PACIFIC
ENVIRONMENTAL
GROUP, INC.

October 17, 1994
Project 310-058.3A

Mr. Richard Hiett
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Re: Unocal Corporation
Quarterly Summary Report
Third Quarter 1994

Dear Mr. Hiett:

As directed by Ms. Tina Berry of Unocal Corporation, Pacific Environmental Group, Inc. is forwarding the quarterly summary report for the following location:

Service Station	Location
5760	376 Lewelling Boulevard, San Lorenzo

If you have questions or comments, please do not hesitate to contact our office at (408) 441-7500.

Sincerely,

Pacific Environmental Group, Inc.

Joe Muzzio
Project Geologist

Enclosure

cc: Ms. Tina Berry, Unocal Corporation
Ms. Juliet Shin, Alameda County Environmental Health Care

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539

Reviewed by AKoch on 2/1/95

MONITORING PURGING DISPOSING SAMPLING

MPDS SERVICES, INCORPORATED

HAZMAT

94 OCT 17 PM 3:57

October 14, 1994

Ms. Juliet Shin
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94501

RE: Unocal Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

Dear Ms. Shin:

Per the request of the Unocal Corporation Project Manager, Ms. Tina R. Berry, enclosed please find our report (MPDS-UN5760-04) dated October 4, 1994, for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2321.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

Jarrel F. Crider

/jfc

Enclosure

cc: Ms. Tina R. Berry

2401 Stanwell Drive, Suite 400, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

Reviewed by AKeeth
2/1/95

Quarterly Summary Report
Third Quarter 1994

Unocal Service Station 5760
376 Lewelling Boulevard
San Lorenzo, California

City/County ID #: None
County: Alameda

BACKGROUND

The underground storage tanks were removed and replaced in November 1987. Currently there are nine monitoring wells on-site. Groundwater monitoring and sampling of wells began in February 1988.

RECENT QUARTER ACTIVITIES

MPDS performed the third quarter 1994 monitoring event and the second quarter monitoring report was issued. PACIFIC prepared and submitted a remedial action implementation plan, and performed a 5-day soil vapor extraction (SVE) test. Received a response from the Alameda County Health Services (ACHS) regarding PACIFIC's implementation plan; PACIFIC prepared and issued a response.

NEXT QUARTER ACTIVITIES

Groundwater monitoring and sampling for the fourth quarter 1994 will be performed. The third quarter monitoring report will be issued, as will a report documenting the findings of the SVE test. Assuming project approval is received from the ACHS, implementation of remediation will commence.

CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.
Dissolved groundwater delineated? No.
Free product delineated? Yes.
Amount of groundwater contaminant recovered this quarter? Not applicable.
Soil remediation in progress? Yes.
Anticipated start? 5-day SVE test complete.
Anticipated completion date? Unknown.
Dissolved/free product remediation in progress? No.
Anticipated start? Third Quarter 1994.
Anticipated completion? Unknown.

CONSULTANT: Pacific Environmental Group, Inc.

MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN5760-04
October 4, 1994

Unocal Corporation
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: **Quarterly Data Report**
Unocal Station Service #5760
376 Lewelling Boulevard
San Lorenzo, California

Dear Ms. Berry:

This data report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced site by MPDS Services, Inc.

RECENT FIELD ACTIVITIES

The monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected on September 7, 1994. Prior to sampling, the wells were each purged of between 8 and 18 gallons of water. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded and are presented in Table 2. Once the field parameters were observed to stabilize, and where possible, a minimum of approximately four casing volumes had been removed from each well, samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials and/or one-liter amber bottles, as appropriate, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Table 3. The concentrations of Total Petroleum

2401 Stanwell Drive, Suite 400, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

Hydrocarbons (TPH) as gasoline and benzene detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

DISTRIBUTION

A copy of this report should be sent to Ms. Juliet Shin of the Alameda County Health Care Services Agency.

If you have any questions regarding this report, please do not hesitate to call at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Sarkis Karkar

Sarkis A. Karkarian
Staff Engineer

Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 8/31/96

/bp

Attachments: Tables 1, 2 & 3
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Joe Muzzio, Pacific Environmental Group, Inc.

TABLE 1

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on September 7, 1994)						
U-1	22.03	18.17	30.00	0	No	18
U-2	21.98	19.28	29.98	0	No	16
U-3	21.64	17.61	24.72	0	No	11
U-4	21.76	18.52	27.88	0	No	14
U-5	21.58	17.73	28.26	0	No	8
U-6	21.48	16.20	28.32	0	No	8.5
U-7	21.39	15.72	35.00	0	No	14
U-8	21.70	16.87	29.70	0	No	9
U-9	21.25	16.06	28.23	0	No	8.5
(Monitored and Sampled on June 9, 1994)						
U-1	22.78	17.42	30.21	0	No	19
U-2	23.00	18.26	29.98	0	No	17.5
U-3	22.66	16.60	25.04	0	No	13
U-4	22.72	17.53	27.88	0	No	15.5
U-5	22.61	16.70	28.28	0	No	8
U-6	22.50	15.18	28.09	0	No	9
U-7	22.41	14.70	35.02	0	No	14
U-8	22.71	15.86	29.74	0	No	10
U-9	22.26	15.05	28.18	0	No	9
(Monitored and Sampled on March 9, 1994)						
U-1	23.00	17.20	30.10	0	No	20
U-2	23.21	18.05	29.91	0	No	18
U-3	22.91	16.35	24.98	0	No	13
U-4	22.95	17.30	27.80	0	No	16
U-5	22.86	16.45	28.20	0	No	8
U-6	22.78	14.90	28.01	0	No	9
U-7	22.66	14.45	35.00	0	No	14
U-8	22.95	15.62	29.59	0	No	10
U-9	22.57	14.74	28.10	0	No	9.5

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on December 2, 1993)						
U-1*	21.84	18.36	29.93	<0.01	N/A	0
U-2	22.03	19.23	29.87	0	No	16
U-3	21.71	17.55	25.03	0	No	12
U-4	21.79	18.46	27.85	0	No	14
U-5	21.65	17.66	28.26	0	No	8
U-6	21.60	16.08	28.05	0	No	8.5
U-7	21.50	15.61	35.20	0	No	14
U-8	21.77	16.80	29.77	0	No	9
U-9	21.38	15.93	28.18	0	No	8.5

Well #	Well Casing Elevation (feet)**
U-1	40.20
U-2	41.26
U-3	39.25▲
U-4	40.28▲
U-5	39.31
U-6	37.68
U-7	37.11
U-8	38.57
U-9	37.31

◆ The depth to water level and total depth measurements were taken from the top of the well casings.

* Monitored only.

** The elevation of the top of the well casing are relative to Mean Sea Level.

▲ Recently remeasured levels. Prior to September 7, 1994, the respective top of well casing levels were; U-3 = 39.26 ft., U-4 = 40.25 ft.

N/A = Not Applicable.

TABLE 2

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on September 7, 1994)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
U-1	4.38	4:00 pm	0	0	76.4	11.53	7.55
			4.5	1.03	73.4	11.14	6.92
			9	2.05	72.6	11.67	6.86
			13.5	3.08	72.8	11.72	6.92
		4:15 pm	18	4.11	73.1	11.81	6.88
U-2	3.96	10:00 am	0	0	64.8	8.15	7.51
			4	1.01	67.3	8.76	7.39
			8	2.02	68.1	7.77	7.30
			12	3.03	68.4	7.63	7.29
		10:20 am	16	4.04	68.7	7.60	7.22
U-3	2.63	3:00 pm	0	0	79.3	14.00	7.50
			2.5	0.95	78.2	14.21	6.98
			5	1.90	74.8	15.55	6.80
			7.5	2.85	77.5	14.50	6.70
		3:15 pm	11	4.18	78.0	15.00	6.67
U-4	3.46	10:50 am	0	0	73.7	13.51	7.43
			3.5	1.01	73.6	16.07	7.33
			7	2.02	73.5	16.23	7.26
			10.5	3.03	73.1	16.32	7.03
		11:10 am	14	4.05	72.8	16.21	7.01
U-5	1.79	11:40 am	0	0	79.8	16.23	7.75
			2	1.12	77.4	12.80	7.51
			4	2.23	74.8	14.41	7.40
			6	3.35	74.2	14.81	7.25
		11:47 am	8	4.47	73.8	15.05	7.24

TABLE 2 (Continued)

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on September 7, 1994)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
U-6	2.06	2:15 pm	0	0	77.1	10.17	7.94
			2	0.97	75.1	10.63	7.67
			4	1.94	74.2	11.07	7.49
			6	2.91	73.8	11.18	7.23
		2:23 pm	8.5	4.13	73.7	11.06	7.18
U-7	3.28	12:10 pm	0	0	72.3	9.56	7.94
			3.5	1.07	70.4	9.81	7.98
			7	2.13	69.9	9.85	7.81
			10.5	3.20	69.8	9.86	7.77
		12:20 pm	14	4.27	69.8	9.84	7.64
U-8	2.18	1:00 pm	0	0	76.0	9.42	7.78
			2.25	1.03	72.2	9.97	7.48
			4.50	2.06	71.5	9.98	7.39
			6.75	3.10	71.4	10.15	7.22
		1:07 pm	9	4.13	71.3	10.26	7.17
U-9	2.07	1:40 pm	0	0	78.1	10.73	7.71
			2	0.97	74.7	11.30	7.60
			4	1.93	73.3	12.28	7.33
			6	2.90	72.8	12.03	7.20
		1:48 pm	8.5	4.11	72.7	12.30	7.12

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
9/07/94	U-1	41,000	1,600	6,200	3,100	16,000
	U-2	ND	ND	0.63	ND	0.61
	U-3	100,000	2,400	4,900	4,200	21,000
	U-4	ND	ND	1.1	ND	1.0
	U-5	ND	ND	0.73	ND	0.84
	U-6	1,600*	ND	ND	ND	ND
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
	U-9	2,700**	ND	ND	ND	ND
6/09/94	U-1	59,000	5,200	1,300	5,200	15,000
	U-2	ND	ND	ND	ND	ND
	U-3	120,000*	3,300	6,100	5,200	26,000
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	2,600*	16	ND	29	ND
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
	U-9	2,900**	ND	ND	ND	ND
4/13/94	U-2	ND	ND	ND	ND	ND
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	0.78	ND	0.98
	U-9	ND	ND	ND	ND	ND
3/09/94	U-1	45,000	930	4,100	2,000	11,000
	U-2	62	1.1	5.4	1.1	9.7
	U-3	120,000	4,500	8,300	5,600	28,000
	U-4	ND	1.4	4.7	1.1	8.1
	U-5	71	1.7	6.3	1.5	10
	U-6	2,200	11	8.2	24	16
	U-7	ND	1.4	4.4	0.96	7.5
	U-8	ND	1.2	3.7	0.79	6.1
	U-9	5,700*	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
12/02/93	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	110,000	3,200	7,700	5,600	26,000
	U-4	ND	ND	ND	ND	2.6
	U-5	ND	ND	ND	ND	ND
	U-6	2,100	12	1.6	21	1.1
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
	U-9	ND	ND	ND	ND	ND
9/09/93	U-1	67,000	2,900	18,000	6,200	32,000
	U-2	ND	ND	ND	ND	ND
	U-3	110,000	2,800	10,000	6,500	31,000
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	6,300♦♦	29	ND	120	34
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
	U-9	1,200♦	ND	ND	ND	ND
6/04/93	U-1	35,000	1,300	5,700	900	9,200
	U-2	ND	ND	ND	ND	ND
	U-3	92,000	2,900	8,700	4,300	20,000
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	13,000	100	38	450	320
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
	U-9	2,100♦	ND	ND	ND	ND
2/12/93	U-1	70,000	2,200	8,400	3,100	18,000
	U-2	ND	ND	ND	ND	ND
	U-3	80,000	3,700	9,400	3,700	18,000
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	2,600	27	ND	120	51
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
11/20/92	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	50,000	3,200	4,700	1,900	10,000
	U-4	ND	ND	2.5	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	WELL WAS INACCESSIBLE				
	U-7	ND	ND	ND	ND	ND
8/06/92	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	140,000	5,100	13,000	5,000	23,000
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	9,200	160	ND	360	150
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
4/07/92	U-1	▲	▲	▲	▲	▲
	U-2	ND	ND	ND	ND	ND
	U-3	97,000	6,100	16,000	5,400	28,000
	U-4	ND	ND	ND	ND	ND
	U-5	ND	ND	ND	ND	ND
	U-6	6,600	90	ND	820	1,200
	U-7	ND	ND	ND	ND	ND
	U-8	ND	ND	ND	ND	ND
3/05/92	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	0.36	ND	ND
	U-3	160,000	5,300	15,000	5,400	26,000
	U-4	ND	ND	ND	ND	ND
12/04/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	75,000	2,500	6,100	1,900	11,000
	U-4	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
9/19/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	61,000	3,300	9,700	2,800	15,000
	U-4	ND	ND	ND	ND	ND
6/03/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	130,000	5,800	19,000	4,600	24,000
	U-4	ND	ND	ND	ND	ND
3/04/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	0.9	ND	2.6
	U-3	84,000	1,400	10,000	2,900	17,000
	U-4	ND	ND	ND	ND	ND
1/18/91	U-3	51,000	1,700	3,100	1,500	7,500
	U-4	ND	ND	ND	ND	ND
12/05/90	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	U-2	ND	ND	ND	ND	ND
	U-3	69,000	1,900	3,500	1,600	9,800
	U-4	ND	ND	ND	ND	ND
8/24/90	U-1	27,000	1,200	1,800	1,400	5,500
8/23/90	U-2	ND	ND	ND	ND	ND
	U-3	110,000	4,400	13,000	2,800	17,000
	U-4	ND	ND	1.0	ND	1.8
6/05/90	U-1	46,000	2,300	5,500	2,500	11,000
3/20/90	U-1	36,000	2,100	5,500	1,900	9,300
2/09/88	U-1	93,000	3,600	11,000	▲▲	20,000

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

* Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be gasoline and non-gasoline mixture.

** Sequoia Analytical Laboratory reported that the hydrocarbon detected did not appear to be gasoline.

▲ Product Skimmer installed in well

▲▲ Ethylbenzene and xylenes were combined prior to March 1990.

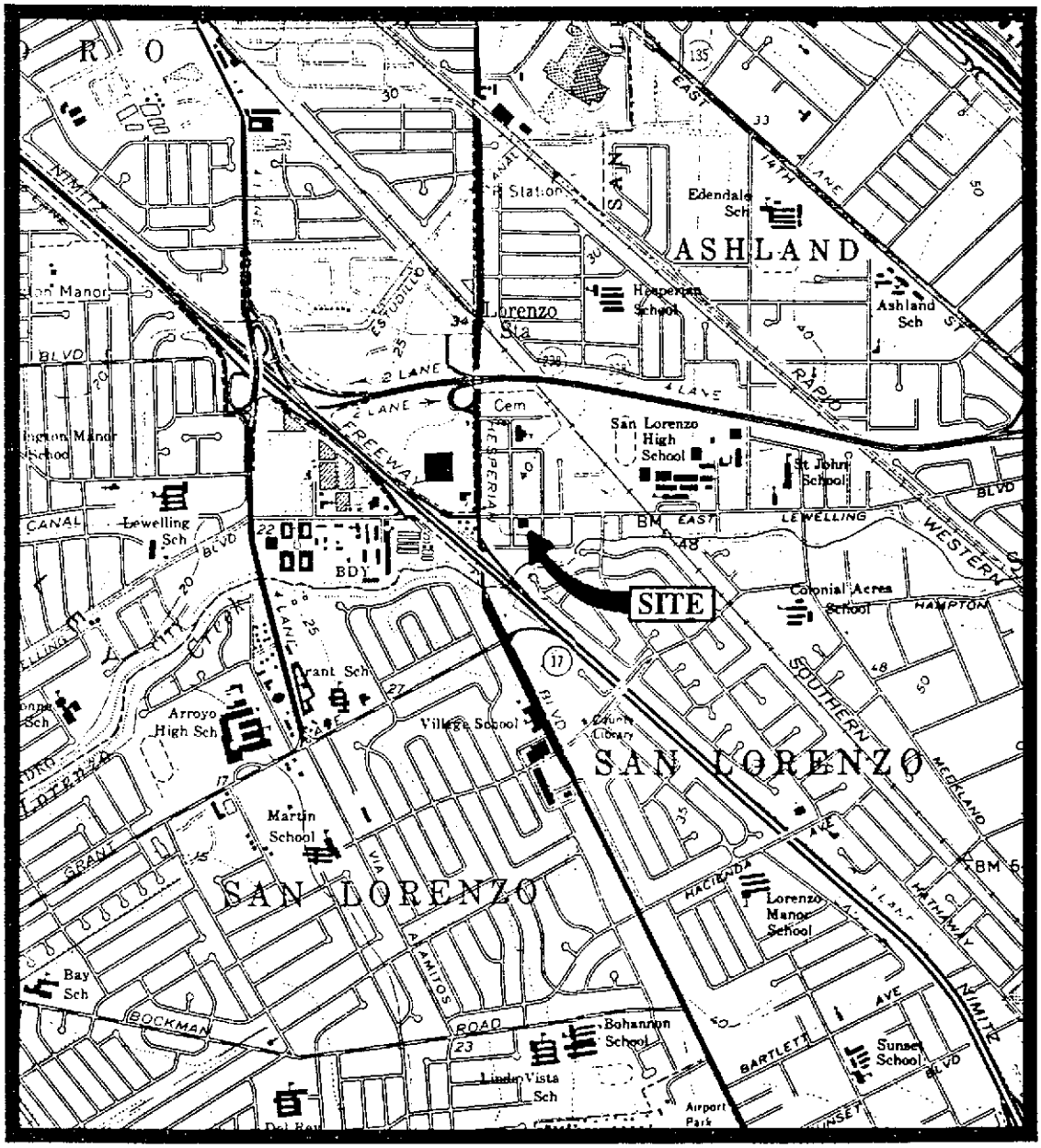
♦ The concentration reported as gasoline is primarily due to the presence of a discrete hydrocarbon peak not indicative of standard gasoline.

♦♦ The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.

ND = Non-detectable.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

Notes: Laboratory analyses data prior to December 2, 1993, were provided by GeoStrategies, Inc.

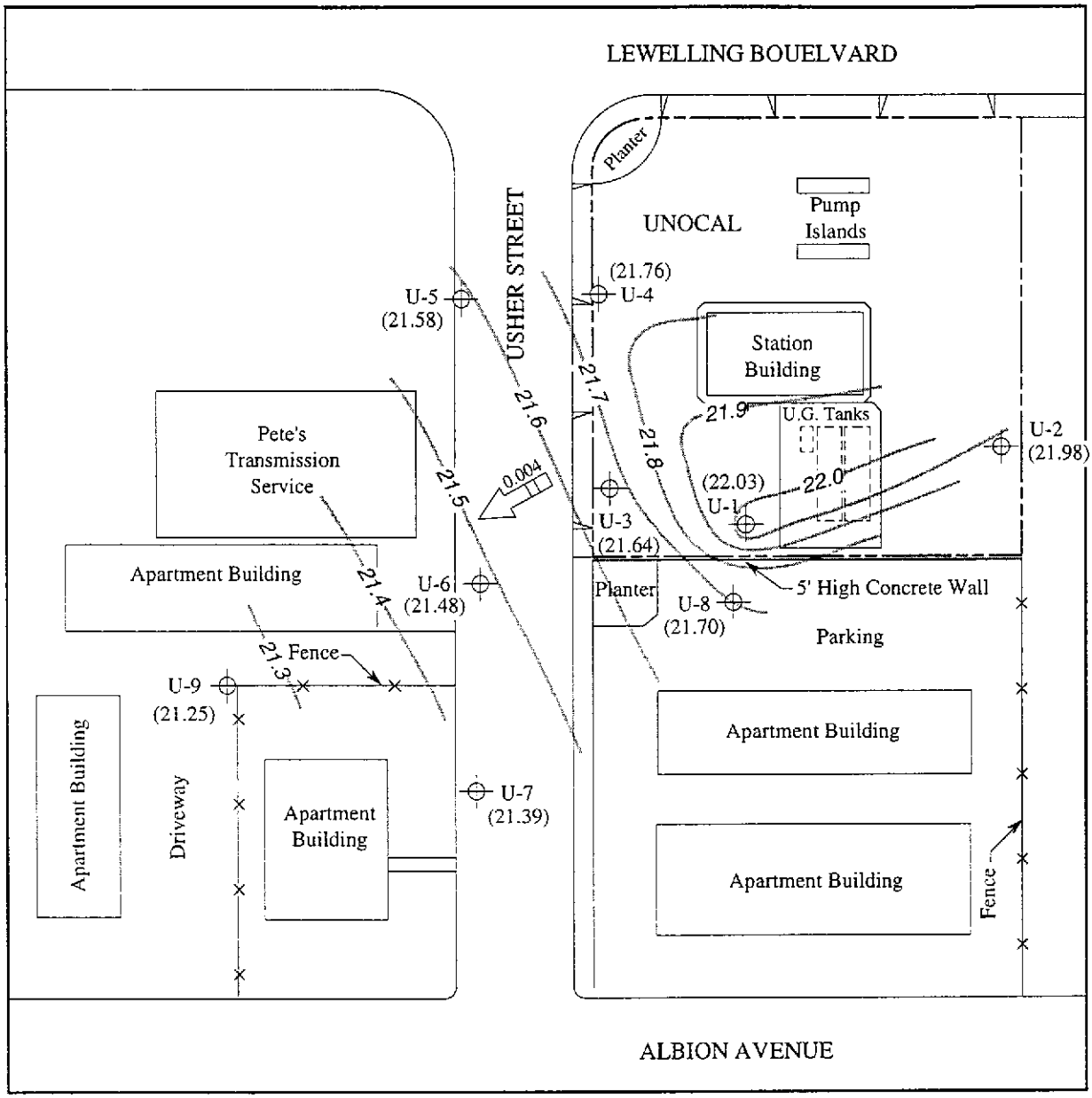


Base modified from 7.5 minute U.S.G.S.
Hayward and San Leandro Quadrangles
(both photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5760** **376 LEWELLING BOULEVARD** **SAN LORENZO, CALIFORNIA**	**LOCATION MAP**



LEGEND

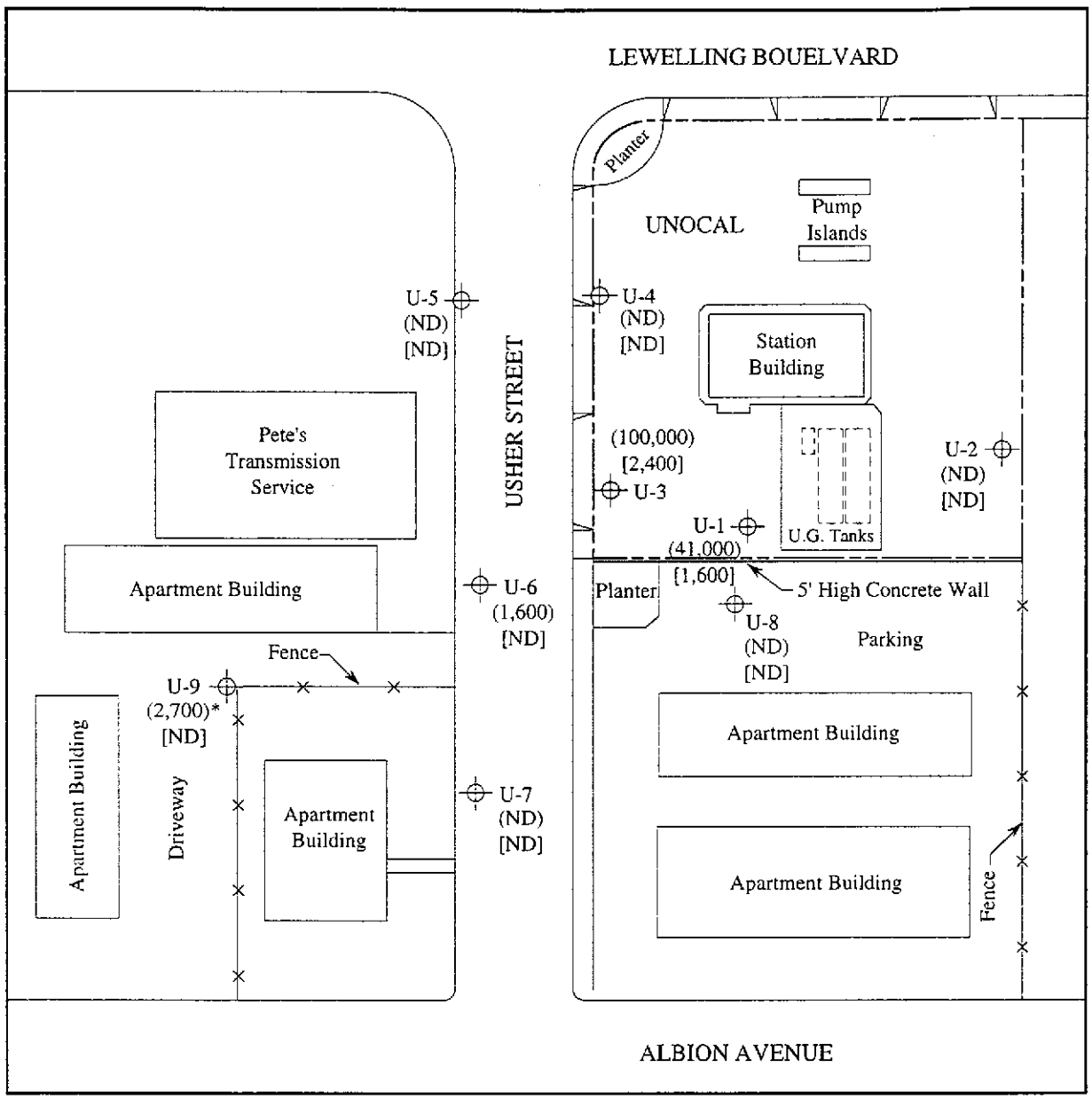
- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation

0 60 120

Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE SEPTEMBER 7, 1994 MONITORING EVENT

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5760** **376 LEWELLING BOULEVARD** **SAN LORENZO, CALIFORNIA**	FIGURE **1**



LEGEND

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L

ND = Non-detectable

* The lab reported that the hydrocarbons detected did not appear to be gasoline.

0 60 120

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON SEPTEMBER 7, 1994

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #5760** **376 LEWELLING BOULEVARD** **SAN LORENZO, CALIFORNIA**	FIGURE **2**

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
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MPDS Services	Client Project ID:	Unocal #5760, 376 Lewelling Blvd., San Lorenzo	Sampled:	Sep 7, 1994
2401 Stanwell Dr., Ste. 400	Matrix Descript:	Water	Received:	Sep 7, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Sep 23, 1994
Attention: Avo Avedessian	First Sample #:	409-0804		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons µg/L	Benzene µg/L	Toluene µg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
409-0804	U 1	41,000	1,600	6,200	3,100	16,000
409-0805	U 2	ND	ND	0.63	ND	0.61
409-0806	U 3	100,000	2,400	4,900	4,200	21,000
409-0807	U 4	ND	ND	1.1	ND	1.0
409-0808	U 5	ND	ND	0.73	ND	0.84
409-0809	U 6	1,600^	ND	ND	ND	ND
409-0810	U 7	ND	ND	ND	ND	ND
409-0811	U 8	ND	ND	ND	ND	ND
409-0812	U 9	2,700*	ND	ND	ND	ND

* Hydrocarbons detected did not appear to be gasoline.
^ Hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

Detection Limits:	50	0.50	0.50	0.50	0.50

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL,1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #5760, 376 Lewelling Blvd., San Lorenzo	Sampled:	Sep 7, 1994
2401 Stanwell Dr., Ste. 400	Matrix Descript:	Water	Received:	Sep 7, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Sep 23, 1994
Attention: Avo Avedessian	First Sample #:	409-0804		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult Factor	Date Analyzed	Instrument ID	Surrogate Recovery, % (QC Limits: 70-130%)
409-0804	U 1	Gasoline	100	9/16/94	HP-2	120
409-0805	U 2	--	1.0	9/16/94	HP-2	106
409-0806	U 3	Gasoline	400	9/19/94	HP-4	98
409-0807	U 4	--	1.0	9/16/94	HP-2	107
409-0808	U 5	--	1.0	9/16/94	HP-2	111
409-0809	U 6	Gasoline and Discrete Peak^	5.0	9/21/94	HP-4	78
409-0810	U 7	--	1.0	9/21/94	HP-4	97
409-0811	U 8	--	1.0	9/21/94	HP-4	94
409-0812	U 9	Discrete Peak*	100	9/21/94	HP-4	102

SEQUOIA ANALYTICAL, #1271

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Please Note:
^ * "Discrete Peak" refers to an unidentified peak in the MTBE range.

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MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 4090804-812

Reported: Sep 26, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	4090805	4090805	4090805	4090805
Date Prepared:	9/16/94	9/16/94	9/16/94	9/16/94
Date Analyzed:	9/16/94	9/16/94	9/16/94	9/16/94
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	105	110	115	117
Matrix Spike Duplicate % Recovery:	105	110	120	118
Relative % Difference:	0.0	0.0	4.2	0.85
LCS Batch#:	1LCS091694	1LCS091694	1LCS091694	1LCS091694
Date Prepared:	9/16/94	9/16/94	9/16/94	9/16/94
Date Analyzed:	9/16/94	9/16/94	9/16/94	9/16/94
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	106	108	116	115
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 4090804-812
Reported: Sep 26, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD Batch#:	4090874	4090874	4090874	4090874
Date Prepared:	9/19/94	9/19/94	9/19/94	9/19/94
Date Analyzed:	9/19/94	9/19/94	9/19/94	9/19/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	85	95	100	105
Matrix Spike Duplicate % Recovery:	95	110	115	113
Relative % Difference:	11	15	14	7.3
LCS Batch#:	2LCS091994	2LCS091994	2LCS091994	2LCS091994
Date Prepared:	9/19/94	9/19/94	9/19/94	9/19/94
Date Analyzed:	9/19/94	9/19/94	9/19/94	9/19/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	82	94	98	100
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

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MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 4090804-812
Reported: Sep 26, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD Batch#:	4090941	4090941	4090941	4090941
Date Prepared:	9/21/94	9/21/94	9/21/94	9/21/94
Date Analyzed:	9/21/94	9/21/94	9/21/94	9/21/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	100	100	102
Matrix Spike Duplicate % Recovery:	90	100	100	105
Relative % Difference:	0.0	0.0	0.0	2.9
LCS Batch#:	2LCS092194	2LCS092194	2LCS092194	2LCS092194
Date Prepared:	9/21/94	9/21/94	9/21/94	9/21/94
Date Analyzed:	9/21/94	9/21/94	9/21/94	9/21/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	84	93	95	97
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

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Project Manager

Please Note:
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M P D S Services, Inc.
2401 Stanwell Drive, Suite 400, Concord, CA 94520
Tel: (510) 602-5120 Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER: RAY MARANGOSIAN

WITNESSING AGENCY:

UNOCAL S/S # 5760 CITY: SAN LORENZO

ADDRESS: 376 LEWELLING BLVD

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	ANALYSES REQUESTED: TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
U1	9-7-94		x	x		2	well	x								4090804 AB
U2	"		x	x		"	"	x								4090805
U3	"		x	x		"	"	x								4090806
U4	"		x	x		"	"	x								4090807
U5	"		x	x		"	"	x								4090808
U6	"		x	x		"	"	x								4090809
U7	"		x	x		"	"	x								4090810
U8	"		x	x		"	"	x								4090811
U9	"		x	x		"	"	x								4090812

TURN AROUND TIME: REGULAR

RELINQUISHED BY: Ray Marangosian (SIGNATURE) — DATE/TIME: 9-7-94 17:40

(SIGNATURE) — 9/8/94 0805

(SIGNATURE) — 9-8

(SIGNATURE)

(SIGNATURE)

RECEIVED BY: [signature] 9/7/94 17:40 (SIGNATURE)

(SIGNATURE) R.H. McCoy 9/8/94 11:30 am

(SIGNATURE)

(SIGNATURE)

THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:

1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? yes
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? yes
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? No
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? yes

SIGNATURE: [signature] TITLE: Analyst DATE: 9/7/94