144	55.9°	5.93	9 gal	
1225				143	55.8°	5.91	13.50 gal.	
1230	sample	Time						

Purge Method: Dedicated bladder pump and Air compression Total Volume Removed: 14.00 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-21	3 - 40ml VOA's	YES HCL	NCL	TPHG / BTEX
MW-21	2 - 60ml VOA's	NO	NCL	TPHD

Well Condition: Good

Remarks:

Recharged to 10.48 at sampling Time

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Water Sampling Data Sheet

Project Name:	Smith River	Date/Time:	1-27-05
Project No.:	093047	Sampler Name:	David R. Paine
Location:	Smith River	Sample Type:	Ground water
Well #:	MW-22	Weather	Overcast
Hydrocarbon Thickness/Depth (feet):	NA	Key Needed:	YES

Total Well Depth (feet)	-	Initial Depth to Water (feet)	=	Height of Water Column (feet)	x	0.163 gal/ft (2-inch well) / 0.653 gal/ft (4-inch well)	=	1 Casing Volume (gal)
19.06	-	13.65	=	5.41	x	0.653	=	3.53

Time	DO (ppm)	CO_2 (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1238							0 gal.	start
1249				129	59.6°	5.79	3.50 gal.	
1302				127	60°	5.71	7 gal.	
1320				129	59.8°	5.76	10.50 gal.	
1320	sample	Time						

Purge Method: Dedicated bladder pump and Air compressor Total Volume Removed: 12.50 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-22	3 - 40ml VOAs	YES HCL	NCL	TPHG / BTEX
MW-22	2 - 60 ml VOAs	No	NCL	TPHD

Well Condition: Good

Remarks: Recharged to 14.69 at sampling Time

Client Name: **SMITH RIVER**

The water from your site: **HIGHWAY 101 SMITH RIVER, CA**

SHN ref # **093047** Collected On: **6/28-29/04**

Has been tested and certified as acceptable to be discharged into the City of Eureka municipal sewer system.

Amount Discharged: **58 GALLONS**

Date Discharged: **8/6/04**

Certified by: **DAVID R. PAINE**

SHN CONSULTING ENGINEERS & GEOLOGISTS, INC.

City of Eureka Wastewater Discharge Permit #65

Appendix B

Historic Monitoring Data

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-2	1/28/91	<0.5[6]	<0.5	<0.5	<0.5	310	--[7]	--	--	--
	4/29/91	<0.5	<0.5	<0.5	<0.5	250	--	--	--	--
	9/9/91	<0.5	<0.5	<0.5	<0.5	320	--	--	--	--
	11/18/91	--	--	--	--	180	--	--	--	--
	2/3/92	--	--	--	--	180	--	--	--	--
	5/4/92	--	--	--	--	230	--	--	--	--
	7/28/92	--	--	--	--	150	--	--	--	--
	10/12/92	--	--	--	--	190	--	--	--	--
	1/26/93	--	--	--	--	130	--	--	--	--
	4/19/93	--	--	--	--	200	--	--	--	--
	7/27/93	--	--	--	--	220	--	--	--	--
	10/27/93	--	--	--	--	200	--	--	--	--
	1/26/94	--	--	--	--	170	--	--	--	--
	4/26/94	--	--	--	--	170	--	--	--	--
	7/26/94	--	--	--	--	120	--	--	--	--
	11/1/94	--	--	--	--	200	--	--	--	--
	1/23/95	--	--	--	--	180	--	--	--	--
	4/13/95	--	--	--	--	160	--	--	--	--
	7/26/95	--	--	--	--	200	--	--	--	--
	10/31/95	--	--	--	--	250	--	--	--	--
	1/15/96	--	--	--	--	130	--	--	--	--
	4/30/96	--	--	--	--	180	--	--	--	--
	8/5/96	--	--	--	--	200	--	--	--	--
	10/29/96	--	--	--	--	300	--	--	--	--
	4/28/97	--	--	--	--	190	--	--	--	--
	10/15/97	--	--	--	--	220	--	--	--	--
	4/13/98	--	--	--	--	130	--	--	--	--
	11/23/98	--	--	--	--	150	--	--	--	--
	4/26/99	--	--	--	--	160	--	--	--	--
	10/27/99	--	--	--	--	160	--	--	--	--
	4/27/00	--	--	--	--	130	--	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-4	1/28/91	<0.5	<0.5	<0.5	<0.5	190	--	--	--	--
	4/29/91	<0.5	<0.5	<0.5	<0.5	210	--	--	--	--
	9/9/91	<0.5	<0.5	<0.5	<0.5	150	--	--	--	--
	11/18/91	--	--	--	--	160	--	--	--	--
	2/3/92	--	--	--	--	180	--	--	--	--
	5/4/92	--	--	--	--	240	--	--	--	--
	7/28/92	--	--	--	--	100	--	--	--	--
	10/13/92	--	--	--	--	68	--	--	--	--
	1/26/93	--	--	--	--	<50	--	--	--	--
	4/19/93	--	--	--	--	65	--	--	--	--
	7/27/93	--	--	--	--	120	--	--	--	--
	10/27/93	--	--	--	--	100	--	--	--	--
	1/26/94	--	--	--	--	110	--	--	--	--
	4/26/94	--	--	--	--	120	--	--	--	--
	7/27/94	--	--	--	--	83	--	--	--	--
	11/1/94	--	--	--	--	83	--	--	--	--
	1/23/95	--	--	--	--	<50	--	--	--	--
	4/13/95	--	--	--	--	<50	--	--	--	--
	7/26/95	--	--	--	--	120	--	--	--	--
	10/31/95	--	--	--	--	<50	--	--	--	--
	1/15/96	--	--	--	--	<50	--	--	--	--
	4/30/96	--	--	--	--	<50	--	--	--	--
	8/5/96	--	--	--	--	87	--	--	--	--
	10/29/96	--	--	--	--	140	--	--	--	--
	4/28/97	--	--	--	--	<50	--	--	--	--
	10/15/97	--	--	--	--	130	--	--	--	--
	4/13/98	--	--	--	--	<50	--	--	--	--
	11/23/98	--	--	--	--	88	--	--	--	--
	4/26/99	--	--	--	--	<50	--	--	--	--
	10/27/99	--		--	--	59	--	--	--	--
	4/27/00	--	--	--	--	<50	--	--	--	--
	4/25/01	--	--	--	--	<50	--	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-4 (cont'd)	4/29/02	--	--	--	--	<50	--	--	--	--
	7/29/03	--	--	--	--	<50	--	--	--	--
	1/29/04	--	--	--	--	<50	--	--	--	--
	1/27/05	--	--	--	--	<50	--	--	--	--
MW-7	1/29/91	<0.5	<0.5	<0.5	<0.5	80	<50	--	<1.0	<1.0
	11/18/91	<0.5	<0.5	<0.5	14	100	540	--	--	--
	2/3/92	<0.5	<0.5	<0.5	<0.5	72	110	--	--	--
	5/4/92	<0.5	<0.5	<0.5	<0.5	67	<50	--	--	--
	1/26/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/19/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/93	<0.5	<0.5	<0.5	0.85	68	57	--	--	--
	1/26/94	<0.5	<0.5	<0.5	0.7	51	<50	--	--	--
	4/26/94	<0.5	<0.5	<0.5	11	62	140	--	--	--
	11/1/94	<0.5	<0.5	<0.5	13	60	290	--	--	--
	1/23/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/15/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/29/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/15/97	<0.5	<0.5	<0.5	<0.5	68	<50	--	--	--
	4/13/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/23/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/04	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/05	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-8	1/28/91	10	4.9	4.2	15.9	<50	1,100	--	<1.0	<1.0
	4/29/91	<0.5	<0.5	<0.5	12.8	54	1,700	--	<1.0	<1.0
	9/9/91	8.6	<5.0	9.2	8.2	<50	880	--	<1.0	<1.0
	11/19/91	4.9	<4.0	<4.0	<4.0	<50	1,600	--	<1.0	<1.0
	2/3/92	<2.0	<2.0	<2.0	<2.0	<50	720	--	<1.0	<1.0
	5/4/92	<1.0	<2.0	<1.0	<2.0	<50	550	--	<1.0	<1.0
	7/28/92	5.8	<5.0	<3.0	<3.0	<50	1,800	--	<1.0	<1.0
	10/12/92	5	<4.0	<4.0	5.1	65	1,100	--	<1.0	<1.0
	1/26/93	<0.5	<0.5	<0.5	<0.5	<50	360	--	<0.5	<0.5
	4/19/93	2.1	1.8	12	10.63	<50	740	--	<1.0	<1.0
	7/27/93	7.8	<7.0	23	13.5	<50	2,100	--	<1.0	<1.0
	10/27/93	5.2	3.9	18	8.3	<50	1,000	--	<1.0	<1.0
	1/26/94	<1.0	<1.0	4.5	3.8	<50	410	--	<1.0	<1.0
	4/26/94	<6.0	<6.0	9.3	3.6	<50	650	--	<1.0	<1.0
	7/26/94	7.3	<5.0	22	8.5	<50	<50	--	<1.0	<1.0
	11/1/94	7.7	<10	25	16	--	1,600	--	--	--
	1/23/95	0.69	1.4	3.3	2.7	--	290	--	--	--
	4/13/95	<0.5	1.1	2.9	2.2	--	210	--	--	--
	7/26/95	6.3	6	16	14.4	--	680	--	--	--
	10/31/95	8.3	4.4	24	14	--	1,200	--	--	--
	1/15/96	<0.5	<0.5	1.5	0.96	--	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	--	<50	--	--	--
	8/5/96	7.6	3.8	20	15.1	--	700	--	--	--
	10/29/96	1.7	<0.5	4.8	2.4	<50	160	--	--	--
	4/28/97	0.87	<1.0	2.5	1.8	<50	150	--	--	--
	10/15/97	2.7	<2.0	6.7	5.1	--	360	--	--	--
	4/13/98	0.96	<2.0	3.1	2.1	--	170	--	--	--
	11/23/98	3	<5.0	12	9.75	--	540	--	--	--
	4/26/99	4	4.8	14	10.6	--	780	--	--	--
	10/27/99	2.2	<4.0	6.7	<4.0	--	82	--	--	--
	4/27/00	<6.0	<6.0	6.7	4.4	--	400	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-10	1/28/91	<0.5	<0.5	<0.5	<0.5	100	450	<1,000	<1.0	<1.0
	4/30/91	<0.5	<0.5	<0.5	<0.5	79	380	<1,000	<1.0	<1.0
	11/19/91	<5.0	<5.0	<5.0	<5.0	52	360	--	--	--
	2/3/92	<5.0	<5.0	<5.0	<5.0	<50	660	--	--	--
	5/4/92	<1.0	<1.0	<2.0	<2.0	<50	350	--	--	--
	1/26/93	<0.5	<0.5	<5.0	<5.0	55	280	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<2.0	<50	210	--	--	--
	7/27/93	<2.0	<5.0	<8.0	<8.0	<50	520	--	--	--
	1/26/94	<0.5	<0.5	<4.0	<4.0	<50	450	--	--	--
	4/26/94	<0.5	<2.0	<3.0	<5.0	<50	300	--	--	--
	11/1/94	<1.0	<2.0	3.6	2	--	580	--	--	--
	1/23/95	<0.5	<0.5	<3.0	<3.0	<50	200	--	--	--
	4/13/95	<0.5	<0.5	<2.0	<2.0	81	110	--	--	--
	7/26/95	<0.5	0.72	<1.5	<1.5	<50	140	--	--	--
	1/15/96	<0.5	<1.0	<2.0	<2.0	<50	110	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<1.5	55	99	--	--	--
	10/29/96	<0.5	<0.5	<1.0	<0.5	55	120	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	170	--	--	--
	10/15/97	<0.5	<0.5	0.85	0.56	51	180	--	--	--
	4/13/98	<0.5	<0.5	<1.5	<1.5	53	93	--	--	--
	11/23/98	<0.5	<0.5	0.55	<0.5	51	190	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	100	--	--	--
	10/27/99	<1.0	<2.0	2.1	<2.0	58	100	--	--	--
	4/27/00	<0.5	<1.0	<1.0	<1.0	<50	220	--	--	--
MW-12	1/29/91	4.6	4	19	44	300	1,800	--	--	--
	4/30/91	2.4	4.9	11	57	250	1,500	--	--	--
	9/9/91	<5.0	<5.0	6.8	63	260	1,500	--	--	--
	11/19/91	7.8	7	15	52	250	1,400	--	--	--
	2/4/92	<2.5	<2.5	2.7	21	190	1,000	--	--	--
	5/4/92	2.2	3.3	10	26	200	760	--	--	--
	7/28/92	3.6	7.5	4.5	49.1	240	1,300	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-12 (cont'd)	10/12/92	3.7	6.7	3.3	50.4	320	970	--	--	--
	1/27/93	<0.5	<1.0	<1.0	<5.0	110	570	--	--	--
	4/20/93	<0.5	<0.5	<0.5	2.16	72	230	--	--	--
	7/27/93	2.6	7.6	4.5	40.7	160	650	--	--	--
	10/27/93	2.5	5.4	2.5	40.7	220	710	--	--	--
	1/27/94	<0.5	0.6	<0.5	1.53	160	200	--	--	--
	4/27/94	0.89	2.2	2.3	5.3	100	490	--	--	--
	7/26/94	1.9	5.1	2.2	28.6	170	760	--	--	--
	11/1/94	2	<5.0	2.9	13.7	320	710	--	--	--
	1/23/95	<0.5	<0.5	<0.5	<0.5	110	110	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	74	<50	--	--	--
	7/26/95	<0.5	0.98	0.71	8.1	140	140	--	--	--
	10/31/95	0.55	0.91	0.67	8.1	190	230	--	--	--
	1/15/96	<0.5	<0.5	<0.5	<0.5	78	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	87	<50	--	--	--
	8/5/96	0.51	1.6	1.4	5.68	110	160	--	--	--
	10/29/96	<0.5	<0.5	0.52	2.4	190	95	--	--	--
	4/28/97	<0.5	<0.5	0.75	<0.5	63	84	--	--	--
	10/16/97	<0.5	<0.5	0.64	2.2	140	180	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/24/98	<0.5	<0.5	<0.5	<0.5	69	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	0.84	71	<50	--	--	--
	10/27/99	<0.5	0.55	<0.5	0.87	99	<50	--	--	--
	4/27/00	<0.5	<1.0	<0.5	<0.5	53	91	--	--	--
MW-14	1/29/91	2.2	1.9	1.7	12	480	470	--	--	--
	4/30/91	2.1	1.9	1.9	10	510	470	--	--	--
	9/9/91	<3.0	2.7	1.7	6	320	620	--	--	--
	11/19/91	<5.0	<5.0	<5.0	<5.0	240	610	--	--	--
	2/4/92	<3.0	<3.0	<3.0	3.4	750	550	--	--	--
	5/5/92	1.5	1.5	1.4	4.8	500	320	--	--	--
	7/29/92	<3.0	2.7	<3.0	<3.0	330	570	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-14 (cont'd)	10/13/92	2.2	3.2	<2.0	<2.0	350	520	--	--	--
	1/27/93	1.7	1.6	2	5.6	430	700	--	--	--
	4/20/93	1	1.2	1.3	4.6	290	490	--	--	--
	7/27/93	2	3.8	2.4	5.4	360	680	--	--	--
	10/28/93	1.7	2.8	<3.0	<3.0	370	540	--	--	--
	1/27/94	0.99	2	<3.0	<3.0	580	550	--	--	--
	4/27/94	1.2	1.3	1.6	3.3	480	530	--	--	--
	7/27/94	1.2	2.3	<3.0	<3.0	360	560	--	--	--
	11/1/94	1.4	<3.0	<3.0	<3.0	620	690	--	--	--
	1/24/95	0.59	1.1	1.5	3.1	720	480	--	--	--
	4/13/95	0.58	0.91	1.4	3.5	410	390	--	--	--
	7/26/95	<0.5	0.92	1.0	2.47	380	360	--	--	--
	10/31/95	0.58	0.92	0.92	1.5	380	260	--	--	--
	1/15/96	0.58	1.2	1	0.91	300	230	--	--	--
	4/30/96	<0.5	<1.0	1.1	1.3	330	230	--	--	--
	8/5/96	<0.5	0.71	1.0	0.67	440	320	--	--	--
	10/30/96	<0.5	<1.0	0.64	0.63	520	140	--	--	--
	4/28/97	<0.5	<1.0	0.77	0.53	440	220	--	--	--
	10/16/97	<0.5	<2.0	0.91	0.62	470	250	--	--	--
	4/14/98	<0.5	<1.6	0.92	0.68	250	370	--	--	--
	11/24/98	<0.5	<1.0	0.83	0.58	380	280	--	--	--
	4/26/99	<0.5	1.4	0.87	0.79	350	250	--	--	--
	10/27/99	<0.5	<1.5	<2.0	<1.5	370	180	--	--	--
	4/27/00	<0.5	<2.0	<2.0	<2.0	190	340	--	--	--
MW-15	1/29/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	9/10/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/19/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-15 (cont'd)	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
MW-16	1/29/91	<0.5	<0.5	<0.5	<0.5	200	<50	<1,000	<1.0	<1.0
	4/30/91	<0.5	<0.5	<0.5	0.54	250	63	<1,000	<1.0	<1.0
	9/10/91	<1.0	<1.0	<1.0	<0.5	180	<50	<1,000	<1.0	<1.0
	11/19/91	<0.5	<0.5	<0.5	<0.5	120	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	58	<50	<1,000	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	130	<50	<1,000	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	87	<50	<1,000	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	97	<50	<1,000	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	120	<50	<1,000	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	130	<50	<1,000	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	<1,000	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	100	<50	<1,000	--	--
	11/1/94	--	--	--	--	500	--	--	--	--
	1/24/95	--	--	--	--	<50	--	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-16 (cont'd)	4/13/95	--	--	--	--	<50	--	--	--	--
	7/27/95	--	--	--	--	84	--	--	--	--
	11/1/95	--	--	--	--	<50	--	--	--	--
	1/16/96	--	--	--	--	<50	--	--	--	--
	5/1/96	--	--	--	--	64	--	--	--	--
	8/6/96	--	--	--	--	120	--	--	--	--
	10/30/96	--	--	--	--	100	--	--	--	--
	4/28/97	--	--	--	--	<50	--	--	--	--
	10/16/97	--	--	--	--	94	--	--	--	--
	4/14/98	--	--	--	--	<50	--	--	--	--
	11/24/98	--	--	--	--	<50	--	--	--	--
	4/26/99	--	--	--	--	55	--	--	--	--
	10/28/99	--	--	--	--	120	--	--	--	--
	4/27/00	--	--	--	--	<50	--	--	--	--
MW-17	1/29/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	9/10/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/19/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-17 (cont'd)	4/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/26/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
MW-18	1/25/90	<0.5	<0.5	<0.5	<0.5	160	<50	(*)	<1.0	<1.0
	5/1/90	<0.5	<0.5	<0.5	<0.5	114	<50	--	<1.0	<1.0
	11/7/90	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--
	1/29/91	<0.5	<0.5	<0.5	<0.5	220	<50	--	--	--
	4/30/91	<0.5	<0.5	<0.5	<0.5	250	<50	--	--	--
	9/10/91	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	97	52	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	71	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--
	7/27/95	<0.5	<0.5	<0.5	<0.5	110	<50	--	--	--
	11/1/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	8/6/96	<0.5	<0.5	<0.5	<0.5	89	<50	--	--	--
	10/25/00	<0.5	<0.5	<0.5	<0.5	89	<50	--	--	--
MW-19	1/29/91	<0.5	1.9	<0.5	1114	890	45,000	--	<1.0	1.3
	4/30/91	<0.5	<0.5	<0.5	1114	810	45,000	--	<1.0	<1.0
	9/10/91	<1.0	3.2	2.4	905	550	38,000	--	<1.0	<1.0
	11/19/91	<1.0	3	<1.0	842	580	38,000	--	<1.0	<1.0
	2/4/92	<1.0	2.5	1.6	1817	740	47,000	--	<1.0	<1.0
	5/5/92	<0.5	1.7	2.7	657	520	29,000	--	<1.0	<1.0
	7/29/92	<1.0	2.4	2	1014	420	37,000	--	<1.0	<1.0
	10/13/92	<1.0	2.8	3.2	1019	360	29,000	--	<1.0	<1.0
	1/27/93	<0.5	0.7	<0.5	810	390	53,000	--	1.6	<0.5
	4/20/93	<1.0	<1.0	1.8	816	140	25,000	--	<2.0	<1.0
	7/28/93	<1.0	1.1	2.7	560	470	31,000	--	<1.0	<1.0
	10/28/93	<1.0	1.8	2.9	851	580	23,000	--	<1.0	<1.0
	1/27/94	<1.0	1.3	2.5	993	600	42,000	--	1.3	1.6
	4/27/94	<1.0	<1.0	<1.0	295.9	340	15,000	--	<1.0	<1.0

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-19 (cont'd)	7/27/94	<1.0	<1.0	1.7	569.4	660	29,000	--	<1.0	<1.0
	11/1/94	<1.0	2.5	1.1	306.6	440	25,000	--	<1.0	<1.0
	1/24/95	<10.0	<10.0	<10.0	467.2	380	17,000	--	<1.0	<1.0
	4/13/95	<0.5	0.68	1.9	643	500	25,000	--	1.4	<1.0
	7/27/95	<0.5	0.67	0.98	163.2	310	6,700	--	1.4	<1.0
	11/1/95	<0.5	1.0	1.6	307.2	320	16,000	--	1.9	<1.0
	1/16/96	<0.5	0.95	1.8	262	150	28,000	--	1.6	<1.0
	5/1/96	<0.5	0.53	0.72	174.2	170	10,000	--	<1.0	<1.0
	8/6/96	<0.5	<0.5	0.86	142.8	380	7,800	--	1.2	<1.0
	10/30/96	1	1.9	1.1	387.4	570	9,800	--	1.1	<1.0
	1/28/97	<0.5	<0.5	0.8	256	260	12,000	--	<1.0	<1.0
	4/28/97	<0.5	0.62	1.2	379	300	15,000	--	1.7	<1.0
	7/29/97	<0.5	0.74	1.4	217	150	13,000	--	<1.0	<1.0
	10/16/97	<0.5	1.2	1.2	206.9	320	13,000	--	<1.0	<1.0
	1/26/98	<0.5	<0.5	0.69	204.6	120	9,100		2.7	<3.0
	4/14/98	<0.5	0.76	1.8	521	210	33,000		<100	<100
	7/27/98	<0.5	0.89	1.6	246.1	470	14,000		<2.0	<1.0
	11/24/98	<1.0	<1.0	<1.0	175	240	15,000		<2.0	<1.0
	1/27/99	<0.5	<0.5	<0.5	58	65	3,300		<1.0	<1.0
	4/27/99	<0.5	<0.5	0.59	80.7	180	6,300		<1.0	<1.0
	10/28/99	<0.5	0.75	0.79	215	220	11,000		<1.0	<1.0
	1/18/00	<0.5	<0.5	<0.5	42.61	75	3,600		<1.0	<1.0
	4/27/00	<0.5	<0.5	<0.5	121.6	67	5,200		<1.0	<1.0
	7/25/00	<0.5	<0.5	<0.5	69.3	150	5,700		<1.0	<1.0
	10/25/00	<0.5	<0.5	<0.5	67.2	330	4,900		<1.0	<1.0
	1/29/01	<0.5	<0.5	<0.5	112.2	1600	5,000		<1.0	<1.0
	4/25/01	<0.5	<0.5	<0.5	97.9	250	5,400		<1.0	<1.0
	7/25/01	<0.5	<0.5	<0.5	112.8	350	5,700		<1.0	<1.0
	11/1/01	<0.5	0.82	0.74	265.2	590	12,000		<1.0	<1.0
	1/29/02	<0.5	<0.5	<0.5	31	96	920	--	<1.0	<1.0
	4/29/02	<0.5	<0.5	<0.5	100.6	280	4,400	--	<1.0	<1.0

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-19 (cont'd)	7/29/02	<0.5	<0.5	<0.5	79.3	260	3,800	--	<1.0	<1.0
	10/31/02	<0.5	<0.5	0.77	193.7	330	10,000	--	<1.0	<1.0
	1/30/03	<0.5	<0.5	<0.5	33	150	1,000	--	<1.0	<1.0
	7/29/03	<1.0	1.8	<1.0	54.88	250[11]	3,000[9]	--	<1.0	<1.0
	1/29/04	<0.5	<0.5	<0.5	81	140[8,11]	1,300[9]	--	<1.0	<1.0
	6/28/04	<0.50	<0.50	<0.50	30	140[11]	1,700[9]	--	--	<1.0
	1/27/05	<0.50	<0.50	<0.50	94.6	140	4,000[10]	--	<1.0	<1.0
MW-20	1/29/91	<0.5	<0.5	<0.5	<0.5	110	<50	--	<1.0	<1.0
	4/30/91	<0.5	<0.5	<0.5	<0.5	80	<50	--	<1.0	<1.0
	9/10/91	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	11/20/91	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	2/4/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	5/5/92	<1.0	<1.0	<1.0	<0.5	81	<50	--	<1.0	<1.0
	7/29/92	<1.0	<1.0	<1.0	<0.5	<50	83	--	<1.0	<1.0
	10/13/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<0.5	<0.5
	4/20/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	10/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/14/95	<0.5	<0.5	<0.5	<0.5	60	<50	--	--	--
	7/27/95	--	--	--	--	71	--	--	--	--
	1/16/96	--	--	--	--	<50	--	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	8/6/96	--	--	--	--	<50	--	--	--	--
	10/30/96	--	--	--	--	71	--	--	--	--
	1/28/97	--	--	--	--	<50	--	--	--	--
	4/29/97	--	--	--	--	<50	--	--	--	--
	7/29/97	--	--	--	--	<50	--	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-20 (cont'd)	10/16/97	--	--	--	--	61	--	--	--	--
	1/26/98	--	--	--	--	87	--	--	--	--
	4/14/98	--	--	--	--	<50	--	--	--	--
	7/27/98	--	--	--	--	<50	--	--	--	--
	11/24/98	--	--	--	--	<50	--	--	--	--
	1/27/99	--	--	--	--	<50	--	--	--	--
	10/28/99	--	--	--	--	<50	--	--	--	--
	1/18/00	--	--	--	--	<50	--	--	--	--
	4/27/00	--	--	--	--	<50	--	--	--	--
MW-21	2/4/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	5/5/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/29/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	10/13/92	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/93	<0.5	<0.5	<0.5	0.8	<50	<50	--	<0.5	<0.5
	4/20/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	10/28/93	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	7/27/94	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	4/14/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/16/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/26/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/24/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-21 (cont'd)	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/1/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/30/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	68	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/04	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	6/28/04	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
	1/27/05	<0.50	<0.50	<0.50	<0.50	63	<50	--	--	--
MW-22	1/29/91	<0.5	<0.5	<0.5	121	320	7,500	--	<1.0	<1.0
	5/1/91	<0.5	<0.5	<0.5	392	300	15,000	--	<1.0	<1.0
	9/11/91	<1.0	<1.0	<1.0	48	140	3,100	--	<1.0	<1.0
	11/20/91	<1.0	<1.0	<1.0	68	120	3,600	--	<1.0	<1.0
	2/4/92	<1.0	<1.0	<1.0	211	250	5,100	--	<1.0	<1.0
	5/5/92	<1.0	<1.0	<1.0	152	220	6,000	--	<1.0	<1.0
	7/29/92	<1.0	<1.0	<1.0	44	170	3,700	--	<1.0	<1.0
	10/13/92	<1.0	<1.0	<1.0	19	79	920	--	<1.0	<1.0
	1/27/93	<0.5	<0.5	<0.5	320	180	18,000	--	<0.5	<0.5
	4/20/93	<1.0	<1.0	<1.0	282.7	98	7,700	--	<1.0	<1.0
	7/28/93	<1.0	<1.0	<1.0	121.6	190	6,200	--	<1.0	<1.0
	10/28/93	<1.0	<1.0	<1.0	21.4	170	1,700	--	<1.0	<1.0

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-22 (cont'd)	1/27/94	<1.0	<1.0	<1.0	141.5	170	6,400	--	<1.0	<1.0
	4/27/94	<1.0	<1.0	<1.0	101.2	180	3,800	--	<1.0	<1.0
	7/27/94	<1.0	<1.0	<1.0	11	170	1,900	--	<1.0	<1.0
	11/1/94	<2.5	<2.5	<2.5	22	170	2,200	--	--	--
	1/24/95	<2.5	<2.5	<2.5	54	140	2,900	--	--	--
	4/14/95	<0.5	<0.5	<0.5	131.3	170	3,200	--	--	--
	7/27/95	<0.5	<0.5	<0.5	1.6	<50	190	--	--	--
	11/1/95	<0.5	<0.5	<0.5	0.77	<50	360	--	--	--
	1/16/96	<0.5	<0.5	<0.5	81.56	61	2,200	--	--	--
	5/1/96	<0.5	<0.5	<0.5	51.53	100	2,000	--	--	--
	8/6/96	<0.5	<0.5	<0.5	3.2	88	370	--	--	--
	10/30/96	<0.5	<0.5	<0.5	10	140	570	--	--	--
	1/28/97	<0.5	<0.5	<0.5	5.3	96	350	--	--	--
	4/29/97	<0.5	<0.5	<0.5	32	87	1,300	--	--	--
	7/29/97	<0.5	<0.5	<0.5	14	<50	870	--	--	--
	10/16/97	<0.5	<0.5	<0.5	15	100	670	--	--	--
	1/26/98	<5.0	<5.0	<5.0	34	110	2,000	--	--	--
	4/14/98	<5.0	<5.0	<5.0	46.73	74	1,900	--	--	--
	7/27/98	<5.0	<5.0	<5.0	11	110	1,000	--	--	--
	11/24/98	<0.5	<0.5	<0.5	41	71	990	--	--	--
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	86	--	--	--
	4/27/99	<0.5	<0.5	<0.5	9.8	<50	430	--	--	--
	10/28/99	<0.5	<0.5	<0.5	2.4	<50	340	--	--	--
	1/18/00	<0.5	<0.5	<0.5	<0.5	<50	68	--	--	--
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	380	--	--	--
	7/25/00	<0.5	<0.5	<0.5	8.6	59	800	--	--	--
	10/25/00	<0.5	<0.5	<0.5	0.91	95	74	--	--	--
	1/29/01	<0.5	<0.5	<0.5	2.5	120	120	--	--	--
	4/25/01	<0.5	<0.5	<0.5	2.7	<50	190	--	--	--
	7/25/01	<0.5	<0.5	<0.5	0.67	85	350	--	--	--
	11/1/01	<0.5	<0.5	<0.5	<0.5	74	58	--	--	--
	1/29/02	<0.5	2.2	<0.5	<0.5	<50	<50	--	--	--

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Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-22 (cont'd)	4/30/02	<0.5	<0.5	<0.5	2.6	91	120	--	--	--
	7/29/02	<0.5	<0.5	<0.5	1.9	86	470	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	75	59	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	75	59	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	1/29/04	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	6/28/04	<0.50	<0.50	<0.50	<0.50	54[8]	<50	--	--	--
	1/27/05	<0.50	<0.50	<0.50	<0.50	<50	<50	--	--	--
MW-25	8/1/90	0.6	<0.5	<0.5	<0.5	<50	--	--	--	--
	11/8/90	<0.5	<0.5	<0.5	<0.5	68	--	--	--	--
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	9/11/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	11/20/91	--	--	--	--	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	1/27/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
MW-28	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--
	9/11/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/20/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
MW-28 (cont'd)	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/20/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
UP DC[18]	8/1/90	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/18/90	<1.0	<1.0	<1.0	<0.5	150	<50	--	--	--
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	<1.0	<1.0
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	9/11/91	<1.0	<1.0	<1.0	<0.5	<50	<50	--	--	--
	11/20/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/21/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	8/6/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/26/98	<0.5	<0.5	<0.5	<0.5	74	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
UP DC (cont'd)	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/24/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/18/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/1/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	4/29/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
LOW DC[19]	8/1/90	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/8/90	<1.0	<1.0	<1.0	<0.5	<50	<50	--	<1.0	<1.0
	1/30/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/1/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	9/11/91	<1.0	<1.0	<1.0	<0.5	<50	<50	--	--	--
	11/20/91	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	2/4/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/5/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/13/92	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/21/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
LOW DC (cont'd)	7/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/93	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/1/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/24/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/13/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/1/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/16/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	5/1/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	8/6/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/30/96	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/28/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/29/97	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/97	<0.5	<0.5	<0.5	<0.5	84	<50	--	--	--
	1/26/98	<0.5	<0.5	<0.5	<0.5	67	<50	--	--	--
	4/14/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/27/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/24/98	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/27/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/28/99	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/18/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/28/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/25/00	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	4/25/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	11/1/01	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

Table B-1
Historic Summary of Analytical Results From Groundwater and Surface Water Collected At Arcata Redwood, Smith River Sawmill, California
(in ug/L)[1]

Sample Location	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHD[2]	TPHG[2]	TPHIR[2]	EPA 8010/8020[3]	
									1,2-DCB[4]	1,4-DCB[5]
LOW DC (cont'd)	4/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	7/29/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	10/31/02	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--
	1/30/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	4/29/03	<0.5	<0.5	<0.5	<1.0	<50	<50	--	--	--
	7/29/03	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--

1. ug/L: micrograms per Liter; same as parts per billion (ppb)
2. TPHD: Total Petroleum Hydrocarbons as Diesel; TPHG: TPH as Gasoline; TPHIR: TPH by infrared Spectrometry
3. Volatile Organics from EPA 8010 and 8020 that have not been detected are not listed in the table.
4. 1,2-DCB: 1,2-Dichlorobenzene
5. 1,4-DCB: 1,4-Dichlorobenzene
6. <: denotes a value that is "less than" the laboratory method detection limit.
7. --: Indicates analysis not conducted
8. Sample contains material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil; all diesel results reported represent the amount of material in the diesel range of molecular weights only
9. Sample does not have the typical pattern of fresh gasoline. The results reported represent the amount of material in the gasoline range
10. Detection limit was raised due to matrix interference
11. Sample contains some material of lighter molecular weight than diesel
12. Sample surrogate could not be quantified due to matrix interference
13. Total Petroleum Hydrocarbons, analyzed with infrared Spectrophotometry, using an EPA specified standard
14. MW-18 is sampled only if either or both MW-7 and MW-10 are dry
15. 1,2-Dichloropropane was detected at 1.1 ug/L from MW-19, in November of 1995
16. Sample analyzed using EPA Method 8021
17. Sample was diluted due to late eluting material
18. UP DC: "Upper" Dominie Creek sample station located above bridge, approximately 300 feet above DCBM-1
19. LOW DC: "Lower" Dominie Creek sample station located downstream from site, approximately 100 feet below DCBM-4

Table B-2
Historic Groundwater Analytical Results, Well Point Locations
Arcata Redwood Company, Smith River, California
(in ug/L)[1]

Sample Location	Sample Date	TPHG[2]	TPHD[3]	TPHMO[4]	B[5]	T[5]	E[5]	X[5]	MTBE[6]
WP-1	11/14/97	37,000	NA[7]	NA	<10[8]	<10	<10	<10	<100
	12/22/97	39,000	730	<500	<0.5	1.6	3.1	1,006	<5.0
	1/26/98	34,000	470	<500	<0.5	0.8	2.3	623	<5.0
	4/15/98	55,000	350	<500	<0.5	1	2.1	866	<5.0
	7/27/98	33,000	750	610	<25	<25	<25	550	<250
	11/24/98	48,000	470	<500	<0.5	1.2	2.9	685	<5.0
	1/27/99	47,000	780	<500	<0.5	1.7	3.3	832	<5.0
	4/27/99	46,000	970	<500	<0.5	1.8	3.7	922	<3.0
	10/28/99	17,000	710	<500	<0.5	2.9	1.7	352	<3.0
	1/18/00	43,000	660	<500	<0.5	1.3	1.6	594	<3.0
	4/28/00	39,000	490	<170	<0.5	1.1	1.6	734	<3.0
	7/25/00	34,000	490	<170	<0.5	0.79	1.6	563	<3.0
	10/26/00	33,000	530	170	<0.5	0.85	1.4	530.1	<3.0
	1/29/01	27,000	1,600	1,600	<0.5	0.98	1.7	543	<3.0
	4/25/01	30,000	780	280	<0.5	0.74	1.5	573	<3.0
	7/25/01	35,000	880	550	<0.5	0.63	1.4	562	<3.0
	11/1/01	30,000	1,700	280	<0.5	3.8	1.4	572	<3.0
	1/29/02	26,000	730	<170	<0.5	0.76	0.91	358.2	<3.0
	4/29/02	26,000	410	<170	<0.5	0.98	1.4	470	<3.0
	7/29/02	23,000	650	<170	<0.5	0.73	1.1	408.5	<3.0
	10/31/02	14,000	2,000	630	<0.5	0.63	0.79	285.8	<3.0
	1/30/03	14,000	460	<170	<5.0	<5.0	<5.0	265.5	<30
	4/29/03	11,000	450	<170	<5.0	<5.0	<5.0	200	<30
	7/29/03	25,000[9]	830[10,11]	190[12]	<0.5	0.87	1.4	500	<3.0
	1/29/04	9,300[9]	860[10,11]	<170	<0.50	<0.50	<0.50	192.5	<3.0
	6/28/04	23,000[9]	840[10,11]	<170	<0.50	0.67	1.2	408.6	<3.0
	1/26/05	12,000[13]	420	<170	<0.50	0.64	0.65	234.3	<3.0
WP-2	11/14/97	46,000	2,100	980	<0.5	3.4	6.2	994	<5.0
	12/22/97	53,000	510	<500	<0.5	2	5	1,440	<5.0
	1/26/98	22,000	380	<500	<0.5	1.1	1.4	452	<5.0
	4/15/98	20,000	420	<500	<0.5	<0.5	0.59	326	<5.0
	7/27/98	55,000	660	<500	<25	<25	<25	1,358	<250
	11/24/98	19,000	460	1,000	<5.0	<5.0	<5.0	415	<50
	1/27/99	39,000	790	<500	<0.5	2.1	4.3	1,129	<5.0
	4/27/99	54,000	880	<500	<0.5	2.7	5.9	1,838	<3.0
	10/28/99	53,000	700	<500	<0.5	2.8	4	1,440	<3.0
	1/18/00	35,000	300	<500	<0.5	1.4	2	747	<3.0
	4/28/00	44,000	780	220	<0.5	2.7	3.8	1,734	<3.0
	7/25/00	45,000	510	<170	<0.5	1.7	3.1	1,125	<3.0
	10/26/00	56,000	520	<170	<0.5	2.2	2.9	963	<3.0
	1/29/01	49,000	51,000	93,000	<0.5	3	3.4	2,152	<3.0
	4/25/01	43,000	960	560	<0.5	1.7	3.3	1,330	<3.0
	7/25/01	NQ[14]	700	340	<0.5	1.3	3.1	NQ	<3.0
	11/1/01	47,000	850	<170	<0.5	2.4	3.5	1,532	<3.0
	1/29/02	27,000	620	230	<0.5	1.2	1.6	755	<3.0
	4/29/02	38,000	530	<170	<0.5	1.9	3.1	1,124	<3.0
	7/29/02	47,000	490	<170	<0.5	1.2	2.6	912	<3.0

Table B-2
Historic Groundwater Analytical Results, Well Point Locations
Arcata Redwood Company, Smith River, California
(in ug/L)[1]

Sample Location	Sample Date	TPHG[2]	TPHD[3]	TPHMO[4]	B[5]	T[5]	E[5]	X[5]	MTBE[6]
WP-2 (cont'd)	10/31/02	64,000	26,000	10,000	<0.5	2.1	2.5	920	<3.0
	1/30/03	6,700	220	<170	<5.0	<5.0	<5.0	180	<30
	4/29/03	18,000	560	<170	<5.0	<5.0	<5.0	541	<30
	7/29/03	40,000[9]	680[10,11]	<170	<5.0	<5.0	<5.0	1,223	<30
	1/29/04	25,000[9]	420[10,11]	<170	<0.5	0.8	1.7	885	<3.0
	6/28/04	40,000[9]	350[10,11]	<170	<5.0	<5.0	<5.0	1,020	<30
	1/26/05	43,000[13]	660	<170	<0.50	0.92	2.6	889	<3.0
WP-3	10/29/99	15,000	360	<500	<0.5	0.67	0.76	225.1	<3.0
	1/18/00	22,000	300	<500	<0.5	0.52	0.87	265.5	<3.0
	4/28/00	7,600	180	<170	<0.5	<0.5	<0.5	112	<3.0
	7/25/00	14,000	280	<170	<0.5	0.53	0.74	214.3	<3.0
	10/26/00	16,000	320	<170	<0.5	0.73	0.79	215.1	<3.0
	1/29/01	8,100	160	<170	<0.5	<0.5	0.71	184.9	<3.0
	4/25/01	16,000	550	<170	<0.5	<0.5	0.9	296.2	<3.0
	7/25/01	18,000	790	230	<0.5	<0.5	0.62	285.8	<3.0
	11/1/01	14,000	470	<170	<0.5	0.79	0.83	245.5	<3.0
	1/29/02	13,000	460	<170	<0.5	<0.5	0.54	163.5	<3.0
	4/29/02	10,000	260	<170	<0.5	<0.5	0.66	214	<3.0
	7/29/02	13,000	330[8]	<170	<0.5	0.57	0.79	213.9	<3.0
	10/31/02	13,000	580	<170	<0.5	0.59	1.1	224.3	<3.0
	1/30/03	9,900	360	<170	<5.0	<5.0	<5.0	<30	<30
	4/29/03	6,400	270	<170	<5.0	<5.0	<5.0	<30	<30
	7/29/03	9,300[9]	310[10,11]	<170	<0.5	<0.5	0.62	173	<3.0
	1/29/04	6,500[9]	260[10,11]	<170	<0.5	<0.5	<0.5	131.8	<3.0
	6/28/04	9,000[9]	260[10,11]	<170	<0.50	<0.50	0.57	112.2	<3.0
	1/26/05	7,400[13]	320	<170	<0.50	<0.50	<0.50	132	<3.0
WP-4	10/29/99	<100	98	<500	<0.5	10	<0.5	<1.0	<3.0
	1/18/00	<50	<50	<500	<0.5	<0.5	<0.5	<0.5	<3.0
	4/28/00	<50	61	<170	<0.5	1.6	<0.5	<0.5	<3.0
	7/25/00	<50	71	<170	<0.5	<0.5	<0.5	<0.5	<3.0

1. ug/L: micrograms per Liter
2. TPHG: Total Petroleum Hydrocarbons as Gasoline, analyzed in general accordance with EPA Method Nos. 5030/GCFID/8015B
3. TPHD: Total Petroleum Hydrocarbons as Diesel, analyzed in general accordance with EPA Method Nos. 3550 or 3510/GCFID/8015B
4. TPHMO: Total Petroleum Hydrocarbons as Motor Oil, analyzed in general accordance with EPA Method Nos. 3550 or 3510/GCFID/8015B.
5. BTEX: Benzene, Toluene, Ethylbenzene and total Xylenes, analyzed in general accordance with EPA Method Nos. 602 or 5030/8021B
6. MTBE: Methyl Tertiary-Butyl Ether, analyzed in general accordance with EPA Method Nos. 606 or 5030/8021B
7. NA: Not Applicable/Not Analyzed
8. <: denotes a value that is less than the laboratory method detection limit
9. Sample does not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.
10. Sample contains some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.
11. Sample contains material similar to degraded or weathered diesel oil.
12. The sample does not have the typical pattern of fresh motor oil. However, the reported result represents the amount of material in the motor oil range.
13. The reported value includes the reported gasoline components in addition to other peaks in the gasoline range.
14. NQ: Not quantifiable, see laboratory analytical report.

Appendix C

Laboratory Analytical Reports

NORTH COAST LABORATORIES LTD.

February 09, 2005

Green Diamond Resource Company
P.O. Box 68
Korbel, CA 95550

Attn: Jeff Lane

RE: 093047, Smith River

Order No.: 0501555
Invoice No.: 48053
PO No.: SA# 1508-03-AD-
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	WP-3
01D	WP-3
02A	WP-1
02D	WP-1
03A	WP-2
03D	WP-2
04A	MW-4
05A	MW-7
05D	MW-7
06A	MW-19
06D	MW-19
06F	MW-19
07A	MW-21
07D	MW-21
08A	MW-22
08D	MW-22

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

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TPH as Diesel/Motor Oil:
Samples WP-1, WP-2 and WP-3 contain material similar to degraded or weathered diesel oil.

Samples WP-1, WP-2 and WP-3 contain some material lighter than diesel. However, some of this material extends into the diesel range of molecular weights.

TPH as Diesel:
Sample MW-19 contains material similar to degraded or weathered diesel oil.

Sample MW-21 contains material in the diesel range of molecular weights, but the material does not exhibit the peak pattern typical of diesel oil.

TPH as Gasoline:
The gasoline values for samples WP-1, WP-2, WP-3 and MW-19 include the reported gasoline components in addition to other peaks in the gasoline range.

EPA 8021B - Aromatic Volatiles:
The positive xylene results were confirmed by second column. Suggest GC-MS.

EPA 8021B - Halogenated Volatiles:
The laboratory control sample duplicate (LCSD) recovery was below the lower acceptance limit for dibromochloromethane. The response of the reporting limit standard was such that the analyte would have been detected even with the low recovery; therefore, the data were accepted.

The relative percent difference's (RPD's) for the laboratory control samples were above the upper acceptance limit for several analytes. This indicates that the results could be variable. Since there were no detectable levels of these analytes in the sample, the data were accepted.

The surrogate recovery was below the lower acceptance limit for sample MW-19. The response of the reporting limit standard was such that the analytes would have been detected even with the low recovery; therefore, the data were accepted.

BTEX:
The surrogate recovery was below the lower acceptance limit for the method blank. The response of the reporting limit standard was such that the analytes would have been detected even with the low recovery; therefore, the data were accepted.

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Date: 09-Feb-05
WorkOrder: 0501555

ANALYTICAL REPORT

Client Sample ID: WP-3 **Received:** 1/27/05 **Collected:** 1/26/05 13:45
Lab ID: 0501555-01A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/2/05
Benzene	ND	0.50	µg/L	1.0		2/2/05
Toluene	ND	0.50	µg/L	1.0		2/2/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/2/05
m,p-Xylene	2.0	0.50	µg/L	1.0		2/2/05
o-Xylene	130	10	µg/L	20		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	101	85-115	% Rec	20		2/3/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	7,400	1,000	µg/L	20		2/3/05

Client Sample ID: WP-3 **Received:** 1/27/05 **Collected:** 1/26/05 13:45
Lab ID: 0501555-01D

Test Name: TPH as Diesel/Motor Oil **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	320	50	µg/L	1.0	2/7/05	2/7/05
TPHC Motor Oil	ND	170	µg/L	1.0	2/7/05	2/7/05

Client Sample ID: WP-1 **Received:** 1/27/05 **Collected:** 1/26/05 14:45
Lab ID: 0501555-02A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/2/05
Benzene	ND	0.50	µg/L	1.0		2/2/05
Toluene	0.64	0.50	µg/L	1.0		2/2/05
Ethylbenzene	0.65	0.50	µg/L	1.0		2/2/05
m,p-Xylene	4.3	0.50	µg/L	1.0		2/2/05
o-Xylene	230	25	µg/L	50		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	89.7	85-115	% Rec	50		2/3/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	12,000	2,500	µg/L	50		2/3/05

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Date: 09-Feb-05
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ANALYTICAL REPORT

Client Sample ID: WP-1 **Received:** 1/27/05 **Collected:** 1/26/05 14:45
Lab ID: 0501555-02D

Test Name: TPH as Diesel/Motor Oil **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	420	50	µg/L	1.0	2/7/05	2/7/05
TPHC Motor Oil	ND	170	µg/L	1.0	2/7/05	2/7/05

Client Sample ID: WP-2 **Received:** 1/27/05 **Collected:** 1/26/05 15:55
Lab ID: 0501555-03A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/2/05
Benzene	ND	0.50	µg/L	1.0		2/2/05
Toluene	0.92	0.50	µg/L	1.0		2/2/05
Ethylbenzene	2.6	0.50	µg/L	1.0		2/2/05
m,p-Xylene	19	5.0	µg/L	10		2/3/05
o-Xylene	870	50	µg/L	100		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	90.2	85-115	% Rec	1.0		2/2/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	43,000	5,000	µg/L	100		2/3/05

Client Sample ID: WP-2 **Received:** 1/27/05 **Collected:** 1/26/05 15:55
Lab ID: 0501555-03D

Test Name: TPH as Diesel/Motor Oil **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	660	50	µg/L	1.0	2/7/05	2/7/05
TPHC Motor Oil	ND	170	µg/L	1.0	2/7/05	2/7/05

Client Sample ID: MW-4 **Received:** 1/27/05 **Collected:** 1/27/05 8:55
Lab ID: 0501555-04A

Test Name: TPH as Diesel **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	2/8/05	2/8/05
Surrogate: N-Tricosane	45.5	27.6-107	% Rec	1.0	2/8/05	2/8/05

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ANALYTICAL REPORT

Client Sample ID: MW-7 **Received:** 1/27/05 **Collected:** 1/27/05 10:40
Lab ID: 0501555-05A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/3/05
Benzene	ND	0.50	µg/L	1.0		2/3/05
Toluene	ND	0.50	µg/L	1.0		2/3/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/3/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/3/05
o-Xylene	ND	0.50	µg/L	1.0		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	93.1	85-115	% Rec	1.0		2/3/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		2/3/05

Client Sample ID: MW-7 **Received:** 1/27/05 **Collected:** 1/27/05 10:40
Lab ID: 0501555-05D

Test Name: TPH as Diesel **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	2/8/05	2/8/05
Surrogate: N-Tricosane	47.2	27.6-107	% Rec	1.0	2/8/05	2/8/05

Client Sample ID: MW-19 **Received:** 1/27/05 **Collected:** 1/27/05 11:40
Lab ID: 0501555-06A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/2/05
Benzene	ND	0.50	µg/L	1.0		2/2/05
Toluene	ND	0.50	µg/L	1.0		2/2/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/2/05
m,p-Xylene	1.6	0.50	µg/L	1.0		2/2/05
o-Xylene	93	10	µg/L	20		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	88.1	85-115	% Rec	20		2/3/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	4,000	1,000	µg/L	20		2/3/05

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ANALYTICAL REPORT

Client Sample ID: MW-19 **Received:** 1/27/05 **Collected:** 1/27/05 11:40
Lab ID: 0501555-06D

Test Name: TPH as Diesel **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	140	50	µg/L	1.0	2/8/05	2/8/05
Surrogate: N-Tricosane	45.9	27.6-107	% Rec	1.0	2/8/05	2/8/05

Client Sample ID: MW-19 **Received:** 1/27/05 **Collected:** 1/27/05 11:40
Lab ID: 0501555-06F

Test Name: Aromatic Volatiles **Reference:** EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	1.0	µg/L	1.0		2/1/05
Toluene	ND	1.0	µg/L	1.0		2/1/05
Chlorobenzene	ND	1.0	µg/L	1.0		2/1/05
Ethylbenzene	ND	1.0	µg/L	1.0		2/1/05
m,p-Xylene	1.7	0.50	µg/L	1.0		2/1/05
o-Xylene	92	10	µg/L	20		2/2/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0		2/1/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0		2/1/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0		2/1/05
Surrogate: Fluorobenzene	97.1	79.1-113	% Rec	1.0		2/1/05

Test Name: Halogenated Volatiles **Reference:** EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Dichlorodifluoromethane	ND	1.0	µg/L	1.0		2/1/05
Chloromethane	ND	1.0	µg/L	1.0		2/1/05
Vinyl Chloride	ND	1.0	µg/L	1.0		2/1/05
Bromomethane	ND	1.0	µg/L	1.0		2/1/05
Chloroethane	ND	1.0	µg/L	1.0		2/1/05
Trichlorofluoromethane	ND	1.0	µg/L	1.0		2/1/05
1,1-Dichloroethene	ND	1.0	µg/L	1.0		2/1/05
Methylene Chloride	ND	1.0	µg/L	1.0		2/1/05
trans-1,2-Dichloroethene	ND	1.0	µg/L	1.0		2/1/05
1,1-Dichloroethane	ND	1.0	µg/L	1.0		2/1/05
Chloroform	ND	1.0	µg/L	1.0		2/1/05
1,1,1-Trichloroethane	ND	1.0	µg/L	1.0		2/1/05
1,2-Dichloroethane	ND	1.0	µg/L	1.0		2/1/05
Carbon Tetrachloride	ND	1.0	µg/L	1.0		2/1/05
1,2-Dichloropropane	ND	1.0	µg/L	1.0		2/1/05
Trichloroethene	ND	1.0	µg/L	1.0		2/1/05
Bromodichloromethane	ND	1.0	µg/L	1.0		2/1/05
cis-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/1/05
trans-1,3-Dichloropropene	ND	1.0	µg/L	1.0		2/1/05

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1,1,2-Trichloroethane	ND	1.0	µg/L	1.0	2/1/05
Dibromochloromethane	ND	1.0	µg/L	1.0	2/1/05
Tetrachloroethene	ND	1.0	µg/L	1.0	2/1/05
Chlorobenzene	ND	1.0	µg/L	1.0	2/1/05
Bromoform	ND	1.0	µg/L	1.0	2/1/05
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1.0	2/1/05
1,3-Dichlorobenzene	ND	1.0	µg/L	1.0	2/1/05
1,4-Dichlorobenzene	ND	1.0	µg/L	1.0	2/1/05
1,2-Dichlorobenzene	ND	1.0	µg/L	1.0	2/1/05
Surrogate: 2-Bromo-1-chloropropane	71.1	75.2-125	% Rec	1.0	2/1/05

Client Sample ID: MW-21 **Received:** 1/27/05 **Collected:** 1/27/05 12:30
Lab ID: 0501555-07A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/3/05
Benzene	ND	0.50	µg/L	1.0		2/3/05
Toluene	ND	0.50	µg/L	1.0		2/3/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/3/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/3/05
o-Xylene	ND	0.50	µg/L	1.0		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	90.3	85-115	% Rec	1.0		2/3/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		2/3/05

Client Sample ID: MW-21 **Received:** 1/27/05 **Collected:** 1/27/05 12:30
Lab ID: 0501555-07D

Test Name: TPH as Diesel **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	63	50	µg/L	1.0	2/8/05	2/8/05
Surrogate: N-Tricosane	43.2	27.6-107	% Rec	1.0	2/8/05	2/8/05

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Date: 09-Feb-05
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ANALYTICAL REPORT

Client Sample ID: MW-22 **Received:** 1/27/05 **Collected:** 1/27/05 13:20
Lab ID: 0501555-08A

Test Name: BTEX **Reference:** EPA 5030/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	3.0	µg/L	1.0		2/3/05
Benzene	ND	0.50	µg/L	1.0		2/3/05
Toluene	ND	0.50	µg/L	1.0		2/3/05
Ethylbenzene	ND	0.50	µg/L	1.0		2/3/05
m,p-Xylene	ND	0.50	µg/L	1.0		2/3/05
o-Xylene	ND	0.50	µg/L	1.0		2/3/05
Surrogate: Cis-1,2-Dichloroethylene	89.5	85-115	% Rec	1.0		2/3/05

Test Name: TPH as Gasoline **Reference:** EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		2/3/05

Client Sample ID: MW-22 **Received:** 1/27/05 **Collected:** 1/27/05 13:20
Lab ID: 0501555-08D

Test Name: TPH as Diesel **Reference:** EPA 3510/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Diesel (C12-C22)	ND	50	µg/L	1.0	2/8/05	2/8/05
Surrogate: N-Tricosane	51.9	27.6-107	% Rec	1.0	2/8/05	2/8/05

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Chain of Custody

LABORATORY NUMBER: 0501555

Attention: Jeff Lane
Results & Invoice to: Green Diamond Resource Company
Address: P.O. Box 68
Korbel CA 95550
Phone: 668-4481
Copies of Report to: SHN Frans Lowmon
812 W. Wabash Ave. Eureka CA 95501-2138
Sampler (Sign & Print): David R. Paine David R. Paine

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☐ Verbal ☐ By: __/__/__
Final Report: FAX ☐ Verbal ☐ By: __/__/__

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PROJECT INFORMATION

Project Number: 093047
Project Name: Smith River
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	ANALYSIS	CONTAINER	PRESERVATIVE
	WP-3	1/26/05	1345	GW	TPHG / BTEX	9	b
	WP-1	↓	1445	↓			
	WP-2	↓	1555	↓			
	MW-4	1/27/05	0855	↓	BOD / BOD5	9	b
	MW-7	↓	1040	↓			
	MW-19	↓	1140	↓			
	MW-21	↓	1230	↓			
	MW-22	↓	1320	↓	TPHD	14	
	WP-3	1/26/05	1345	GW	TPHD / MO	14	
	WP-1	↓	1445	↓			
	WP-2	↓	1555	↓			

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

[redacted]

Cooler temp 4.1C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
David R. Paine David R. Paine	1531 1/27/05	K. Thompson	1/27/05 1531

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus (Hand)

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT