MONITORING
PURGING
DISPOSING
SAMPLING

MPDS SERVICES, INCORPORATED

August 7, 1996

Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, CA 94502

Attention: Ms. Jennifer Eberle

RE: Unocal Service Station #0752
800 Harrison Street
Oakland, California

Dear Ms. Eberle:

Per the request of the Unocal Corporation Project Manager, Ms. Tina R. Berry, enclosed please find our most recent data report 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

\dr

Enclosure

cc: Ms. Tina R. Berry

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

MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN0752-11
August 1, 1996

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

Attention: Ms. Tina R. Berry

RE: Semi-Annual Data Report
Unocal Service Station #0752
800 Harrison Street
Oakland, California

Dear Ms. Berry:

This data report presents the results of the most recent semi-annual 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 semi-annual period are indicated in Table 1. Oxygen Release Compound (ORC®) filter socks were present in all the monitoring wells. 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 this semi-annual period is shown on the attached Figure 1.

Ground water samples were collected on July 9, 1996. Prior to sampling, the wells were each purged of between 7.5 and 10.5 gallons of water. In addition, dissolved oxygen concentrations were measured and are presented in Table 7. 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. Trip blank, Equipment blank and Field blank samples (denoted as ES1, ES2 and ES3, respectively) were also collected for quality assurance and control. 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 2 through 6. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and benzene detected in the ground water samples collected this semi-annual period 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

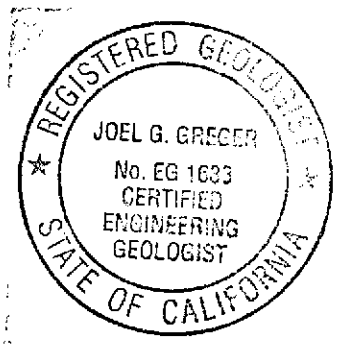
A copy of this report should be sent to Ms. Jennifer Eberle of the Alameda County Health Care Services Agency.

If you have any questions regarding this report, please do not hesitate to call Mr. Joel G. Greger 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 8/31/98

/bp

Attachments: Tables 1 through 7
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Robert H. Kezerian, Kaprealian Engineering, 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 July 9, 1996)			
MW1	16.17	18.52	33.70	0	No	10.5
MW2	16.50	18.22	30.33	0	No	8.5
MW3	15.71	17.43	30.57	0	No	9
MW4	15.75	16.96	32.35	0	No	10.5
MW5	15.84	17.11	31.80	0	No	10
MW6	15.57	16.59	30.94	0	No	10
MW7	15.21	16.99	31.60	0	No	10
MW8	15.22	16.78	27.75	0	No	7.5
			(Monitored and Sampled on April 10, 1996)			
MW1	17.04	17.65	33.90	0	No	11.5
MW2	17.37	17.35	30.45	0	No	9
MW3	16.74	16.40	31.80	0	No	10.5
MW4	16.71	16.00	32.51	0	No	11.5
MW5	16.90	16.05	31.95	0	No	11
MW6	16.60	15.56	31.03	0	No	11
MW7	16.39	15.81	31.95	0	No	11
MW8	16.30	15.70	27.60	0	No	8.5
			(Monitored and Sampled on January 3, 1996)			
MW1	15.00	19.69	33.88	0	No	10
MW2	15.32	19.40	30.59	0	No	8
MW3	14.60	18.54	30.74	0	No	8.5
MW4	14.66	18.05	32.50	0	No	10
MW5	14.75	18.20	31.80	0	No	9.5
MW6	14.50	17.66	30.97	0	No	9.5
MW7	14.18	18.02	31.93	0	No	9.5
MW8	14.18	17.82	27.61	0	No	7
			(Monitored and Sampled on October 10, 1995)			
MW1	15.09	19.60	33.96	0	No	10
MW2	15.47	19.25	30.75	0	No	8
MW3	14.64	18.50	30.81	0	No	8.5
MW4	14.68	18.03	32.61	0	No	10
MW5	14.80	18.15	32.00	0	No	10.5
MW6	14.48	17.68	31.25	0	No	10
MW7	14.12	18.08	32.16	0	No	10
MW8	14.15	17.85	27.15	0	No	6.5

Table 1

Summary of Monitoring Data

Well #	Well Casing Elevation (feet)*
MW1	34.69
MW2	34.72
MW3	33.14
MW4	32.71
MW5	32.95
MW6	32.16
MW7	32.20
MW8	32.00

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

* The elevations of the top of the well casings are relative to Mean Sea Level (MSL), per the City of Oakland benchmark disk stamped "25/A" at the northeast corner of 7th and Harrison (elevation = 28.81 feet MSL).

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
MW1	6/5/91	47	ND	ND	ND	ND
	9/30/91	ND	ND	ND	ND	ND
	12/30/91	ND	ND	ND	ND	ND
	4/2/92	ND	ND	ND	ND	ND
	6/30/92	ND	ND	ND	ND	ND
	9/15/92	76	1.0	ND	ND	ND
	12/21/92	95	0.69	ND	ND	1.0
	4/28/93	920	3.1	2.3	1.2	9.7
	7/23/93	ND	0.5	0.66	ND	ND
	10/5/93	92**	1.5	ND	ND	0.72
	1/3/94	ND	ND	ND	ND	ND
	4/2/94	ND	ND	ND	ND	ND
	7/5/94	250	4.8	13	1.2	7.3
	10/6/94	540	1.4	ND	0.66	11
	1/2/95	140	ND	ND	ND	ND
	4/3/95	580	3.6	0.75	ND	4.0
	7/14/95	260	2.1	ND	ND	1.2
	10/10/95	220	2.0	ND	25	5.6
	1/3/96	190	2.4	ND	0.71	1.2
	4/10/96	540	8.9	1.7	1.5	7.4
	7/9/96	**490**	**3.0**	1.4	1.3	2.5
MW2	6/5/91	49	ND	ND	ND	ND
	9/30/91	130	18	0.53	14	9.6
	12/30/91	91	16	0.89	11	1.9
	4/2/92	88	12	0.32	6.3	7.2
	6/30/92	76	9.3	0.76	4.8	6.9
	9/15/92	1,300	91	5.7	80	110
	12/21/92	960	97	3.2	74	96
	4/28/93	1,300	76	1.9	130	87
	7/23/93	66	1.8	ND	2.5	2.0
	10/5/93	120	12	ND	2.1	12
	1/3/94	260	25	ND	5.5	26
	4/2/94	ND	0.65	ND	ND	0.99
	7/5/94	160	16	ND	0.73	10
	10/6/94	170	15	ND	1.4	11
	1/2/95	190	27	ND	0.95	11
	4/3/95	2,400	65	6.6	19	63
	7/14/95	750	270	ND	ND	13
	10/10/95	50	1.6	ND	ND	ND
	1/3/96	ND	ND	ND	ND	ND
	4/10/96	300	42	ND	2.4	9.0
	7/9/96	**760**	**230**	ND	1.3	2.4

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
MW3	6/5/91	5,800	1,200	40	140	97
	9/30/91	6,800	1,400	130	290	240
	12/30/91	7,200	2,100	690	410	550
	4/2/92	8,000	1,400	200	300	310
	6/30/92	8,900	1,900	210	430	550
	9/15/92	10,000	1,900	330	400	580
	12/21/92	8,500	1,500	150	310	330
	4/28/93	2,600	220	7.6	41	27
	7/23/93	4,400	660	26	160	82
	10/5/93	9,200	720	88	140	140
	1/3/94	4,900	830	100	170	150
	4/2/94	6,000	800	30	140	110
	7/5/94	25,000**	ND	ND	ND	ND
	10/6/94	49,000*	1,300	200	280	300
	1/2/95	480	1.6	ND	1.4	ND
	4/3/95	8,100**	65	ND	ND	ND
	7/14/95	ND	1,300	ND	ND	ND
	10/10/95	3,100	1,400	36	50	53
	1/03/96	ND	2,300	110	150	140
	4/10/96	940	38	33	39	47
	7/9/96	**ND**	**2,000**	ND	150	160
MW4	10/19/92	480	0.51	2.1	2.8	6.8
	12/21/92	220*	ND	ND	0.97	0.74
	4/28/93	ND	ND	ND	ND	ND
	7/23/93	85*	ND	ND	ND	ND
	10/5/93	130**	ND	ND	ND	ND
	1/3/94	210	ND	ND	0.76	1.6
	4/2/94	89	ND	ND	ND	ND
	7/5/94	190**	ND	ND	ND	ND
	10/6/94	170	0.85	ND	ND	0.74
	1/2/95	ND	ND	ND	ND	ND
	4/3/95	98**	ND	ND	ND	ND
	7/14/95	ND	ND	ND	ND	ND
	10/10/95	ND	ND	ND	ND	ND
	1/03/96	ND	ND	ND	ND	ND
	4/10/96	ND	ND	ND	ND	ND
	7/9/96	**ND**	**ND**	ND	ND	ND

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
MW5	10/19/92	2,700	61	5.0	100	61
	12/21/92	1,700	51	4.7	83	34
	4/28/93	6,700	200	190	250	430
	7/23/93	2,000	122	8.0	68	47
	10/5/93	1,700	70	6.2	54	40
	1/3/94	1,500	44	ND	42	46
	4/2/94	1,800	46	5.1	38	35
	7/5/94	2,200	97	8.4	37	36
	10/6/94	1,600	79	5.7	28	22
	1/2/95	1,700	50	8.6	30	28
	4/3/95	5,400**	190	240	170	420
	7/14/95	3,800	210	100	130	190
	10/10/95	1,300	92	14	15	39
	1/03/96	630	53	4.4	8.3	13
	4/10/96	500	25	18	7.0	20
	7/9/96	1,000	44	20	10	34
MW6	10/19/92	3,900	420	12	60	28
	12/21/92	2,300	370	11	39	15
	4/28/93	1,200	54	1.5	11	5.3
	7/23/93	580	19	0.99	3.4	2.7
	10/5/93	1,400	34	ND	5.3	7.3
	1/3/94	1,400	57	ND	8.5	11
	4/2/94	5,300*	ND	ND	ND	ND
	7/5/94	ND	ND	ND	ND	ND
	10/6/94	11,000**	ND	ND	ND	ND
	1/2/95	550	18	0.92	2.0	1.8
	4/3/95	6,600**	ND	ND	ND	ND
	7/14/95	ND	ND	ND	ND	ND
	10/10/95	ND	81	ND	ND	ND
	1/03/96	70	9.9	0.58	ND	0.81
	4/10/96	300	25	4.7	0.94	2.7
	7/9/96	1,800	410	ND	12	ND

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
MW7	4/28/93	110	2.8	1.3	1.4	1.7
	7/23/93	790	23	3.3	28	5.4
	10/5/93	360	10	1.2	0.91	0.99
	1/3/94	ND	0.93	ND	0.75	1.9
	4/2/94	360	2.0	ND	ND	0.8
	7/5/94	ND	ND	ND	ND	ND
	10/6/94	340	5.6	0.85	ND	1.2
	1/2/95	ND	ND	ND	ND	ND
	4/3/95	570	24	ND	3.4	5.8
	7/14/95	ND	14	ND	ND	ND
	10/10/95	740	170	ND	ND	ND
	1/03/96ϒ	360	16	1.3	2.7	1.4
	4/10/96	120	4.1	1.5	ND	0.88
	7/9/96	**ND**	**ND**	ND	ND	ND
MW8	4/28/93	450	18	1.8	1.8	1.4
	7/23/93	260	5.1	ND	0.6	ND
	10/5/93	120**	1.7	ND	ND	ND
	1/3/94	ND	ND	ND	ND	ND
	4/2/94	150	1.2	ND	ND	ND
	7/5/94	730	17	ND	1.6	ND
	10/6/94	140**	ND	ND	ND	ND
	1/2/95	440	18	0.72	2.0	1.8
	4/3/95	960	11	ND	ND	ND
	7/14/95	280	4.2	2.6	1.1	3.3
	10/10/95	110	1.3	0.62	0.67	ND
	1/03/96ϒ	63	ND	0.51	ND	1.8
	4/10/96	ND	1.1	0.61	ND	ND
	7/9/96	**72**	**1.0**	ND	ND	ND

ϒ Sequoia Analytical Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 µg/L in the sample collected from this well.

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

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

ND = Non-detectable

-- Indicates analysis was not performed.

Table 3

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	Chloroform	Tetrachloro-ethene	Trichloro-ethene	MTBE
MW1	6/5/91	ND	7.8	2.9	1.3	--
	9/30/91	ND	--	--	--	--
	12/30/91	ND	6.4	2.1	0.9	--
	4/2/92	94	7.1	2.6	1.4	--
	6/30/92	120	9.5	2.2	1.3	--
	9/15/92	ND	12	2.2	1.3	--
	12/21/92	ND	12	1.4	0.83	--
	4/28/93♦	470▲▲	12	0.89	0.85	--
	7/23/93	ND	16	1.3	0.91	--
	10/5/93	57▲	13	1.3	0.66	--
	1/3/94*	ND	18	1.4	0.93	--
	4/2/94	ND	15	1.1	0.68	--
	10/10/95	--	--	--	--	29
	4/10/96	--	--	--	--	50
	7/9/96	--	--	--	--	150
MW2	10/10/95	--	--	--	--	200
	4/10/96	--	--	--	--	620
	7/9/96	--	--	--	--	1,500
MW3	10/10/95	--	--	--	--	190,000
	4/10/96	--	--	--	--	69,000
	7/9/96	--	--	--	--	140,000
MW4	1/3/94	--	9.0	1.0	ND	240
	10/10/95	--	--	--	--	120
	4/10/96	--	--	---	--	240
	7/9/96	--	--	--	--	480
MW5	10/10/95	--	--	--	--	1,100
	4/10/96	--	--	--	--	640
	7/9/96	--	--	--	--	150
MW6	10/10/95	--	--	--	--	75,000
	4/10/96	--	--	--	--	53,000
	7/9/96	--	--	--	--	70,000
MW7	10/10/95	--	--	--	--	13,000
	4/10/96	--	--	--	--	3,200
	7/9/96	--	--	--	--	3,400

Table 3

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	Chloroform	Tetrachloro-ethene	Trichloro-ethene	MTBE
MW8	1/3/94♦	--	1.5	1.2	ND	51
	10/10/95	--	--	--	--	170
	4/10/96	--	--	--	--	60
	7/9/96	--	--	--	--	140

* A fuel fingerprint analysis was conducted on this sample. Sequoia Analytical Laboratory reported that total extractable petroleum hydrocarbons in this sample were not detected in high enough concentrations to compare with known standards and approximate their makeup.

♦ 1,2-dichloroethane was detected in MW8 at a concentration of 4.0 µg/L on 1/03/94, and 1.1 µg/L in MW1 on 4/28/93.

⩚ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.

⩚⩚ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

ND = Non-detectable.

-- Indicates analysis was not performed.

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

Note: - All EPA method 8010 constituents were non-detectable, except as indicated above.

- Laboratory analyses data prior to January 3, 1994, were provided by Kaprealian Engineering, Inc.

Table 4

Summary of Laboratory Analyses
Water

Well #	Date	TOG	Cadmium	Chromium	Lead	Nickel	Zinc
MW1	6/30/92	ND	ND	0.079	0.009	0.1	0.087
MW1	4/2/92	ND	ND	0.015	0.016	ND	0.02
MW1	12/30/91	ND	ND	0.0078	0.0057	ND	0.046
MW1	9/30/91	ND	ND	0.019	ND	ND	0.11
MW1	6/5/91	ND	ND	0.0083	0.011	0.063	0.023

TOG = Total Oil & Grease.

ND = Non-detectable.

Results are in milligrams per liter (mg/L), unless otherwise indicated.

Note: Laboratory analyses data were provided by Kaprealian Engineering, Inc.

Table 5

Summary of Laboratory Analyses
Water

Date	Well #	Heterotrophic Plate Count (CFU/mL)
1/3/96	MW2	>5,700
	MW3	350
	MW4	1,000
	MW5	>5,700
	MW8	>5,700

CFU/mL = Colony Forming Units per milliliter.

Table 6

Summary of Laboratory Analyses
Water

Date	Well #	BOD	Bicarbonate Alkalinity	Calcium	Iron	Manganese	Nitrate	Sulfate
4/10/96	MW1	--	160	21	15	2.6	--	--
	MW2	--	460	58	60	7.0	--	--
	MW3	--	360	40	60	3.7	--	--
	MW4	--	160	25	43	2.0	--	--
	MW5	--	240	22	18	2.4	--	--
	MW6	--	240	35	61	3.7	--	--
	MW7	--	210	44	120	4.8	--	--
	MW8	--	380	37	63	3.6	--	--
1/3/96	MW2	2.2	130	27	77	3.0	0.22	97
	MW3	4.3	430	43	61	5.4	0.23	16
	MW4	ND	120	20	61	3.3	10	44
	MW5	3.4	240	31	80	3.3	ND	17
	MW8	ND	310	37	62	3.3	0.57	20

-- Indicates analysis was not performed.

ND = Non-detectable.

BOD = Biochemical Oxygen Demand

Results are in milligrams per liter (mg/L), unless otherwise indicated.

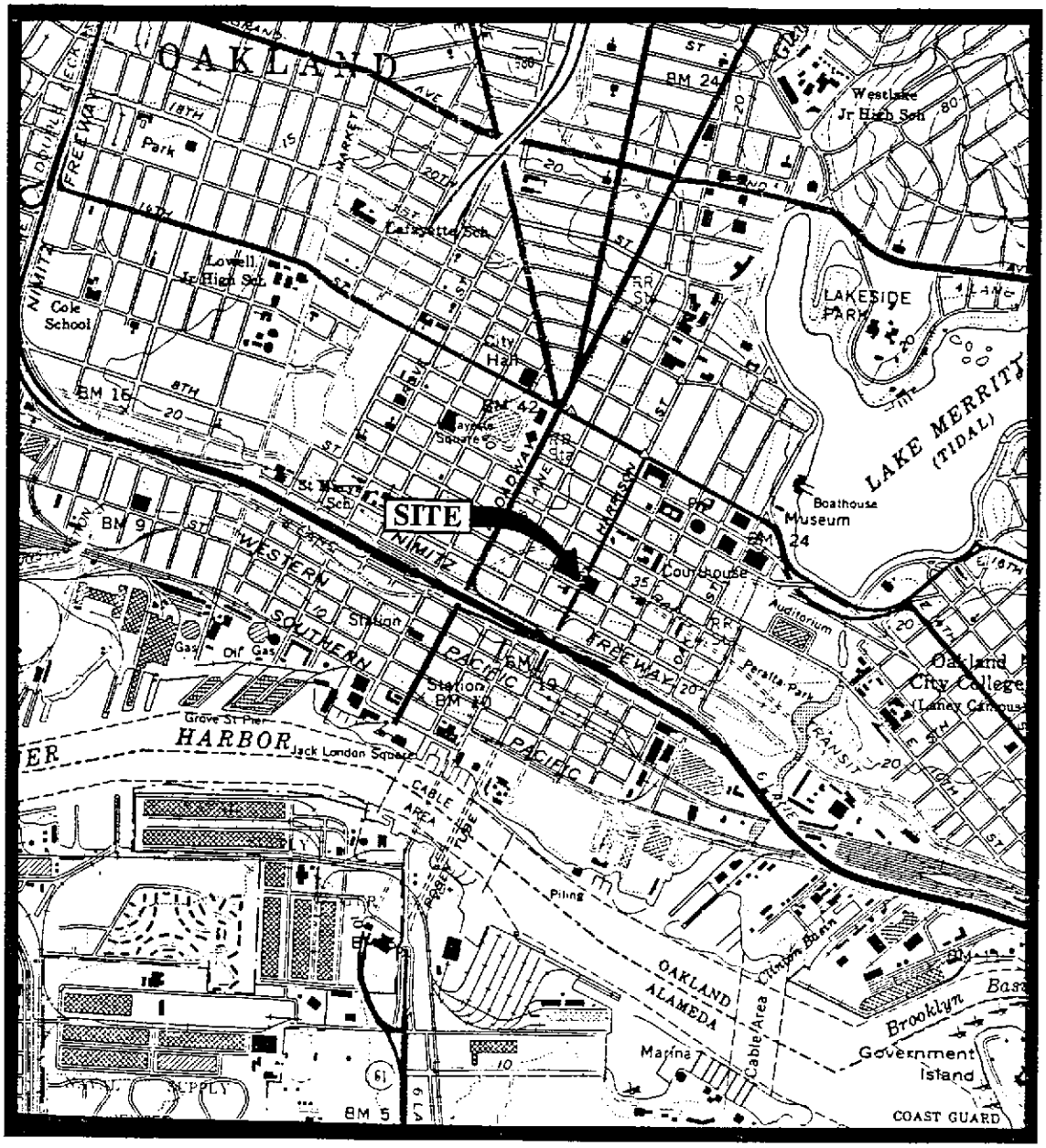
Table 7

Summary of Monitoring Data

Date	Well #	Dissolved Oxygen Concentrations After Purging
7/9/96	MW1	3.13
	MW2	0.71
	MW3	1.04
	MW4	4.91
	MW5	3.25
	MW6	3.62
	MW7	2.34
	MW8	1.32
4/10/96	MW1	3.04
	MW2	5.88
	MW3	4.63
	MW4	5.23
	MW5	3.73
	MW6	4.50
	MW7	5.10
	MW8	4.80
1/3/96	MW2	1.8
	MW3	1.5
	MW4	1.2
	MW5	2.8
	MW8	1.3

Results are in milligrams per liter (mg/L).

Note: Measurements were taken using a LaMotte DO4000 dissolved oxygen meter.



Base modified from 7.5 minute U.S.G.S. Oakland West Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #0752** **800 HARRISON STREET** **OAKLAND, CALIFORNIA**	**LOCATION MAP**

Table 2

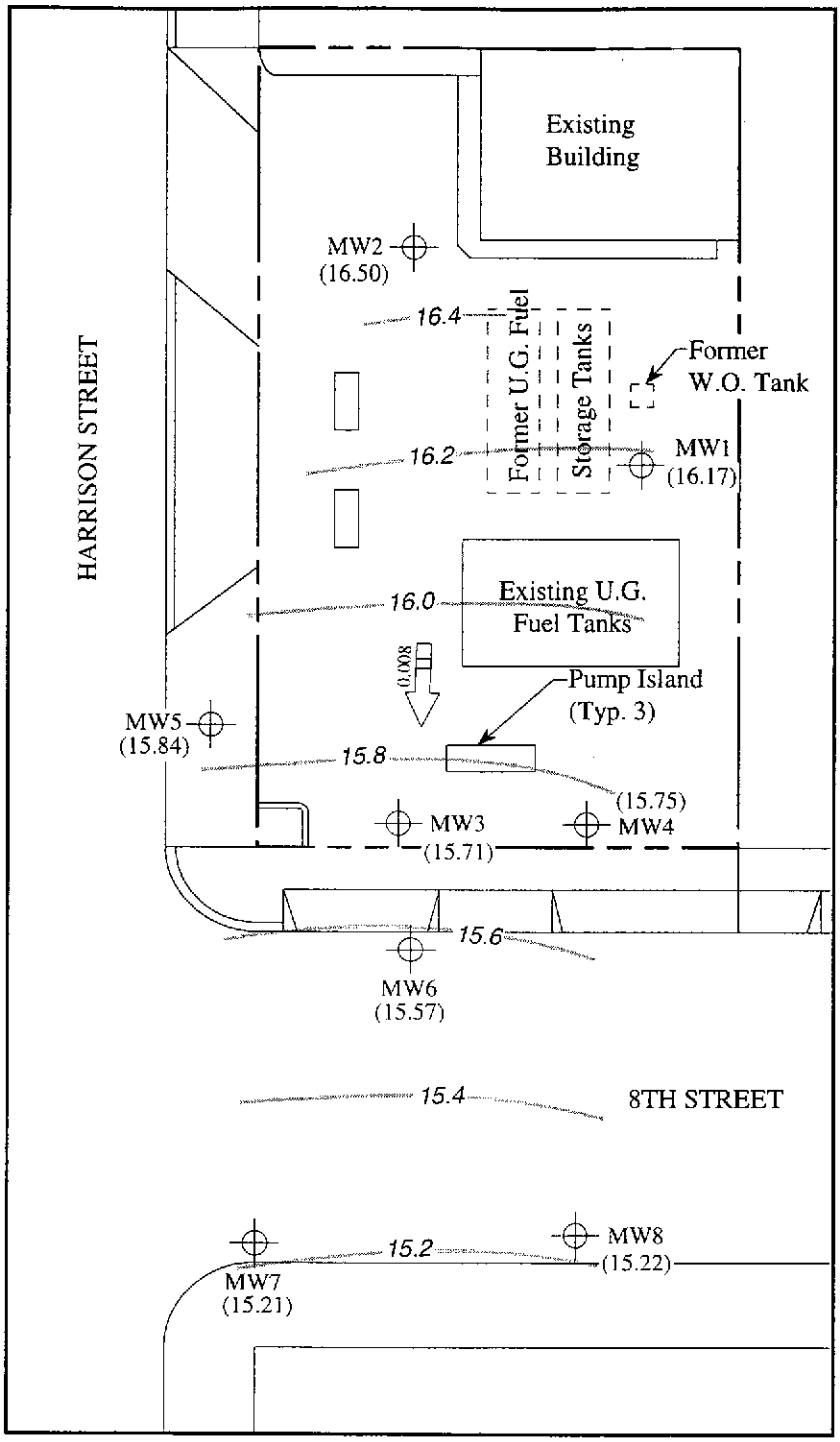
Summary of Laboratory Analyses
Water

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

Note: - The detection limit for results reported as ND by Sequoia Analytical Laboratory is equal to the stated direction limit times the dilution factor indicated on the laboratory analytical sheets.

- Prior to August 1, 1995, the total purgeable petroleum hydrocarbon (TPH as gasoline) quantification range used by Sequoia Analytical Laboratory was C4 - C12. Since August 1, 1995, the quantification range used by Sequoia Analytical Laboratory is C6 - C12.

- Laboratory analyses data prior to January 3, 1994, were provided by Kaprealian Engineering, Inc.



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 30 60

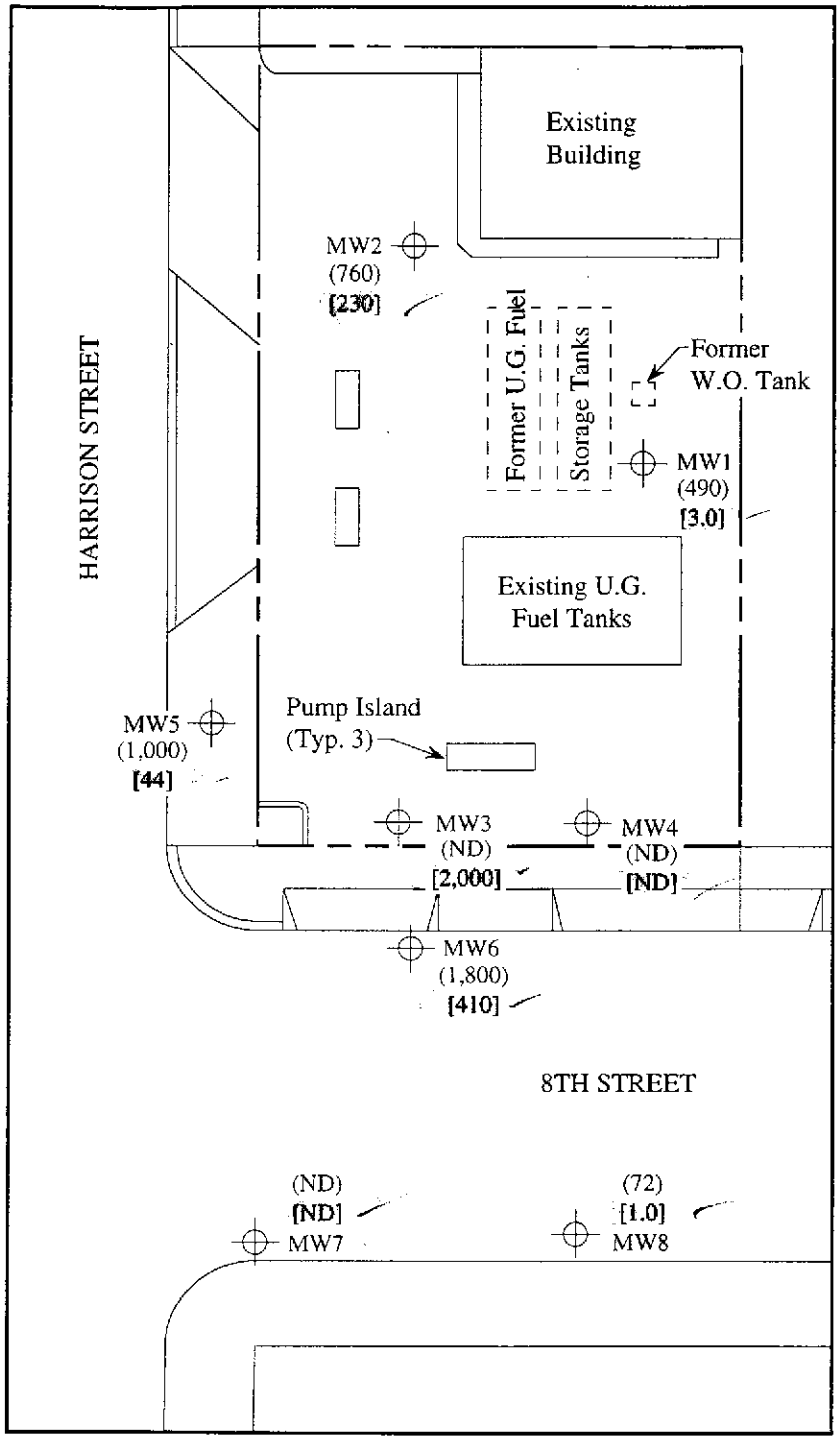
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE JULY 9, 1996 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #0752
800 HARRISON STREET
OAKLAND, CALIFORNIA

FIGURE
1



LEGEND

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

0 30 60

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 9, 1996

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #0752
800 HARRISON STREET
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 #0752, 800 Harrison St., Oakland	Sampled: Jul 9, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Jul 9, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jul 22, 1996
Attention: Jarrel Crider	First Sample #:	607-0719	

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
607-0719	MW-1	490	3.0	1.4	1.3	2.5
607-0720	MW-2	760	230	ND	1.3	2.4
607-0721	MW-3	ND	2,000	ND	150	160
607-0722	MW-4	ND	ND	ND	ND	ND
607-0723	MW-5	1,000	44	20	10	34
607-0724	MW-6	1,800	410	ND	12	ND
607-0725	MW-7	ND	ND	ND	ND	ND
607-0726	MW-8	72	1.0	ND	ND	ND
607-0727	ES-1	ND	ND	ND	ND	ND
607-0728	ES-2	ND	ND	ND	ND	ND
607-0729	ES-3	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

6070719.MPD <1>

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #0752, 800 Harrison St., Oakland	Sampled:	Jul 9, 1996
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Jul 9, 1996
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Jul 22, 1996
Attention: Jarrel Crider	First Sample #:	607-0719		

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
607-0719	MW-1	Gasoline	1.0	7/16/96	HP-11	95
607-0720	MW-2	Gasoline	5.0	7/17/96	HP-2	103
607-0721	MW-3	--	200	7/17/96	HP-2	110
607-0722	MW-4	--	1.0	7/17/96	HP-2	105
607-0723	MW-5	Gasoline	2.0	7/17/96	HP-2	159
607-0724	MW-6	Gasoline	20	7/17/96	HP-2	108
607-0725	MW-7	--	10	7/18/96	HP-11	94
607-0726	MW-8	Gasoline	1.0	7/17/96	HP-2	108
607-0727	ES-1	--	1.0	7/17/96	HP-2	103
607-0728	ES-2	--	1.0	7/17/96	HP-2	105
607-0729	ES-3	--	1.0	7/17/96	HP-2	103

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

6070719.MPD <2>

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #0752, 800 Harrison St., Oakland	Sampled:	Jul 9, 1996
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water	Received:	Jul 9, 1996
Concord, CA 94520	Analysis for:	MTBE (Modified EPA 8020)		
Attention: Jarrel Crider	First Sample #:	607-0719	Analyzed:	Jul 16-18, 1996
			Reported:	Jul 22, 1996

LABORATORY ANALYSIS FOR: MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
607-0719	MW-1	40	150
607-0720	MW-2	40	1,500
607-0721	MW-3	1,200	140,000
607-0722	MW-4	40	480
607-0723	MW-5	40	150
607-0724	MW-6	1,200	76,000
607-0725	MW-7	40	3,400
607-0726	MW-8	40	140

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

Sequoia Analytical

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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #0752, 800 Harrison St., Oakland
Matrix: Liquid
QC Sample Group: 6070719-729

Reported: Jul 22, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	6070504	6070504	6070504	6070504
Date Prepared:	7/16/96	7/16/96	7/16/96	7/16/96
Date Analyzed:	7/16/96	7/16/96	7/16/96	7/16/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	110	95	110	103
Matrix Spike Duplicate % Recovery:	105	90	100	97
Relative % Difference:	4.7	5.4	9.5	6.7
LCS Batch#:	11LCS071696	11LCS071696	11LCS071696	11LCS071696
Date Prepared:	7/16/96	7/16/96	7/16/96	7/16/96
Date Analyzed:	7/16/96	7/16/96	7/16/96	7/16/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
LCS % Recovery:	105	90	100	98
% Recovery Control Limits:	60-140	60-140	60-140	60-140

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. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #0752, 800 Harrison St., Oakland
Matrix: Liquid
QC Sample Group: 6070719-729
Reported: Jul 24, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD Batch#:	6070590	6070590	6070590	6070590
Date Prepared:	7/17/96	7/17/96	7/17/96	7/17/96
Date Analyzed:	7/17/96	7/17/96	7/17/96	7/17/96
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:	114	115	120	117
Matrix Spike Duplicate % Recovery:	124	120	130	122
Relative % Difference:	8.4	4.3	8.0	4.2
LCS Batch#:	2LCS071796	2LCS071796	2LCS071796	2LCS071796
Date Prepared:	7/17/96	7/17/96	7/17/96	7/17/96
Date Analyzed:	7/17/96	7/17/96	7/17/96	7/17/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	115	110	115	117
% Recovery Control Limits:	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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MPDS Services
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Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #0752, 800 Harrison St., Oakland
Matrix: Liquid
QC Sample Group: 6070719-729

Reported: Jul 24, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD Batch#:	6070964	6070964	6070964	6070964
Date Prepared:	7/18/96	7/18/96	7/18/96	7/18/96
Date Analyzed:	7/18/96	7/18/96	7/18/96	7/18/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	85	95	93
Matrix Spike Duplicate % Recovery:	115	100	110	103
Relative % Difference:	14	16	15	10
LCS Batch#:	11LCS071896	11LCS071896	11LCS071896	11LCS071896
Date Prepared:	7/18/96	7/18/96	7/18/96	7/18/96
Date Analyzed:	7/18/96	7/18/96	7/18/96	7/18/96
Instrument I.D.#:	HP-11	HP-11	HP-11	HP-11
LCS % Recovery:	120	105	115	113
% Recovery Control Limits:	60-140	60-140	60-140	60-140

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
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

9607139

CHAIN OF CUSTODY

SAMPLER: NICHOLAS PERROW
WITNESSING AGENCY:
UNOCAL S/S # 0752 CITY: OAKLAND
ADDRESS: 800 HARRISON ST.

ANALYSES REQUESTED: TPH-GAS BTEX; TPH-DIESEL; TOG; 8010; MTBE

TURN AROUND TIME: REG

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010	MTBE		REMARKS
MW-1	7/9/96	9:45	✓	✓		4 VOAs	WELL	✓				✓	6070719A-D	
MW-2	"	11:35	✓	✓		"	"	✓				✓	6070720	
MW-3	"	11:05	✓	✓		"	"	✓				✓	6070721	
MW-4	"	8:15	✓	✓		"	"	✓				✓	6070722	
MW-5	"	10:40	✓	✓		"	"	✓				✓	6070723	
MW-6	"	10:15	✓	✓		"	"	✓				✓	6070724	
MW-7	"	9:10	✓	✓		"	"	✓				✓	6070725	
MW-8	"	8:45	✓	✓		"	"	✓				✓	6070726	

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE)	7/9/96 12:45	(SIGNATURE) 7/9/96 12:45
(SIGNATURE)	7-10 1300	(SIGNATURE)
(SIGNATURE)	7-10 1430	(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? Y
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Y
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? N
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Y

SIGNATURE: TITLE: Analyst DATE: 7/9/96

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

9607139

SAMPLER: NICHOLAS PERROW

WITNESSING AGENCY:

UNOCAL S/S # 0752 CITY: OAKLAND

ADDRESS: 800 HARRISON ST.

ANALYSES REQUESTED

TURN AROUND TIME: REG.

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
FS-1	7/9/96		✓			1VOA		✓	6070727							
FS-2	"		✓			"		✓	6070728							
FS-3	"		✓			"		✓	6070729							

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE)	7/9/96 12:45	(SIGNATURE) 7/9/96 1245
(SIGNATURE)	1300 7-10	(SIGNATURE)
(SIGNATURE)	7-10 1430	(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? Y
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Y
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? Y in ES-2
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Y

SIGNATURE: TITLE: Analyst DATE: 7/9/96