MONITORING
PURGING
DISPOSING
SAMPLING
mpds SERVICES, INCORPORATED

MPDS-UN0746-07
May 24, 1995

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

Attention: Mr. Edward C. Ralston

RE: Quarterly Data Report
Unocal Service Station #0746
3943 Broadway
Oakland, California

Dear Mr. Ralston:

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. Skimmers were present in wells MW3 and MW5. 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 May 3, 1995. Prior to sampling, the wells were each purged of between 3 and 10 gallons of water. 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 2. 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.

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

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 the Alameda County Health Care Services.

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.

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
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Timothy R. Ross, Kaprealian Engineering, Inc.

TABLE 1

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)◆	Product Thick-ness (feet)	Sheen	Water Purged (gallons)	Product Purged (ounces)
(Monitored and Sampled on May 3, 1995)							
MW1	73.69	6.85	19.58	0	No	9	0
MW2	73.20	8.12	19.80	0	No	8	0
MW3	73.50	7.91	22.04	0	No	10	0
MW4	73.00	8.29	19.98	0	No	8	0
MW5	73.40	7.98	19.78	0	No	8.5	0
MW6	73.47	6.47	19.55	0	No	9	0
MW7	73.93	7.71	19.96	0	No	8.5	0
MW8	72.81	8.60	21.22	0	No	9	0
MW9	72.71	7.82	21.91	0	No	10	0
MW10	71.39	10.22	21.70	0	No	8	0
MW11	68.90	9.28	19.11	0	No	7	0
MW12	66.23	13.38	17.57	0	No	3	0
(Monitored and Purged on March 14, 1995)							
MW3	74.36	7.05	22.02	0	--	50	[<1]
MW5	74.34	7.04	19.75	0	--	50	0
RW1	74.62	6.01	16.06	0	--	0	0
(Monitored and Sampled on February 7, 1995)							
MW1	73.48	7.06	19.55	0	No	8.5	0
MW2	73.03	8.29	19.76	0	No	8	0
MW3	73.36	8.05	22.01	0	No	9.5	0
MW4	73.63	7.66	19.95	0	No	8.5	0
MW5	73.28	8.10	19.73	0	No	9	0
MW6	73.29	6.65	19.59	0	No	9	0
MW7	73.76	7.88	19.92	0	No	8.5	0
MW8	72.72	8.69	21.20	0	No	9	0
MW9	72.77	7.76	21.86	0	No	10	0
MW10*	71.32	10.29	21.66	0	No	8	0
MW11*	65.90	12.28	19.07	0	No	5	0
MW12*	67.89	11.72	17.54	0	No	4	0
RW1*	73.45	7.18	16.03	0	--	0	0

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)◆	Product Thick-ness (feet)	Sheen	Water Purged (gallons)	Product Purged (ounces)
(Monitored and Sampled on November 10, 1994)							
MW1*	74.11	6.43	19.60	0	--	0	0
MW2	73.85	7.47	19.75	0	No	9	0
MW3	73.94	7.47	21.98	0	Yes	10	0
MW4	72.08	9.21	19.92	0	No	8	0
MW5*	73.90**	7.54	19.91	0.08	N/A	0	4
MW6*	73.82	6.12	19.58	0	--	0	0
MW7*	73.98	7.66	19.98	0	--	0	0
MW8	73.60	7.81	21.18	0	No	10	0
MW9	73.28	7.25	21.94	0	No	10	0
MW10	68.97	12.64	21.72	0	No	7	0
MW11	64.61	13.57	19.13	0	No	4	0
MW12	66.21	13.40	17.60	0	No	3	0
RW1*	74.29	6.34	15.98	0	--	0	0
(Monitored and Sampled on August 31, 1994)							
MW1	72.27	8.27	19.58	0	No	8	0
MW2	71.47	9.85	19.80	0	No	7	0
MW3	71.33	10.08	22.03	0	No	8.5(50)	0
MW4	71.28	10.01	19.98	0	No	7	0
MW5*	71.15**	10.25	19.77	0.02	N/A	1(50)	0
MW6	72.01	7.93	19.53	0	No	8	0
MW7	72.52	9.12	19.97	0	No	7.5	0
MW8	70.04	11.37	21.22	0	No	7	0
MW9	69.56	10.97	21.90	0	No	7.5	0
MW10	68.14	13.47	21.68	0	No	6	0
MW11	65.21	12.97	19.10	0	No	4.5	0
MW12	66.79	12.82	17.57	0	No	3.5	0
RW1*	71.02	9.61	16.06	0	--	0	0

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)▲
MW1	80.54
MW2	81.32
MW3	81.41
MW4	81.29
MW5	81.38
MW6	79.94
MW7	81.64
MW8	81.41
MW9	80.53
MW10	81.61
MW11	78.18
MW12	79.61
RW1	80.63

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

* Monitored only.

** Ground water elevation corrected due to the presence of free product (correction factor = 0.75).

▲ The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the City of Oakland Benchmark BM#1336 (elevation = 82.28 feet MSL).

★ Total well depth not measured.

(x) Amount of water purged after well sampling.

[x] Amount of product purged from skimmer.

N/A = Not applicable.

-- Sheen determination was not performed.

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
5/03/95	MW1	260	21	39	17	24
	MW2	ND	ND	ND	ND	ND
	MW3	26,000	740	990	1,100	4,400
	MW4	160	8.3	0.52	1.5	3.7
	MW5	12,000	680	160	600	1,800
	MW6	ND	ND	ND	ND	1.0
	MW7	ND	ND	ND	ND	1.0
	MW8	75	ND	ND	ND	1.0
	MW9	ND	0.85	0.67	1.3	1.0
	MW10	ND	ND	ND	ND	0.65
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND
2/07/95	MW1	6,100	670	ND	120	60
	MW2	1,600♦	ND	ND	ND	ND
	MW3	45,000	1,400	1,300	1,500	5,600
	MW4	540	47	ND	17	2.5
	MW5	25,000	1,400	740	990	3,000
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	230	1.4	0.95	0.90	1.1
	MW9	57	0.70	ND	0.86	ND
	MW10	SAMPLED SEMI-ANNUALLY				
	MW11	SAMPLED SEMI-ANNUALLY				
	MW12	SAMPLED SEMI-ANNUALLY				
11/10/94	MW1	SAMPLED SEMI-ANNUALLY				
	MW2	95♦♦	ND	ND	ND	ND
	MW3	86,000	3,300	3,800	1,800	8,300
	MW4	7,700	1,800	280	460	1,300
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	SAMPLED SEMI-ANNUALLY				
	MW7	SAMPLED SEMI-ANNUALLY				
	MW8	940	6.7	6.3	ND	16
	MW9	ND	ND	ND	ND	ND
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
8/31/94	MW1	ND	ND	0.98	ND	0.84
	MW2	310♦	ND	ND	ND	ND
	MW3	44,000	500	240	1,400	5,700
	MW4	400	17	0.94	14	5.2
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	1.5	ND	1.6
	MW7	ND	ND	0.80	ND	0.75
	MW8	1,800♦	ND	ND	ND	ND
	MW9*	650	7.7	2.8	4.4	5.0
	MW10	ND	ND	0.64	ND	0.54
	MW11	ND	ND	1.5	ND	1.8
	MW12*	ND	ND	1.0	ND	1.0
5/31/94	MW2	1,100♦	ND	ND	ND	ND
	MW3	39,000	670	630	1,500	6,200
	MW4	1,100	190	ND	100	58
	MW5	43,000	1,500	1,200	1,600	6,700
	MW8	350	3.0	1.0	0.73	1.7
	MW9	360	7.8	0.97	4.6	2.2
	MW10	ND	ND	0.90	ND	0.91
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	0.81	ND	0.82
2/16/94	MW1	ND	0.84	ND	ND	0.59
	MW2	3,200♦	ND	ND	ND	ND
	MW3	57,000	910	2,500	2,100	9,000
	MW4	190	11	0.98	21	6.6
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	0.70
	MW8	990	4.9	1.8	2.4	4.5
	MW9	250	5.1	1.3	4.4	1.5
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
11/30/93	MW1	SAMPLED SEMI-ANNUALLY				
	MW2	480◆	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW4	200	28	ND	17	8.1
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	SAMPLED SEMI-ANNUALLY				
	MW7	SAMPLED SEMI-ANNUALLY				
	MW8	3,500	18	ND	ND	ND
	MW9	200	5.6	ND	2.9	2.7
	MW10	WELL WAS INACCESSIBLE				
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND
8/25/93	MW1	ND	ND	ND	ND	ND
	MW2	190◆	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW4	640	100	1.1	100	22
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	1,800	11	17	8.9	29
	MW9	220	10	ND	6.8	1.4
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND
5/25/93	MW1	260	27	4.9	2.6	54
	MW2*	1,300◆	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW4	74	10	ND	4.6	1.8
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	1,200	5.4	ND	9.0	21
	MW9	160	6.1	ND	7.4	1.1
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	0.75	ND	1.0
	MW12	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
2/24/93	MW1	1,100	280	4.9	120	140
	MW2	11,000♦	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW4	140	12	0.64	9.4	3.7
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	WELL WAS INACCESSIBLE				
	MW9	WELL WAS INACCESSIBLE				
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND
11/20/92	MW1	ND	0.75	ND	ND	ND
	MW2	510♦	ND	ND	ND	ND
	MW3	1,100,000♦♦	1,800	6,400	3,000	15,000
	MW4	ND	6.2	ND	1.2	0.52
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	WELL WAS INACCESSIBLE				
	MW9	WELL WAS INACCESSIBLE				
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND
8/26/92	MW1	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	20,000	690	1,900	1,300	5,700
	MW4	120	86	0.52	0.57	1.6
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	0.73	ND
	MW8	1,800	12	8.0	4.0	13
	MW9	250	13	ND	8.6	3.8
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
	MW12	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
5/23/92	MW1	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	25,000	300	130	880	4,900
	MW4	ND	ND	ND	ND	ND
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	2,100	8.6	1.6	1.7	28
	MW9	460	18	0.66	1.4	3.2
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
2/06/92	MW1	ND	ND	ND	ND	ND
	MW2	ND	0.36	0.66	ND	0.62
	MW3	24,000	600	1,800	1,200	5,800
	MW4	5,700	2,200	140	57	980
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	2,600	4.1	7.0	31	93
	MW9	660	41	1.0	33	15
	MW10	ND	ND	ND	ND	ND
	MW11	ND	ND	ND	ND	ND
11/19/91	MW1	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	22,000	250	440	660	3,000
	MW4	55	9.2	4.5	1.4	6.7
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	32	ND	ND	ND	ND
	MW8	1,600	8.1	1.8	19	52
	MW9	360	17	0.45	15	11

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
8/28/91	MW1	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	16,000	650	2,200	1,100	5,400
	MW4	2,000	1,500	20	120	300
	MW5	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	1,800	3.2	1.9	19	74
	MW9	450	17	0.9	13	14
5/28/91	MW1	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	24,000	570	1,100	810	4,200
	MW4	38	ND	ND	ND	1.9
	MW5	24,000	2,300	3,400	1,300	6,000
	MW6	ND	ND	ND	ND	0.42
	MW7	39	ND	ND	ND	0.73
	MW8	4,800	4.2	1.3	5.1	170
	MW9	590	6.0	0.43	6.8	1.4
2/25/91	MW1	ND	ND	ND	ND	ND
	MW2	ND	0.68	0.42	ND	0.86
	MW3	37,000	730	2,900	1,300	7,300
	MW4	22,000	600	1,300	780	2,800
	MW5	25,000	950	1,300	900	3,500
	MW6	ND	0.37	0.40	0.35	1.5
	MW7	70	ND	ND	ND	0.52
	MW8	5,300	17	6.1	53	300
	MW9	390	13	1.1	2.8	14
11/07/90	MW1	45	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	42,000	1,400	5,000	1,800	7,500
	MW4	180	1.5	0.37	6.3	26
	MW5	20,000	640	1,100	670	3,000
	MW6	ND	ND	ND	ND	ND
	MW7	ND	ND	ND	ND	ND
	MW8	4,700	28	38	86	7,200
	MW9	480	7.8	1.2	13	47

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
8/16/90	MW1	ND	ND	ND	ND	ND
	MW2	ND	ND	6.7	ND	ND
	MW3	6,800	600	660	760	160
	MW4	3,600	480	17	230	260
	MW5	16,000	1,400	1,900	2,800	660
2/15/90	MW1	170	7.9	ND	2.2	2.8
	MW2	ND	ND	ND	ND	ND
	MW3	20,000	1,700	2,100	750	3,100
	MW4	150	8.0	8.0	10	45
	MW5	24,000	1,500	1,700	260	3,600
11/01/89	MW1	ND	ND	ND	ND	0.30
	MW2	200	ND	ND	3.0	1.2
	MW3	13,000	57	48	1.7	120

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

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

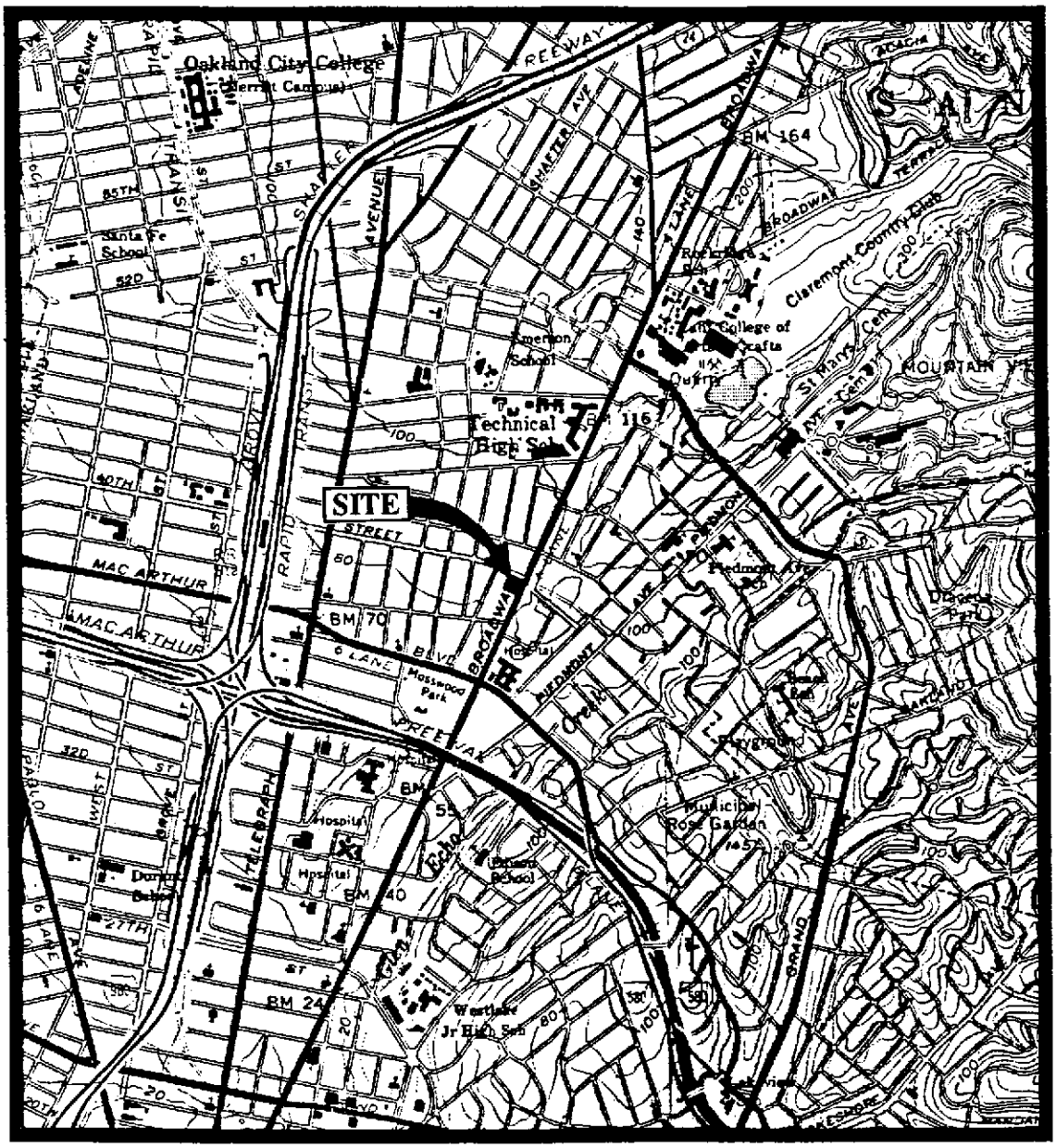
* Methyl tert butyl ether was detected at a concentration of:

2,700 µg/L in MW2 on May 25, 1993.
59 µg/L in MW9 on August 31, 1994.
ND in MW12 on August 31, 1994.

ND = Non-detectable.

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

Note: Laboratory analyses data prior to November 30, 1993, were provided by Kaprealian Engineering, Inc.

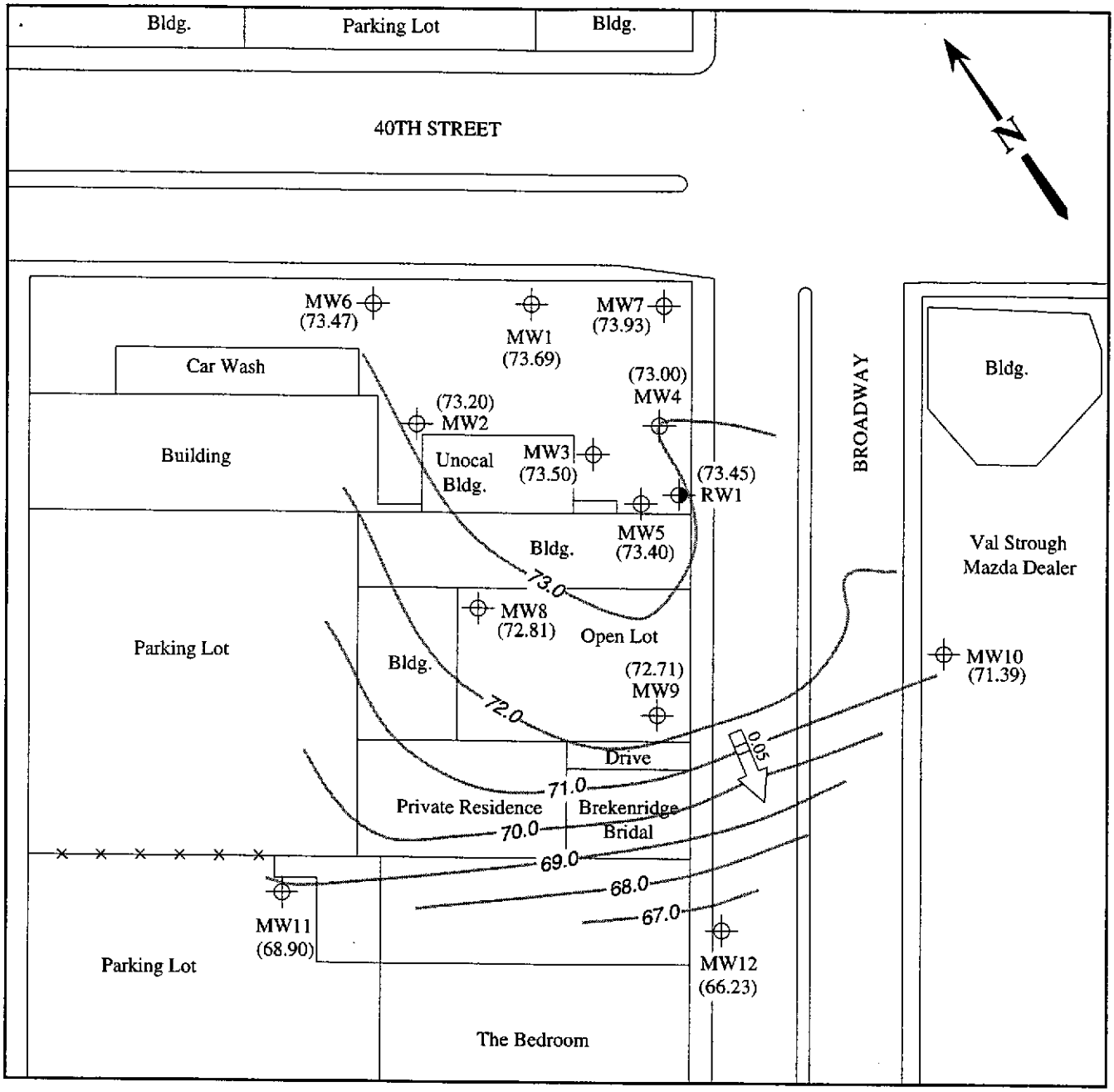


Base modified from 7.5 minute U.S.G.S. Oakland East and West Quadrangles (both photorevised 1980)

0 2000 4000'

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #0746** **3943 BROADWAY** **OAKLAND, CALIFORNIA**	**LOCATION MAP**



LEGEND

- Monitoring well
- 6-inch diameter recovery 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

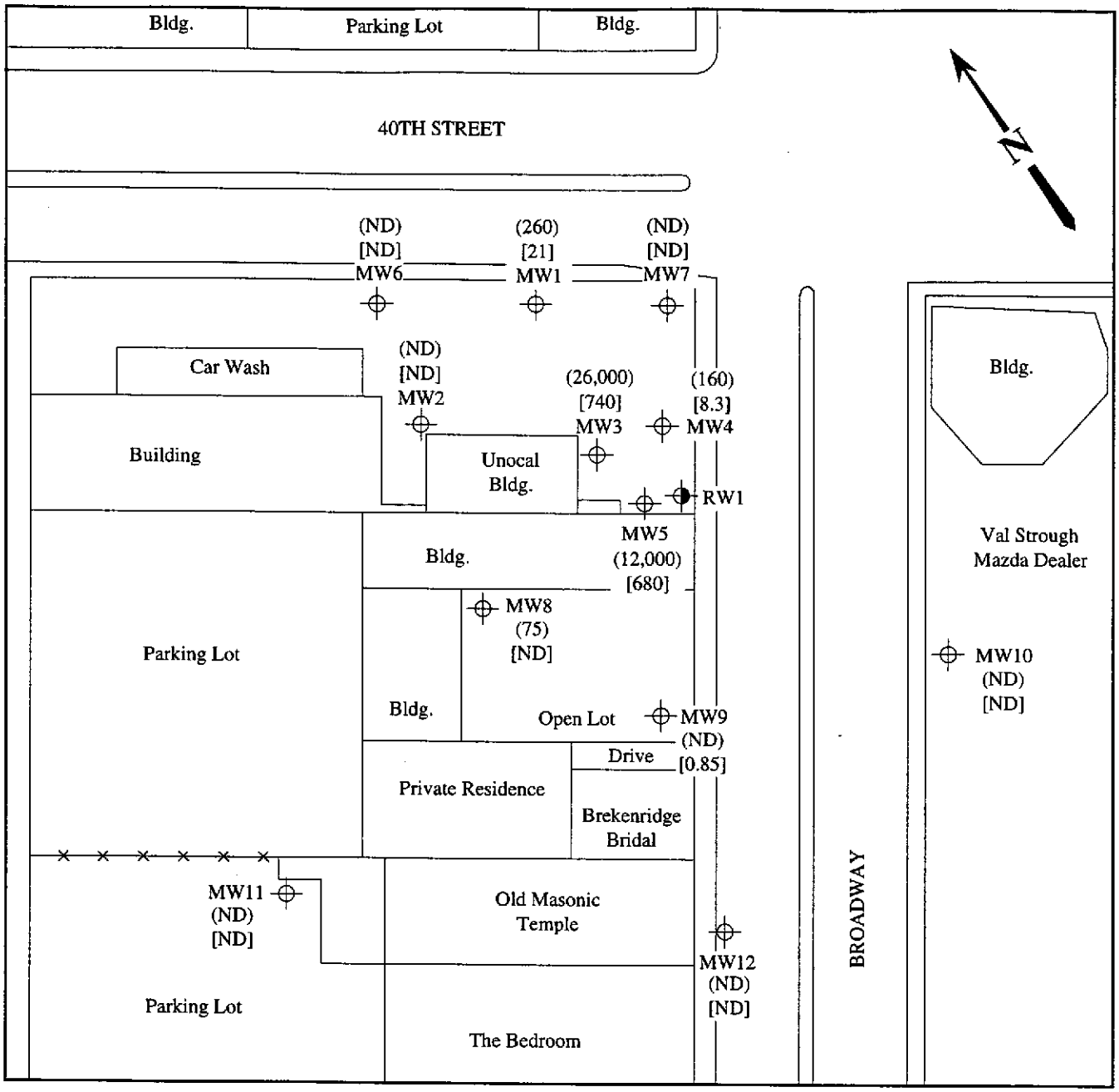
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE MAY 3, 1995 MONITORING EVENT

MPDS SERVICES, INCORPORATED

UNOCAL SERVICE STATION #0746
3943 BROADWAY
OAKLAND, CALIFORNIA

FIGURE
1



LEGEND

- Monitoring well
- 6-inch diameter recovery well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of ~~TPH as gasoline in µg/L~~ benzene

ND = Non-detectable

0 60 120

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON MAY 3, 1995

MPDS SERVICES, INCORPORATED

UNOCAL SERVICE STATION #0746
3943 BROADWAY
OAKLAND, 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 #0746, 3943 Broadway, Oakland	Sampled: May 3, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: May 3, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: May 17, 1995
Attention: Sarkis Karkarian	First Sample #:	505-0749	

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
505-0749	MW-1	260	21	39	17	24
505-0750	MW-2	ND	ND	ND	ND	ND
505-0751	MW-3	26,000	740	990	1,100	4,400
505-0752	MW-4	160	8.3	0.52	1.5	3.7
505-0753	MW-5	12,000	680	160	600	1,800
505-0754	MW-6	ND	ND	ND	ND	1.0
505-0755	MW-7	ND	ND	ND	ND	1.0
505-0756	MW-8	75	ND	ND	ND	1.0
505-0757	MW-9	ND	0.85	0.67	1.3	1.0
505-0758	MW-10	ND	ND	ND	ND	0.65
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, #2000

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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MPDS Services	Client Project ID:	Unocal #0746, 3943 Broadway, Oakland	Sampled:	May 3, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	May 3, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	May 17, 1995
Attention: Sarkis Karkarian	First Sample #:	505-0749		

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
505-0749	MW-1	Gasoline	1.0	5/15/95	HP-1	89
505-0750	MW-2	--	1.0	5/15/95	HP-1	90
505-0751	MW-3	Gasoline	100	5/16/95	HP-1	84
505-0752	MW-4	Gasoline	1.0	5/15/95	HP-1	84
505-0753	MW-5	Gasoline	1.0	5/16/95	HP-1	80
505-0754	MW-6	--	1.0	5/15/95	HP-1	82
505-0755	MW-7	--	1.0	5/15/95	HP-1	89
505-0756	MW-8	Gasoline	1.0	5/15/95	HP-1	82
505-0757	MW-9	--	1.0	5/16/95	HP-1	86
505-0758	MW-10	--	1.0	5/16/95	HP-1	84

SEQUOIA ANALYTICAL, #2000

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Project Manager

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MPDS Services	Client Project ID:	Unocal #0746, 3943 Broadway, Oakland	Sampled: May 3, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: May 3, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: May 17, 1995
Attention: Sarkis Karkarian	First Sample #:	505-0759	

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
505-0759	MW-11	ND	ND	ND	ND	ND
505-0760	MW-12	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, #2000

Signature on File

Alan B. Kemp
Project Manager

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Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #0746, 3943 Broadway, Oakland	Sampled:	May 3, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	May 3, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	May 17, 1995
Attention: Sarkis Karkarian	First Sample #:	505-0759		

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
505-0759	MW-11	--	1.0	5/16/95	HP-1	84
505-0760	MW-12	--	1.0	5/16/95	HP-1	86

SEQUOIA ANALYTICAL, #2000

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Alan B. Kemp
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Client Project ID: Unocal #0746, 3943 Broadway, Oakland
Matrix: Liquid
QC Sample Group: 5050749-760

Reported: May 19, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	N. Zahedi	N. Zahedi	N. Zahedi	N. Zahedi
MS/MSD Batch#:	5050223	5050223	5050223	5050223
Date Prepared:	5/15/95	5/15/95	5/15/95	5/15/95
Date Analyzed:	5/15/95	5/15/95	5/15/95	5/15/95
Instrument I.D.#:	HP-1	HP-1	HP-1	HP-1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	97	100	101	104
Matrix Spike Duplicate % Recovery:	98	98	101	105
Relative % Difference:	1.0	2.0	0.0	0.96
LCS Batch#:	--	--	--	--
Date Prepared:	--	--	--	--
Date Analyzed:	--	--	--	--
Instrument I.D.#:	--	--	--	--
LCS % Recovery:	--	--	--	--
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #2000

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.

Sequoia Analytical

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

Client Project ID: Unocal #0746, 3943 Broadway, Oakland
Matrix: Liquid
QC Sample Group: 5050749-760

Reported: May 19, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	N. Zahedi	N. Zahedi	N. Zahedi	N. Zahedi
MS/MSD Batch#:	5050257	5050257	5050257	5050257
Date Prepared:	5/16/95	5/16/95	5/16/95	5/16/95
Date Analyzed:	5/16/95	5/16/95	5/16/95	5/16/95
Instrument I.D.#:	HP-1	HP-1	HP-1	HP-1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Matrix Spike % Recovery:	86	82	86	91
Matrix Spike Duplicate % Recovery:	101	90	96	101
Relative % Difference:	16	9.3	11	10
LCS Batch#:	--	--	--	--
Date Prepared:	--	--	--	--
Date Analyzed:	--	--	--	--
Instrument I.D.#:	--	--	--	--
LCS % Recovery:	--	--	--	--
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #2000

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.

mpds SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER: NICHOLAS PERROW

WITNESSING AGENCY:

UNOCAL S/S # 0746 CITY: OAKLAND

ADDRESS: 3943 BROADWAY

ANALYSES REQUESTED

TURN AROUND TIME: 72 HOUR

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
MW-1	5/2/95	2:20 PM	✓	✓		2 VOAS	WELL	✓		5050749	AB					
MW-2	"	12:10 PM	✓	✓		"	"	✓		5050750						
MW-3	"	2:30 PM	✓	✓		"	"	✓		5050751						
MW-4	"	1:55 PM	✓	✓		"	"	✓		5050752						
MW-5	"	2:55 PM	✓	✓		"	"	✓		5050753						
MW-6	"	9:30 AM	✓	✓		"	"	✓		5050754						
MW-7	"	10:00 AM	✓	✓		"	"	✓		5050755						
MW-8	"	1:20 PM	✓	✓		"	"	✓		5050756						
MW-9	"	12:50 PM	✓	✓		"	"	✓		5050757						
MW-10	"	10:35 AM	✓	✓		"	"	✓		5050758	↓					

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
(SIGNATURE)	5/2/95 16:30	(SIGNATURE)	1215 5-4
(SIGNATURE)	5-4	(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)	5/3/95 1650	(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: 5/3/95

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.

Relinquished by: T. Berg 5/3/95 0820 Received by: 5/4/95 2:00 pm

mpds SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER: NICHOLAS PERROW

WITNESSING AGENCY:

UNOCAL S/S # 6346 CITY: OAKLAND

ADDRESS: 3963 BROADWAY

TURN AROUND TIME: 24 HOUR

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	ANALYSES REQUESTED: TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
MW-11	5/3/95	11:00AM	✓	✓		3 VOAs	✓	✓		5050759	AB					
MW-12		11:40AM	✓	✓		"	"	✓		5050760	✓					

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
(SIGNATURE)	5/3/95 16:30	(SIGNATURE)	5-4 12:15
(SIGNATURE)	5-4	(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)	5/3/95 1630	(SIGNATURE)	

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

1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? _____
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? _____
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? _____
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? _____

SIGNATURE: _____ TITLE: _____ DATE: 5/3/95

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.

Relinquished by: 5/3/95 0830

5/4/95 2:00 p.m.