

**SECOND QUARTERLY MONITORING REPORT**

**Located at:**

**HILL LUMBER COMPANY  
1259 BRIGHTON AVENUE  
ALBANY, CALIFORNIA**

**Prepared For:**

**Mr. RALPH HILL  
HILL LUMBER COMPANY  
1259 BRIGHTON AVENUE  
ALBANY, CALIFORNIA**

**Prepared By:**

**RAFAEL L. GALLARDO**

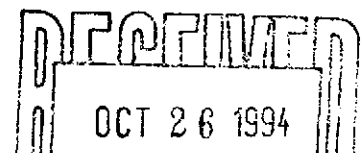
**Reviewed By:**

**Certified Environmental Consulting, Inc.  
536 Stone Road, Suite J  
Benicia, California 94510-1016  
(707) 745-0171**

**CEC Project # 157-1660**

**October 20, 1994**

jobs\0157-1660.rpt





**CERTIFIED  
ENVIRONMENTAL  
CONSULTING INC.**

October 20, 1994

REF: 157-1660

Mr. Ralph Hill  
Hill Lumber Company  
1259 Brighton Ave.  
Albany, Ca. 94706  
(510) 525-1000

**SUBJECT: SECOND QUARTER GROUNDWATER SAMPLING RESULTS FOR TWO  
MONITORING WELLS LOCATED AT 1259 BRIGHTON AVENUE,  
ALBANY, CALIFORNIA.**

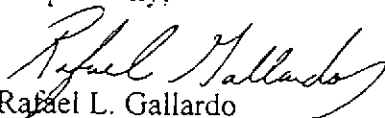
Dear Mr. Hill:

Enclosed is a copy of the second quarter groundwater monitoring results from the October 10, 1994 sampling of monitoring wells, MW-1, and MW-2, located at 1259 Brighton Avenue, Albany, California. Two samples were collected from the two monitor wells and analyzed for TPH-D, TPH-G, and BTEX. The laboratory results were Non-detectable for TPH-G, and BTEX for Monitor wells MW-1, and MW-2. However, detectable levels of TPH-D, (130, and 93 ppb respectfully) were found in MW-1, and MW-2. The results indicate an increase in TPH-D for both wells.

The next quarterly sampling is scheduled for January 10, 1995.

If you have any questions in regard to this report, please call me at 707-745-0171.

Respectfully,

  
Rafael L. Gallardo  
Project Geologist

RLG:rlg

Enclosure:

cc: Susan Hugo  
Alameda County Health Agency

jobs0157-1660.2rp

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## 1.0 INTRODUCTION

### 1.1 Site location and description

The site is located at 1259 Brighton Avenue, Albany, California (see Figure 1). El Cerrito Creek is approximately 350 feet north of the assessment site, and San Francisco Bay is located approximately one-mile to the west. The site is situated adjacent to the BART line tracks and path way to the west. The assessment site is currently occupied by the City of Albany Corporation Yard and contains two monitoring wells and one piezometer, (See Figure 2).

### 1.2 Background

The assessment site was used as a lumber yard and retail lumber store since 1922.

From the 1930's to the 1950's, the lumber yard operated a 500-gallon underground leaded gasoline tank located in the loading dock area adjacent to the eastside of the building.

From the 1950's to 1991, Hill Lumber maintained a 1,000-gallon underground gasoline tank located below the sidewalk adjacent to Brighton Avenue.

On April 17, 1991, Semco, Inc. of Modesto, California, removed both tanks. TPH-G concentration levels below the 500-gallon tank ranged between 210 to 890 ppm. TPH-G concentration levels below the 1,000-gallon tank ranged between 2 and 3,700 ppm. The excavations were backfilled to grade with pea gravel and repaved.

On July 11, 1991, Certified Environmental Consulting, Inc. (CEC), drilled 4 borings within approximately 10 feet of the tank excavations. CEC concluded that the soil contamination was limited to 2 small areas extending approximately 2 to 4 feet around each tank. CEC collected an uncased water sample from the area of the former 1,000-gallon tank. The water sample revealed the presence of TPH-G (2,925 ppb) and Benzene (59 ppb).

On June 17, 1992, CEC submitted a work plan for monitoring well installation and remediation at the assessment site.

On September 17, 1992, CEC submitted a soil remediation report. The report indicated that the contaminated soil was successfully removed, with the exception of small amounts of inaccessible contaminated soil below the warehouse and office building foundations, a gas line on Hill Lumber property, and below a buried water conduit on BART property. Monitoring wells were not installed at the assessment site.

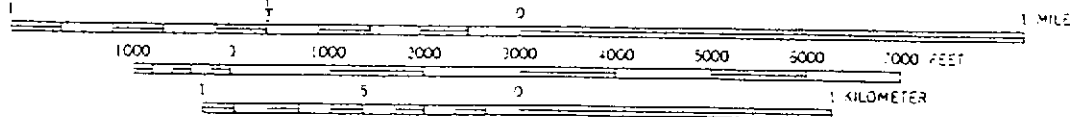
On November 17, 1992, CEC submitted a letter to Ms. Susan Hugo, of the Alameda County Health Agency, indicating the results of the stockpile sampling at the site.

On March 3, 1993, CEC submitted a letter to Mr. Ralph Hill indicating that the stockpiled soil was no longer considered hazardous.

On July 14, 1994, CEC submitted a report on the installation of two monitoring wells and one piezometer at the assessment site. The laboratory analysis indicated non-detectable results for TPH-G, and BTEX; however, trace levels (110 ppb) of TPH-D were registered in MW-1.

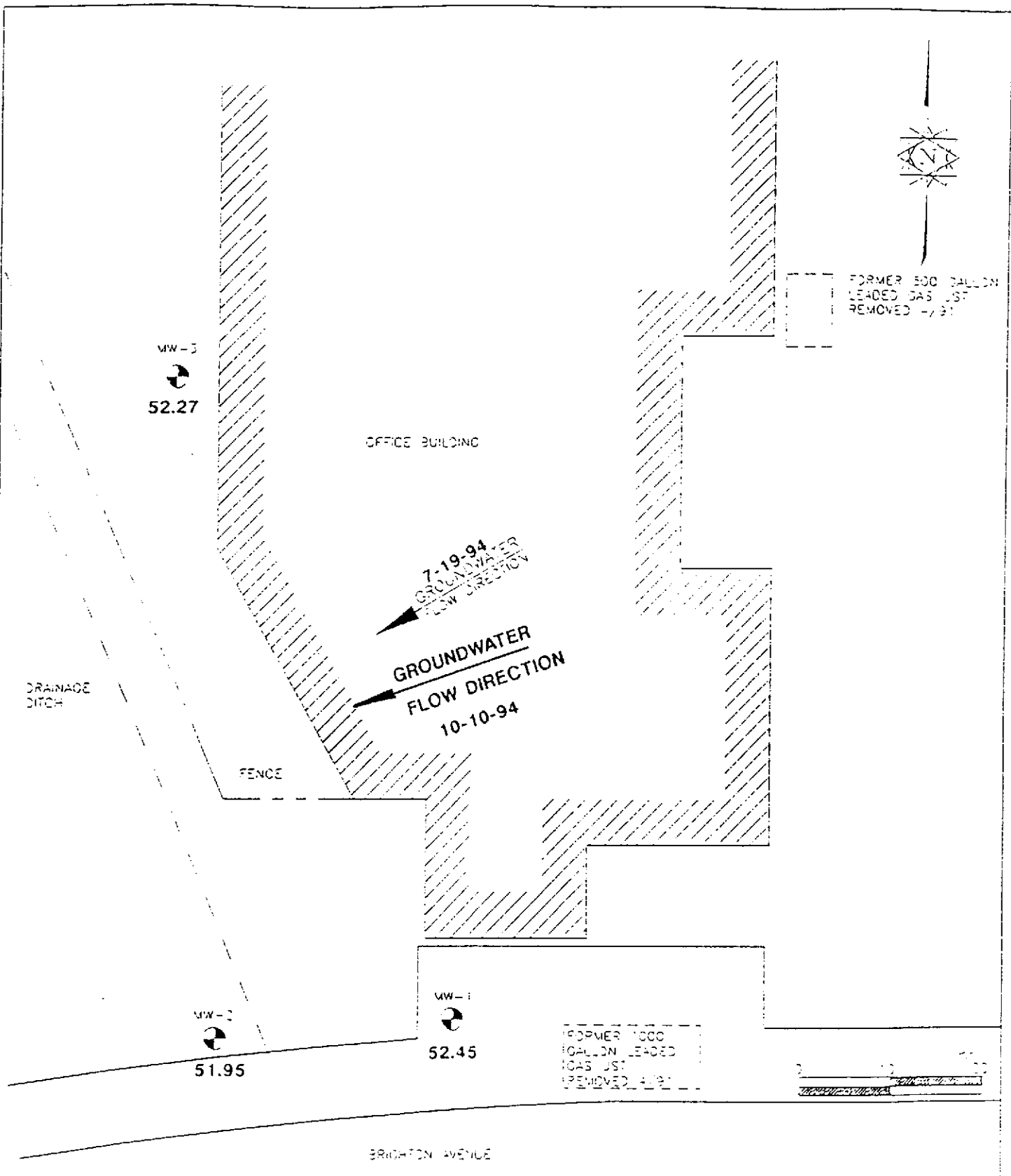


SCALE 1:24,000



CONTOUR INTERVAL 20 FEET

FIGURE 1  
 SITE LOCATION MAP  
 HILL LUMBER COMPANY  
 1259 BRIGHTON AVE., ALBANY, CA  
 JOB NO. 157-1660



HILL LUMBER COMPANY  
1259 BRIGHTON AVENUE, ALBANY, CA  
MONITORING WELL LOCATIONS

## 1.3 GEOLOGY AND HYDROGEOLOGY

### Geology

The site rests on Quaternary Holocene younger alluvium deposits (Qa), consisting of unconsolidated, moderately sorted, sand and silt, with sandy silty clays down to approximately 18.0 feet. Underlying the younger alluvium at a depth of approximately 18 to 25 feet are undivided bedrock units (TKJu) of Tertiary, Cretaceous, and Jurassic age. These units consist of highly weathered, highly fractured, and friable sandstone and shale.

### Hydrogeology

The site is located within the East Bay Plain. The East Bay Plain covers an area of approximately 114 square miles. Two types of geologic units are found in the East Bay Plain: Consolidated rocks ranging in age from Jurassic to Tertiary; and unconsolidated deposits of pleistocene and Holocene age. The consolidated rocks are more than 10,000 feet thick. The unconsolidated deposits are a maximum thickness of approximately 1,100 feet.

The groundwater basin of the East Bay Plain consists of a random sequence of sand and gravel aquifers interspaced with clay and silt aquicludes. The inferred Groundwater direction is to the west-northwest, towards the direction of the San Francisco Bay. Groundwater was encountered below the assessment site at a depth of approximately 10.5 feet below grade surface (bgs).

#### Source:

Preliminary Geologic Map of the Richmond Quadrangle, Alameda, and Contra Costa Counties, California. Dibble, Jr., 1980.



## 2.0 GROUNDWATER SAMPLING

### 2.1 GROUNDWATER ELEVATION MEASUREMENTS

Groundwater elevations were measured for wells MW-1, MW-2 and MW-3 on October 10, 1994. The static groundwater elevation was recorded on Sample Event Data Sheets for the October quarterly sampling and are presented in Appendix A.

The sampling and the calculation of the groundwater flow direction were derived from the October 10, 1994 readings. Groundwater elevation data is shown on Figure 2. The groundwater flow direction remained towards the southwest. The hydraulic gradient was calculated at 0.018 feet per foot. The gradient is considered relatively flat. The water level dropped an average of 0.14 feet since the first quarter measurements taken in July of 1994.

Water level measurements will be collected during the next sampling event to monitor any fluctuations in groundwater flow direction and gradient. Table 1 contains the monitor well elevations, static water levels and groundwater surface elevations.

### 2.2 MONITORING WELL SAMPLING

Monitoring Wells MW-1, and MW-2, were sampled on October 10, 1994. MW-3, (piezometer) was not sampled. The wells were sampled after purging at least three casing volumes from the well and allowing the water level to recover to at least 80% of the original, static level. Temperature, turbidity, electrical conductivity, and pH were monitored during purging to verify that water had been removed from well casing storage and that well water was representative of the aquifer. The sampling event data sheets are presented in Appendix A.

Samples were collected with disposable teflon bailers and each of the well samples were contained in three 40-milliliter VOA vials and one 1-liter amber bottle. The samples were labeled and stored on ice until delivered, under chain-of-custody procedures, to McCampbell Analytical, Inc. of Pacheco, California, a State-certified analytical laboratory. Sample MW-1, and MW-2 were analyzed for total petroleum hydrocarbons in the gasoline range (TPH-G) and for benzene, toluene, ethylbenzene, and xylenes (BTEX) using GCFID 5030/EPA Method 8015/8020 and total petroleum hydrocarbons in the diesel range (TPH-D) using GCFID 3550/EPA Method 8015.

**Groundwater Elevation Data**  
**October 10, 1994**  
**1259 Brighton Avenue, Albany, California**

WELL	WELL DIAMETER (Inches)	TOP OF CASING (Feet)	DEPTH TO WATER (Feet)	STATIC WATER LEVEL (Feet)
MW-1	2	61.77	9.325	52.45
MW-2	2	61.37	9.425	51.95
MW-3	2	60.47	8.20	52.27

## 3.0 ANALYTICAL RESULTS

### 3.1 MONITORING WELL SAMPLING ANALYTICAL RESULTS

The analytical results of the October 1994 sampling are included in Table 2. Historical results of previous sampling rounds can be found in Table 3. The laboratory analytical data sheets and chain-of-custody records for the October sampling are included as Appendix A. The detection limits for the TPH-G and TPH-D analyses are 50 ug/L (ppb) and for the BTEX analysis 0.5 ug/L.

The analytical results for MW-1, and MW-2, revealed minor levels of TPH-D, (130 and 93 ppb) and non-detectable concentrations of TPH- G, and Benzene . The analytical results indicated an increase in TPH-D, in both wells.

**TABLE 2**

**Historical and Current sampling results for Hill Lumber Company**

WELL NUMBER	SAMPLE DATE	TPH-Diesel ug/L	TPH-Gas ug/L	Benzene ug/L	Toluene ug/L	Ethyl Benzene ug/L	Xylene ug/L
MW-1	7/13/94	110	ND	ND	ND	ND	ND
	10/10/94	130	ND	ND	ND	ND	ND
MW-2	7/13/94	ND	ND	ND	ND	ND	1.0
	10/10/94	93	ND	ND	ND	ND	ND
MW-3 (Piezometer)	7/13/94	ND	ND	ND	ND	ND	ND
	10/10/94	NT	NT	NT	NT	NT	NT
*California Department of Health Services primary maximum contamination level for drinking water.		None Listed	None Listed	1.0	1000	680	1750

\* Marshall, J.B., 1989, A Compilation of Water Quality Goals, Staff Report of the California Regional Water Quality Control Board, Central Valley Region, 15 p.

ND = Non-detectable levels

NT = Not Tested

## 4.0 RECOMMENDATIONS

Continued quarterly monitoring of wells MW-1, and MW-2 is recommended. Analytical results for monitoring wells MW-1 and MW-2 have displayed an increase in TPH-D. These are considered very low detection levels. CEC recommends that MW-3 be added to the sampling for the next quarter.

## 5.0 SCHEDULE OF ACTIVITIES FOR NEXT QUARTER

### 5.1 GROUNDWATER ELEVATION MEASUREMENT

The on-site wells will be sounded and the groundwater levels will be used to calculate the groundwater gradient and flow direction for each quarter. Water samples will again be taken along with Water level measurements. The hydraulic gradient will also be calculated for the month of January, 1995, and will be presented in the next quarterly report.

### 5.2 QUARTERLY SAMPLING

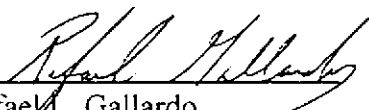
The next quarterly sampling event will occur the second week in January, 1995. The quarterly report will present the results of the January sampling and the groundwater gradient calculations.


## 6.0 LIMITATIONS

This report has been prepared in accordance with generally accepted environmental, geological and engineering practices. No warranty, either expressed or implied, is made as to the professional advice presented herein. The analysis, conclusions and recommendations contained in this report are based upon site conditions as they existed at the time of the investigation and they are subject to change.

The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity, and interpretation of available information as described in this report. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users and any use or reuse of this document or its findings, conclusions or recommendations presented herein is at the sole risk of said user.



  
Rafael L. Gallardo  
Project Geologist

  
Stanley L. Klemetson, Ph.D., P.E.  
Executive Vice President  
P.E. No. 40087

APPENDIX A

ANALYTICAL DATA SHEETS  
AND  
CHAIN-OF-CUSTODY RECORDS  
FOR MONITORING WELL SAMPLING  
October 10, 1994







# HYDRODATA

JOB NO. 157-1660

DATE: 10-10-94

PROJECT: <u>Hill Lumber</u>							EVENT: <u>Quarterly</u>		SAMPLER: <u>T. PEW</u>	
	WELL NUMBER	TIME		DATE			MEASUREMENT	CODE	COMMENTS	
		HR	MIN	MO	DA	YR				
1	MW-1	11	05	10	10	94	9.325	SWL	red-ei-sounder #1	
2	MW-2	11	08	10	10	94	9.425	SWL	red-ei-sounder #1	
3	MW-3 (PZ)			10	10	94	8.20	SWL	red-ei-sounder #1	
4										
5	MW-1	11	05	10	10	94	27.0	MTD	red-ei-sounder #1	
6	MW-2	11	08	10	10	94	27.0	MTD	red-ei-sounder #1	
7	MW-3			10	10	94	27.55	MTD	red-ei-sounder #1	
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

**CODES:**

SWL - Static Water Level (Feet)  
 IWL - Instant Water Level; Non-Static (Feet)  
 OIL - Oil Level (Feet)  
 OWI - Oil/Water Interface (Feet)  
 MTD - Measured Total Depth (Feet)  
 FLO - Flow-Rate (Gallons Per Minute)  
 CUM - Cumulative (Gallons)

HRS - Total Hours  
 PSI - Pressure (psi)  
 pH - 1 to 14  
 Ec - Conductivity  
 TMP - Temperature  
 TRB - Turbidity (NTU)  
 \_\_\_\_ - \_\_\_\_ (Other)

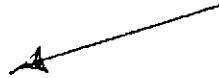
All levels are depth from inner casing - describe any other reference points in comments column; when in doubt, describe reference point.  
 Note in comments column if well is not properly labeled, locked, or able to be locked. Describe corrective action.  
 Note flooding of vault box, odor, access problems.

DIRECTION OF FLOW CALCULATIONS

10-10-74



SWL = 52.27  
MN-3



MW-2  
SWL = 51.95



MW-1  
52.45 = SWL

$$\frac{52.27 - 51.95}{52.45 - 51.95} \times \frac{x}{26.5}$$

$$\frac{.32}{.50} \times 26.5 = 16.96$$

$$i = \frac{.50}{26.5}$$

i = ...



CERTIFIED ENVIRONMENTAL CONSULTING, INC.

# CHAIN OF CUSTODY RECORD

536 Stone Road, Ste. J., Benicoin, CA 94510-1016  
 O/c. (707) 745-0171 (800) 228-0171 Fax (707) 745-0163

Laboratory Analysis P.O. No. 1092  
 Laboratory: Please Call Accounts Payable for P.O. No.

Date: 10-10-94 Sheet 1 of 1

Project Number: 157-1660  
 Project Name: Hill Lumber  
 Address: Brighton Ave  
Albany, Cal.  
 Sampler's Name: ROY W. PEW  
 Sampler's Signature:

				Parameters																		
Sample Number	Location	Date	Time	TPH as Gasoline 8015	TPH as Diesel 8015	TPH-G and B.I.E.X 8015/8020	B.T.X. & E 8020	Oil and Grease 5520	Volatile Organics (8010)	CAM Metals (17)	P. Pollutant Metals (15)	Base/New/Acids (Organic)	Pesticides 8140/8141								Matrix (Soil/Water)	
AW-1		10-10-94			XX	XX																SE
AW-2		"			XX	XX																SE

Lab Name: Mc Campbell  
 Address: 110 2nd Ave  
San Francisco, CA  
 Phone Number: 310-748-1620  
 Turnaround Time:  
 Rush 24 Hour  
 48 Hour  
 5-Day  
 Report to: Ballardo

Comments:

GOOD CONDITION  
 HEAD SPACE ABSENT  
 PRESERVATIVE APPROPRIATE  
 CONTAINERS

Relinquished By	Date	Time	Received By	Date	Time
	10-10-94	2:05		10-10-94	2:05
Dispatched By	Date	Time	Received in Lab by	Date	Time

Total Number of Containers This Sheet: 8  
 Method of Shipment:  
 Special Shipment / Handling or Storage Requirements:

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553  
 Tele: 510-798-1620 Fax: 510-798-1622

Certified Environmental Consulting 536 Stone Road, Ste. J Benicia, CA 94510-1016	Client Project ID: # 157-1660; Hill Lumber	Date Sampled: 10/10/94
	Client Contact: Rafael Gallardo	Date Received: 10/10/94
	Client P.O: # 1092	Date Extracted: 10/12-10/13/94
		Date Analyzed: 10/12-10/14/94

**Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel \***

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) <sup>†</sup>	% Recovery Surrogate
41490	MW-1	W	130.b.f	100
41491	MW-2	W	93.b	101
Detection Limit unless otherwise stated; ND means Not Detected	W		50 ug/L	
	S		10 mg/kg	

\*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

<sup>‡</sup> cluttered chromatogram; surrogate and sample peaks co-elute or surrogate peak is on elevated baseline

<sup>†</sup> The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) modified diesel?; light(C<sub>10</sub>) or heavy(C<sub>23</sub>) diesel compounds are significant; d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel(?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible phase is present.

