MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

July 28, 1995

Ms. Juliet Shin
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502

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-UN5760-07) dated July 19, 1995, 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.

Brenda Pepito

/bp

Enclosure

cc: Ms. Tina R. Berry

2401 Stanwell Drive, Suite 300, Concord, CA 94520
TEL: (510) 602-5120 FAX: (510) 689-1918

PACIFIC
ENVIRONMENTAL
GROUP, INC.

July 21, 1995
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
Second Quarter 1995

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.

Joseph Muzzio
Project Geologist

Enclosure

cc: Ms. Tina Berry, Unocal Corporation
Ms. Amy Leech, Alameda County Environmental Health Care Services

Quarterly Summary Report
Second Quarter 1995

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. A remedial action plan was submitted during the third quarter 1994.

RECENT QUARTER ACTIVITIES

Quarterly groundwater monitoring and sampling were conducted in April 1995. Design of soil vapor and groundwater extraction and remediation systems in progress.

NEXT QUARTER ACTIVITIES

Groundwater monitoring and sampling for the third quarter 1995 will be performed. Remedial system design will be completed, all necessary permits for construction will be obtained, bid packages will be submitted, and construction will begin.

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? No.
Anticipated start? Third quarter 1995.
Anticipated completion date? Unknown.
Dissolved/free product remediation in progress? No.
Anticipated start? Third Quarter 1995.
Anticipated completion? Unknown.

CONSULTANT: Pacific Environmental Group, Inc.

MONITORING
PURGING
DISPOSING
SAMPLING

mpds SERVICES, INCORPORATED

MPDS-UN5760-07
July 19, 1995

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 June 13, 1995. Prior to sampling, the wells were each purged of between 10 and 23 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 Tables 3 and 4. The concentrations of Total

Petroleum 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.

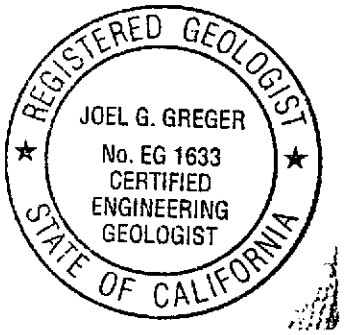
If you have any questions regarding this report, please do not hesitate to call Mr. Nubar Srabian at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist

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



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

/bp

Attachments: Tables 1 through 4
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 June 13, 1995)						
U-1	25.50	14.70	30.10	0	No	23
U-2	24.55	16.71	29.95	0	No	20
U-3	24.15	15.11	25.05	0	No	16
U-4	24.30	15.95	27.90	0	No	18
U-5	24.15	15.16	28.60	0	No	10
U-6	23.95	13.73	28.31	0	No	10
U-7	23.78	13.33	35.00	0	No	15
U-8	24.17	14.40	29.85	0	No	11
U-9	23.68	13.63	28.23	0	No	10
(Monitored and Sampled on March 9, 1995)						
U-1	24.38	15.82	30.10	0	No	22
U-2	24.30	16.96	30.00	0	No	20
U-3	24.05	15.20	25.02	0	No	15
U-4	24.12	16.16	27.92	0	No	17
U-5	23.96	15.35	28.46	0	No	9
U-6	23.94	13.74	28.34	0	No	10
U-7	23.75	13.36	35.00	0	No	15
U-8	24.01	14.56	29.90	0	No	11
U-9	23.81	13.50	28.26	0	No	11
(Monitored and Sampled on December 5, 1994)						
U-1	23.53	16.67	29.90	0	No	20
U-2	22.44	18.82	29.92	0	No	16.5
U-3	22.17	17.08	25.02	0	No	12
U-4	22.20	18.08	27.87	0	No	15
U-5	22.08	17.23	28.40	0	No	8
U-6	22.08	15.60	28.28	0	No	9
U-7	22.01	15.10	34.98	0	No	14
U-8	22.25	16.32	29.83	0	No	9.5
U-9	21.88	15.43	28.20	0	No	9

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 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

Well #	Well Casing Elevation (feet)*
U-1	40.20
U-2	41.26
U-3	39.26
U-4	40.25
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.

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

TABLE 2

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

(Measured on June 13, 1995)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
U-1	5.70	14:20	0	0	68.9	10.15	7.84
			6	1.05	70.1	10.27	7.61
			12	2.11	70.1	10.96	7.17
			18	3.16	70.8	11.49	6.97
		14:30	23	4.04	70.8	11.53	6.87
U-2	4.90	08:30	0	0	57.1	7.70	7.08
			5	1.02	60.1	9.00	7.00
			10	2.04	61.5	8.25	7.02
			15	3.06	65.3	8.14	7.01
		08:45	20	4.08	65.6	8.09	6.69
U-3	3.68	13:25	0	0	70.6	12.62	7.27
			4	1.09	70.2	13.06	6.96
			8	2.17	69.9	13.34	6.97
			12	3.26	70.0	14.19	6.76
		13:45	16	4.35	69.9	14.11	6.69
U-4	4.42	09:30	0	0	69.8	18.09	7.04
			4.5	1.02	70.0	16.09	7.01
			9	2.04	69.4	18.55	7.00
			13.5	3.05	69.2	16.10	7.00
		09:40	18	4.07	69.6	16.67	7.00
U-5	2.28	10:10	0	0	60.9	14.24	7.14
			2.5	1.10	69.7	14.08	7.06
			5	2.19	69.6	15.13	7.03
			7.5	3.29	69.8	15.30	7.01
		10:20	10	4.39	69.9	15.21	7.00

TABLE 2 (Continued)

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

(Measured on June 13, 1995)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
U-6	2.48	12:15	0	0	70.6	9.71	7.28
			2.5	1.01	70.0	10.32	7.19
			5	2.02	69.8	10.59	7.10
			7.5	3.02	69.8	10.55	7.04
		12:25	10	4.03	69.7	10.60	6.99
U-7	3.68	11:00	0	0	65.8	9.19	7.12
			3.5	0.95	65.7	9.04	7.09
			7.5	2.04	66.5	9.50	7.06
			11	2.99	66.5	9.65	7.04
		11:10	15	4.08	66.3	9.26	6.99
U-8	2.63	11:40	0	0	70.9	9.01	7.29
			2.5	0.95	70.0	9.51	7.20
			5	1.90	68.6	9.15	7.10
			7.5	2.85	68.7	9.10	7.06
		11:50	11	4.18	68.3	9.06	7.05
U-9	2.48	12:45	0	0	70.6	11.01	7.24
			2.5	1.01	69.6	11.99	7.18
			5	2.02	69.2	11.95	7.13
			7.5	3.02	69.1	12.21	7.16
		12:55	10	4.03	69.0	12.03	7.10

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
6/13/95	U-1	53,000	1,400	5,000	2,500	14,000
3/09/95	U-1	49,000	860	3,200	1,900	10,000
12/05/94	U-1	1,300	55	20	16	330
9/07/94	U-1	41,000	1,600	6,200	3,100	16,000
6/09/94	U-1	59,000	5,200	1,300	5,200	15,000
3/09/94	U-1	45,000	930	4,100	2,000	11,000
12/02/93	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
9/09/93	U-1	67,000	2,900	18,000	6,200	32,000
6/04/93	U-1	35,000	1,300	5,700	900	9,200
2/12/93	U-1	70,000	2,200	8,400	3,100	18,000
11/20/92	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
8/06/92	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
4/07/92	U-1	▲	▲	▲	▲	▲
3/05/92	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
12/04/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
9/19/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
6/03/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
3/04/91	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
12/05/90	U-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
8/24/90	U-1	27,000	1,200	1,800	1,400	5,500
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
6/13/95	U-2	ND	ND	ND	ND	ND
3/09/95	U-2	ND	ND	ND	ND	ND
12/05/94	U-2	ND	ND	ND	ND	ND
9/07/94	U-2	ND	ND	0.63	ND	0.61
6/09/94	U-2	ND	ND	ND	ND	ND
4/13/94	U-2	ND	ND	ND	ND	ND
3/09/94	U-2	62	1.1	5.4	1.1	9.7
12/02/93	U-2	ND	ND	ND	ND	ND
9/09/93	U-2	ND	ND	ND	ND	ND
6/04/93	U-2	ND	ND	ND	ND	ND
2/12/93	U-2	ND	ND	ND	ND	ND
11/20/92	U-2	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
8/06/92	U-2	ND	ND	ND	ND	ND
4/07/92	U-2	ND	ND	ND	ND	ND
3/05/92	U-2	ND	ND	0.36	ND	ND
12/04/91	U-2	ND	ND	ND	ND	ND
9/19/91	U-2	ND	ND	ND	ND	ND
6/03/91	U-2	ND	ND	ND	ND	ND
3/04/91	U-2	ND	ND	0.9	ND	2.6
12/05/90	U-2	ND	ND	ND	ND	ND
8/23/90	U-2	ND	ND	ND	ND	ND
6/13/95	U-3	64,000	1,700	1,500	3,800	18,000
3/09/95	U-3	100,000	2,300	3,300	4,800	21,000
12/05/94	U-3	140,000	3,100	5,100	4,900	21,000
9/07/94	U-3	100,000	2,400	4,900	4,200	21,000
6/09/94	U-3	120,000*	3,300	6,100	5,200	26,000
3/09/94	U-3	120,000	4,500	8,300	5,600	28,000
12/02/93	U-3	110,000	3,200	7,700	5,600	26,000
9/09/93	U-3	110,000	2,800	10,000	6,500	31,000
6/04/93	U-3	92,000	2,900	8,700	4,300	20,000
2/12/93	U-3	80,000	3,700	9,400	3,700	18,000
11/20/92	U-3	50,000	3,200	4,700	1,900	10,000
8/06/92	U-3	140,000	5,100	13,000	5,000	23,000
4/07/92	U-3	97,000	6,100	16,000	5,400	28,000
3/05/92	U-3	160,000	5,300	15,000	5,400	26,000
12/04/91	U-3	75,000	2,500	6,100	1,900	11,000
9/19/91	U-3	61,000	3,300	9,700	2,800	15,000
6/03/91	U-3	130,000	5,800	19,000	4,600	24,000
3/04/91	U-3	84,000	1,400	10,000	2,900	17,000
1/18/91	U-3	51,000	1,700	3,100	1,500	7,500
12/05/90	U-3	69,000	1,900	3,500	1,600	9,800
8/23/90	U-3	110,000	4,400	13,000	2,800	17,000
6/13/95	U-4	ND	ND	ND	ND	ND
3/09/95	U-4	ND	ND	ND	ND	ND
12/05/94	U-4	ND	ND	ND	ND	ND
9/07/94	U-4	ND	ND	1.1	ND	1.0
6/09/94	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
4/13/94	U-4	ND	ND	ND	ND	ND
3/09/94	U-4	ND	1.4	4.7	1.1	8.1
12/02/93	U-4	ND	ND	ND	ND	2.6
9/09/93	U-4	ND	ND	ND	ND	ND
6/04/93	U-4	ND	ND	ND	ND	ND
2/12/93	U-4	ND	ND	ND	ND	ND
11/20/92	U-4	ND	ND	2.5	ND	ND
8/06/92	U-4	ND	ND	ND	ND	ND
4/07/92	U-4	ND	ND	ND	ND	ND
3/05/92	U-4	ND	ND	ND	ND	ND
12/04/91	U-4	ND	ND	ND	ND	ND
9/19/91	U-4	ND	ND	ND	ND	ND
6/03/91	U-4	ND	ND	ND	ND	ND
3/04/91	U-4	ND	ND	ND	ND	ND
1/18/91	U-4	ND	ND	ND	ND	ND
12/05/90	U-4	ND	ND	ND	ND	ND
8/23/90	U-4	ND	ND	1.0	ND	1.8
6/13/95	U-5	ND	ND	ND	ND	ND
3/09/95	U-5	ND	ND	ND	ND	ND
12/05/94	U-5	ND	ND	ND	ND	ND
9/07/94	U-5	ND	ND	0.73	ND	0.84
6/09/94	U-5	ND	ND	ND	ND	ND
4/13/94	U-5	ND	ND	ND	ND	ND
3/09/94	U-5	71	1.7	6.3	1.5	10
12/02/93	U-5	ND	ND	ND	ND	ND
9/09/93	U-5	ND	ND	ND	ND	ND
6/04/93	U-5	ND	ND	ND	ND	ND
2/12/93	U-5	ND	ND	ND	ND	ND
11/20/92	U-5	ND	ND	ND	ND	ND
8/06/92	U-5	ND	ND	ND	ND	ND
4/07/92	U-5	ND	ND	ND	ND	ND
6/13/95	U-6	1,300	ND	ND	20	46
3/09/95	U-6	2,500	29	ND	70	120
12/05/94	U-6	450**	ND	ND	ND	ND
9/07/94	U-6	1,600*	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
6/09/94	U-6	2,600*	16	ND	29	ND
3/09/94	U-6	2,200	11	8.2	24	16
12/02/93	U-6	2,100	12	1.6	21	1.1
9/09/93	U-6	6,300◆◆	29	ND	120	34
6/04/93	U-6	13,000	100	38	450	320
2/12/93	U-6	2,600	27	ND	120	51
11/20/92	U-6	WELL WAS INACCESSIBLE				
8/06/92	U-6	9,200	160	ND	360	150
4/07/92	U-6	6,600	90	ND	820	1,200
6/13/95	U-7	ND	ND	ND	ND	ND
3/09/95	U-7	ND	ND	ND	ND	ND
12/05/94	U-7	ND	ND	ND	ND	ND
9/07/94	U-7	ND	ND	ND	ND	ND
6/09/94	U-7	ND	ND	ND	ND	ND
4/13/94	U-7	ND	ND	ND	ND	ND
3/09/94	U-7	ND	1.4	4.4	0.96	7.5
12/02/93	U-7	ND	ND	ND	ND	ND
9/09/93	U-7	ND	ND	ND	ND	ND
6/04/93	U-7	ND	ND	ND	ND	ND
2/12/93	U-7	ND	ND	ND	ND	ND
11/20/92	U-7	ND	ND	ND	ND	ND
8/06/92	U-7	ND	ND	ND	ND	ND
4/07/92	U-7	ND	ND	ND	ND	ND
6/13/95	U-8	ND	ND	ND	ND	ND
3/09/95	U-8	ND	ND	ND	ND	ND
12/05/94	U-8	ND	ND	ND	ND	ND
9/07/94	U-8	ND	ND	ND	ND	ND
6/09/94	U-8	ND	ND	ND	ND	ND
4/13/94	U-8	ND	ND	0.78	ND	0.98
3/09/94	U-8	ND	1.2	3.7	0.79	6.1
12/02/93	U-8	ND	ND	ND	ND	ND
9/09/93	U-8	ND	ND	ND	ND	ND
6/04/93	U-8	ND	ND	ND	ND	ND
2/12/93	U-8	ND	ND	ND	ND	ND
8/06/92	U-8	ND	ND	ND	ND	ND
4/07/92	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
6/13/95	U-9	ND	ND	ND	ND	ND
3/09/95	U-9	2,500**	ND	ND	ND	ND
12/05/94	U-9	3,700**	ND	ND	ND	ND
9/07/94	U-9	2,700**	ND	ND	ND	ND
6/09/94	U-9	2,900**	ND	ND	ND	ND
4/13/94	U-9	ND	ND	ND	ND	ND
3/09/94	U-9	5,700*	ND	ND	ND	ND
12/02/93	U-9	ND	ND	ND	ND	ND
9/09/93	U-9	1,200♦	ND	ND	ND	ND
6/04/93	U-9	2,100♦	ND	ND	ND	ND

* 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.

TABLE 4

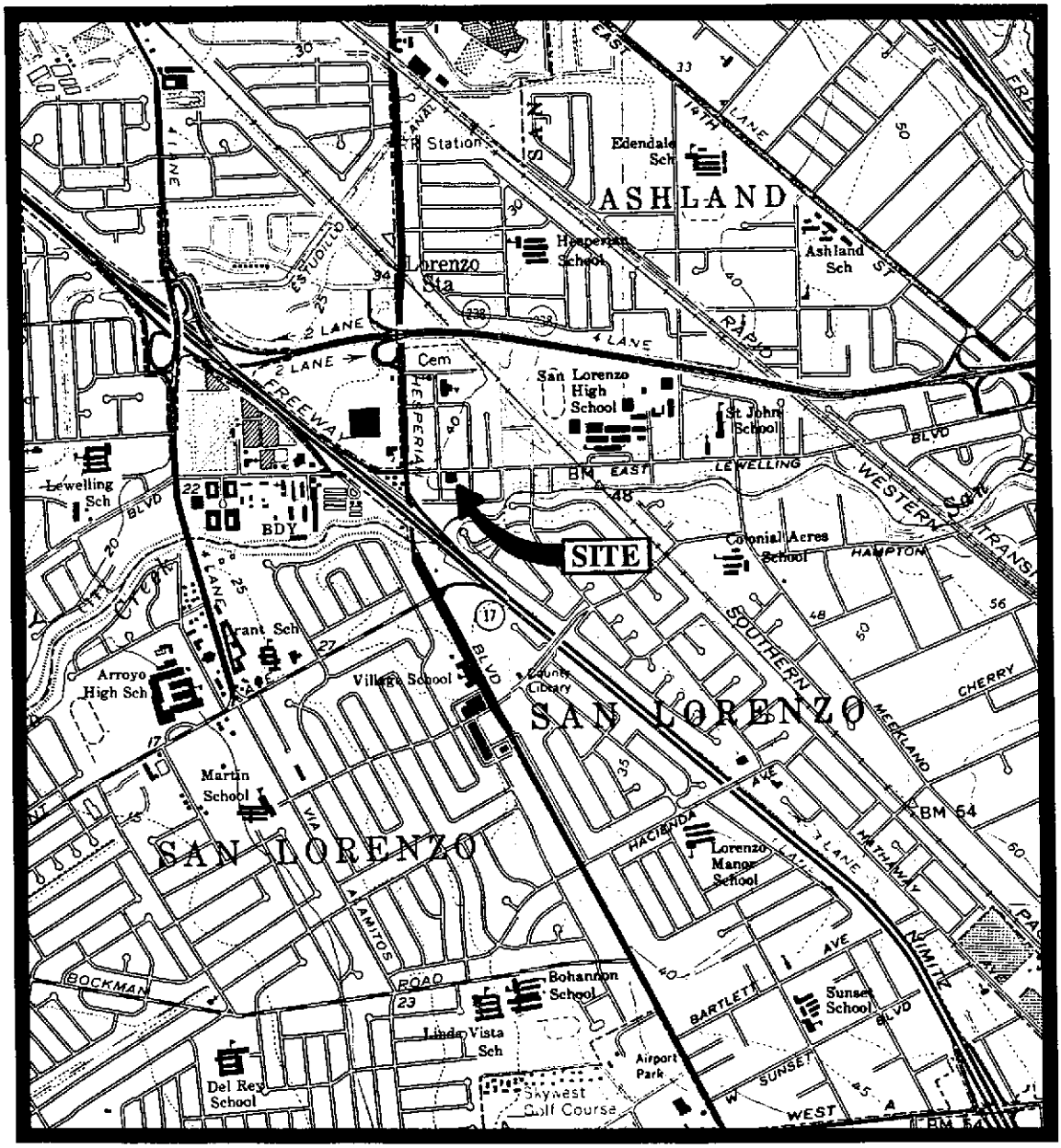
SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	MTBE
6/13/95	U1	2,800
3/09/95	U1	1,500
3/09/95	U2	ND
6/13/95	U2	ND
6/13/95	U3	900
3/09/95	U3	54,000
3/09/95	U4	ND
6/13/95	U4	2.7
6/13/95	U5	0.87
3/09/95	U5	ND
6/13/95	U6	5,400
3/09/95	U6	320
6/13/95	U7	3.5
3/09/95	U7	ND
6/13/95	U8	ND
3/09/95	U8	ND
6/13/95	U9	1,200
3/09/95	U9	5,800

MTBE = methyl tert butyl ether

ND = Non-detectable.

µg/L = micrograms per liter.

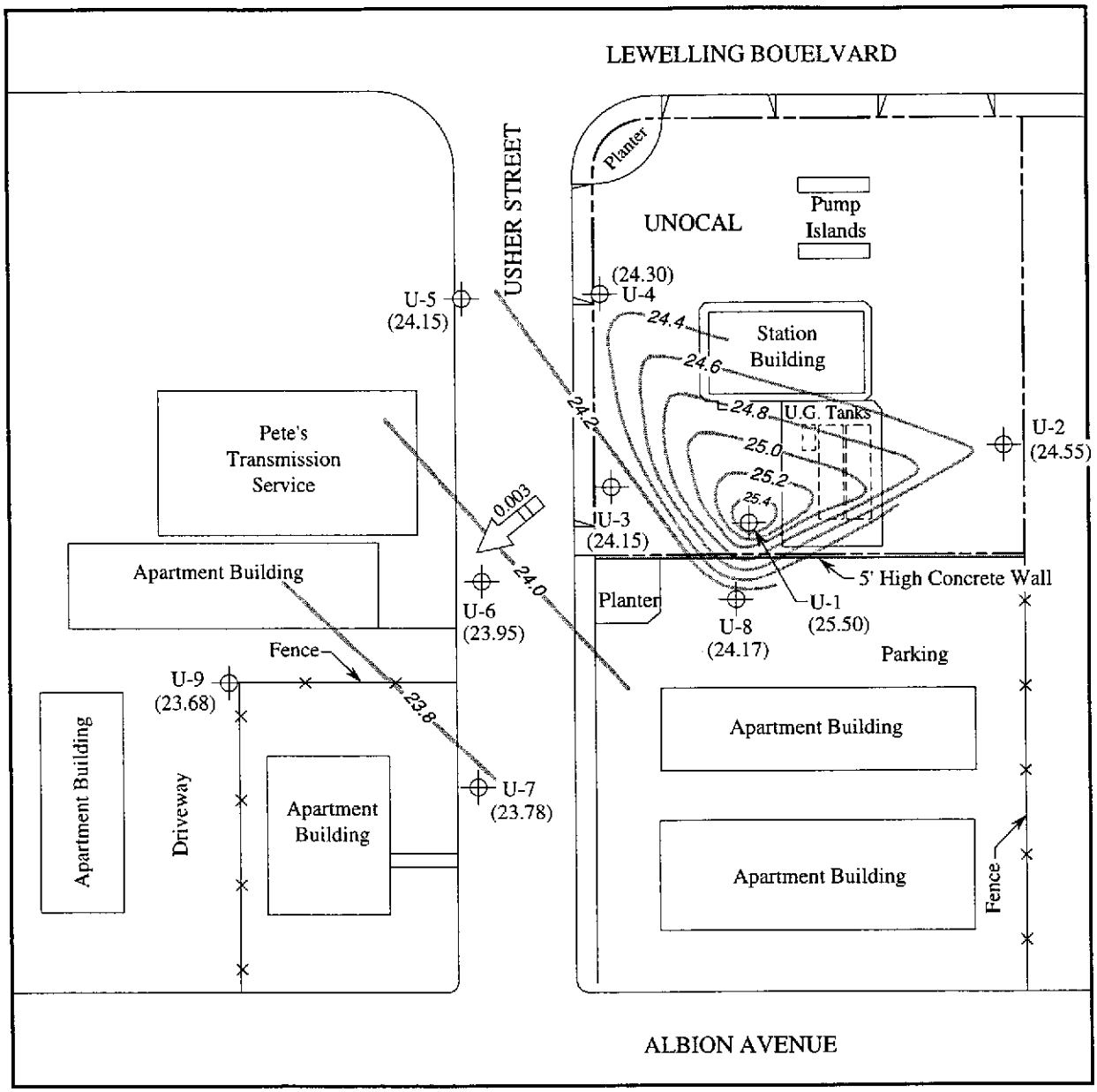


Base modified from 7.5 minute U.S.G.S.
Hayward and San Leandro Quadrangles
(both photorevised 1980)

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

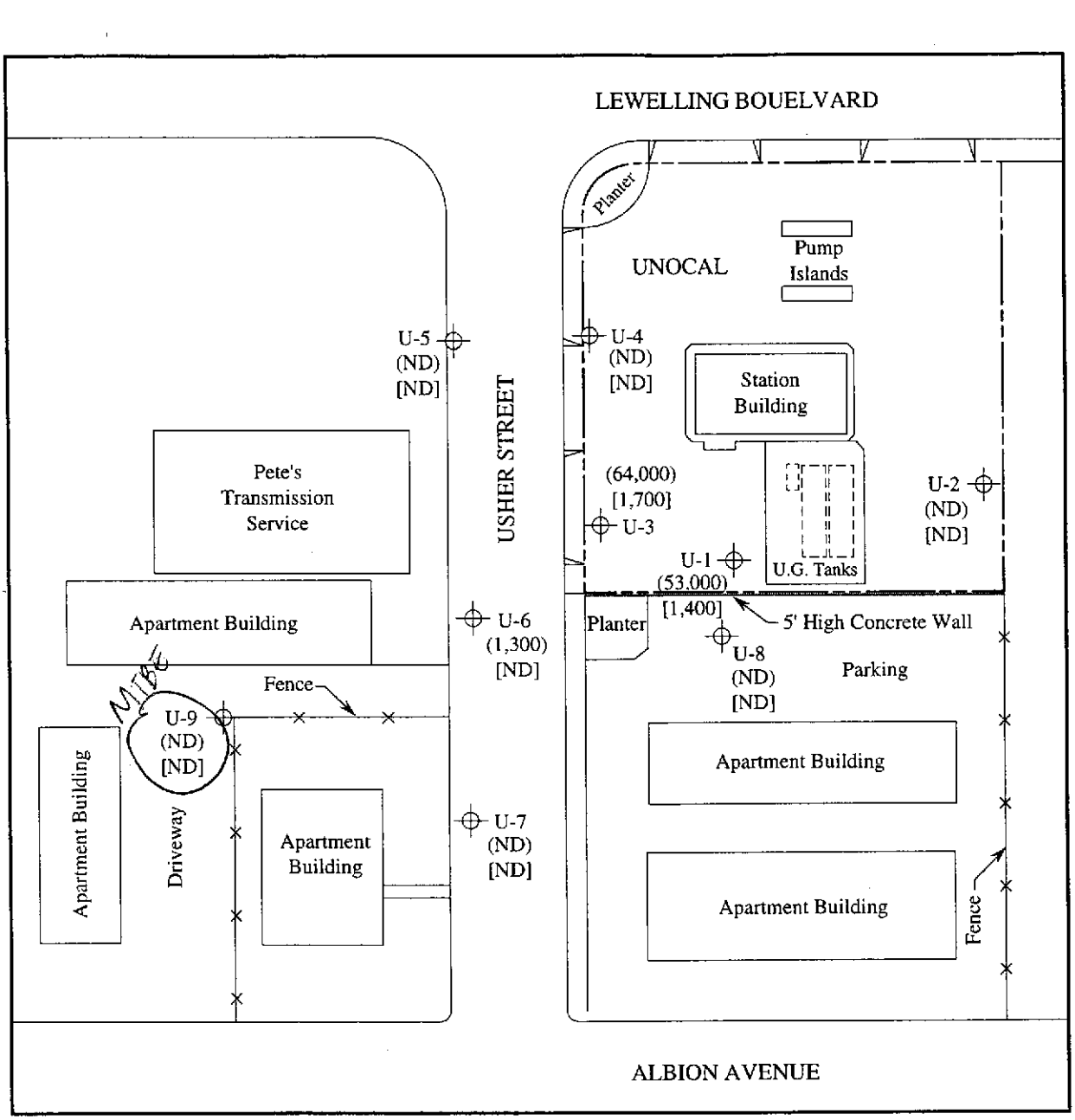
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE JUNE 13, 1995 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

0 60 120

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JUNE 13, 1995

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
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #5760, 376 Lewelling Blvd., San Lorenzo	Sampled: Jun 13, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jun 14, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jun 27, 1995
Attention: Sarkis Karkarian	First Sample #:	506-1438	

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
506-1438	U-1	53,000	1,400	5,000	2,500	14,000
506-1439	U-2	ND	ND	ND	ND	ND
506-1440	U-3	64,000	1,700	1,500	3,800	18,000
506-1441	U-4	ND	ND	ND	ND	ND
506-1442	U-5	ND	ND	ND	ND	ND
506-1443	U-6	1,300	ND	ND	20	46
506-1444	U-7	ND	ND	ND	ND	ND
506-1445	U-8	ND	ND	ND	ND	ND
506-1446	U-9	ND	ND	ND	ND	ND
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: Jun 13, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jun 14, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jun 27, 1995
Attention: Sarkis Karkarian	First Sample #:	506-1438	

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
506-1438	U-1	Gasoline	200	6/22/95	HP-9	81
506-1439	U-2	--	1.0	6/22/95	HP-4	98
506-1440	U-3	Gasoline	400	6/22/95	HP-5	77
506-1441	U-4	--	1.0	6/22/95	HP-4	100
506-1442	U-5	--	1.0	6/22/95	HP-4	98
506-1443	U-6	Gasoline	10	6/23/95	HP-2	108
506-1444	U-7	--	1.0	6/22/95	HP-2	108
506-1445	U-8	--	1.0	6/22/95	HP-2	105
506-1446	U-9	--	1.0	6/22/95	HP-5	79

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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MPDS Services	Client Project ID:	Unocal #5760, 376 Lewelling Blvd.,	Sampled: Jun 13, 1995
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water San Lorenzo	Received: Jun 14, 1995
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)	
Attention: Sarkis Karkarian	First Sample #:	506-1438	Analyzed: Jun 22, 1995
			Reported: Jun 27, 1995

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
506-1438	U-1	120	2,800
506-1439	U-2	0.60	N.D.
506-1440	U-3	240	900
506-1441	U-4	0.60	2.7
506-1442	U-5	0.60	0.87
506-1443	U-6	6.0	5,400
506-1444	U-7	0.60	3.5
506-1445	U-8	0.60	N.D.
506-1446	U-9	0.60	1,200

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on file

Alan B. Kemp
Project Manager

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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 5061438-446

Reported: Jun 30, 1995

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#:	5061319	5061319	5061319	5061319
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	105	105	113
Matrix Spike Duplicate % Recovery:	95	105	110	118
Relative % Difference:	5.4	0.0	4.7	4.3
LCS Batch#:	4LCS062295	4LCS062295	4LCS062295	4LCS062295
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	86	97	100	108
% 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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Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 5061438-446
Reported: Jun 30, 1995

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#:	5061439	5061439	5061439	5061439
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
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:	80	95	100	102
Matrix Spike Duplicate % Recovery:	80	95	100	105
Relative % Difference:	0.0	0.0	0.0	2.9
LCS Batch#:	2LCS062295	2LCS062295	2LCS062295	2LCS062295
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	80	92	99	100
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

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Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 5061438-446

Reported: Jun 30, 1995

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#:	5061323	5061323	5061323	5061323
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	95	100	100
Matrix Spike Duplicate % Recovery:	80	90	95	95
Relative % Difference:	12	5.4	5.1	5.1
LCS Batch#:	3LCS062295	3LCS062295	3LCS062295	3LCS062295
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	84	92	95	98
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

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Attention: Sarkis Karkarian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 5061438-446
Reported: Jun 30, 1995

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#:	5061565	5061565	5061565	5061565
Date Prepared:	6/23/95	6/23/95	6/23/95	6/23/95
Date Analyzed:	6/23/95	6/23/95	6/23/95	6/23/95
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:	100	110	120	120
Matrix Spike Duplicate % Recovery:	105	115	125	123
Relative % Difference:	4.9	5.0	4.1	2.5
LCS Batch#:	1LCS062395	1LCS062395	1LCS062395	1LCS062395
Date Prepared:	6/23/95	6/23/95	6/23/95	6/23/95
Date Analyzed:	6/23/95	6/23/95	6/23/95	6/23/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	93	103	113	113
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Sarkis Karkarian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 5061438-446

Reported: Jun 30, 1995

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#:	5061444	5061444	5061444	5061444
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
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:	100	110	120	120
Matrix Spike Duplicate % Recovery:	95	105	115	117
Relative % Difference:	5.1	4.7	4.3	2.5
LCS Batch#:	1LCS062295	1LCS062295	1LCS062295	1LCS062295
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	100	109	117	118
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

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Attention: Sarkis Karkarian

Client Project ID: Unocal #5760, 376 Lewelling Blvd., San Lorenzo
Matrix: Liquid
QC Sample Group: 5061438-446
Reported: Jun 30, 1995

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#:	5061319	5061319	5061319	5061319
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	105	105	113
Matrix Spike Duplicate % Recovery:	95	105	110	118
Relative % Difference:	5.4	0.0	4.7	4.3
LCS Batch#:	4LCS062295	4LCS062295	4LCS062295	4LCS062295
Date Prepared:	6/22/95	6/22/95	6/22/95	6/22/95
Date Analyzed:	6/22/95	6/22/95	6/22/95	6/22/95
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	86	97	100	108
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

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Project Manager

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mpds SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, 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	TPH-GAS BTEX	TPH-DIESEL	TOG	8010	MTBE				REMARKS
U1	6.13.95	14:45	X	X		2	Vdl	X				X		5061438		All MTBE as per Nubar 6-15-95
U2	4	8:55	X	X		4	4	X				X		5061439		
U3	4	13:55	X	X		4	4	X				X		5061440		
U4	4	9:20	X	X		4	4	X				X		5061441		
U5	4	10:30	X	X		4	4	X				X		5061442		
U6	4	12:35	X	X		4	4	X				X		5061443		
U7	4	11:20	X	X		4	4	X				X		5061444		
U8	4	12:00	X	X		4	4	X				X		5061445		
U9	4	13:05	X	X		4	4	X				X		5061446		

TURN AROUND TIME: REGULAR

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Ray Marangosian (SIGNATURE)	17:25 6-13-95	(SIGNATURE)	6/13/95 1725
(SIGNATURE)	6-14 1305	(SIGNATURE)	1305 6-14
(SIGNATURE)	6-14	(SIGNATURE)	14:15 6-14
(SIGNATURE)		(SIGNATURE)	
(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: TITLE: DATE: 6/13/95

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HNO3. All other containers are unpreserved.