

MPDS-UN6277-10 July 26, 1996

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

Attention: Mr. David J. Camille

RE: Quarterly Data Report

Unocal Service Station #6277

15803 E. 14th Street
San Leandro, California

Dear Mr. Camille:

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 July 1, 1996. Prior to sampling, the wells were each purged of between 9 and 10 gallons of water. The 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. Equipment blank, Trip 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 and 3. 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.

MPDS-UN6277-10 July 26, 1996 Page 2

#### **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 Mr. Scott Seery 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.

JOEL G. GREGER
No. EG 1633
CERTIFIED
ENGINEERING
GEOLOGIST

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, 2 & 3

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

	Ground Water	Depth to	Total Well	Product		Water
Well #	Elevation (feet)	Water (feet)+	Depth (feet)•	Thickness (feet)	Sheen	Purged (gallons)
<u></u>			and Sampled on	<u> </u>	<u>и под под под под под под под под под под</u>	
MW1	22.36	10.14	24.40	0	No	10
MW2A	22.46	11.07	25.20	0	No	10
MW3	22.70	9.52	23.38	o	No	9.5
MW4	22. <b>4</b> 4	9.32	22.75	ő	No	9.5
MW5	22.45	6.84	20.51	ő	No	9.5
MW6	22.53	6.31	19.21	0	No	9
		(Monitored a	and Sampled on	April 8, 1996)		
MW1	22.35	10.15	24.46	0	No	10
MW2A	22,45	11.08	25.23	0	No	10
MW3	22.65	9.57	23.45	ō	No	10
MW4	22.46	9.30	22.85	0	No	10
MW5	22.39	6.90	20.53	0	No	10
MW6	22.48	6.36	19.25	0	No	9
	(	Monitored an	d Sampled on Ja	anuary 10, 1996)		
MW1	22.30	10.20	24.80	0	No	10
MW2A	22.38	11.15	25.35	0	No	10
MW3	22.60	9.62	23.43	0	No	10
MW4	22.48	9.28	22.52	0	No	9
MW5	22.32	6.97	20.95	0	No	9.5
MW6	22.33	6.51	19.62	0	No	9
		(Monitored a	and Sampled on	July 14, 1995)		
MW1	22.26	10.24	24.44	0	No	10
MW2A	22.36	11,17	25.21	ō	No	10
MW3	22.54	9.68	23.43	ō	No	9.5
MW4	22.37	9.39	22.80	0	No	9.5
MW5	22.32	6.97	20.53	ō	No	9.5
MW6	22.38	6.46	19.24	0	No	9

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Table 1
Summary of Monitoring Data

	Well Casing
Well#	Elevation (feet)*
MW1	32.50
MW2A	33.53
MW3	32.22
MW4	31.76
MW5	29.29
MW6	28.84

- ♦ 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), based on a Benchmark located on the west side of East 14th Street, approximately 75 feet north of 155th Avenue (elevation = 31.65 feet MSL).

Table 2
Summary of Laboratory Analyses
Water

Well#	Date	TPH as Gasoline	Венгене	Toluene	Ethyl Benzene	Xylenes	MTBE
	<b>7</b> /1/07						
MW1	7/1/96	ND	ND	ND	ND	ND	230
	4/8/96	2,100	43	27	7.4	21	480
	1/10/96	220	35	ND	2.0	7.6	†
	7/14/95	410	77	ND	7.4	30	
	4/4/95	410♦	19	ND	ND	ND	77
	1/5/95	780	30	ND	ND	9.1	
	10/6/94	970	19	ND	ND	13	
	7/7/94	2,100 ♦ ♦	250	ND	57	200	
	4/4/94	1,100	15	ND	ND	7.4	
	1/6/94	260	21	ND	2.5	14	
	10/6/93	1,200♦	36	ND	ND	23	
	7/1/93	510	100	0.79	5.7	52	
	4/2/93	690	94	0.73	5.3	39	
	1/29/93	740 ♦ ♦	69	ND	3.8	43	
	10/20/92	720	110	1.4	18	110	
	7/20/92	630	100	2.8	6.3	52	
	4/23/92	530	100	7.9	4.6	60	
	1/13/92	450	240	4.6	8.6	73	
	9/10/91	280	38	3.1	4.1	22	
	6/10/91	310	1.5	ND	ND	0.31	
	3/15/91	110	21	ND	ND	8.4	
	12/14/90	450	150	6.8	0.28	49	
	9/19/90	140	ND	ND	ND	3.5	
	6/25/90	310	10	0.89	0.37	2.1	
	3/29/90	320	12	1.6	0.31	3.5	
	12/12/89	340	100	13	3.4	44	
	9/13/89	550	32	17	3.4	52	
	6/6/89	590	ND	ND	ND	ND	
MW2A	7/1/96	170	2.4	ND	0.65	2.0	ND
	4/8/96	ND	ND	ND	ND	ND	ND
	1/10/96	89	1.2	ND	ND	0.58	
	7/14/95	60	3.0	ND	1.3	2.4	
	4/4/95	67♦	1.0	ND	ND	ND	
	1/5/95	140♦	1.4	ND	ND	ND	
	10/6/94	71	6.4	ND	2.1	2.4	
	7/7/94	90	5.2	ND	1.5	2.2	
	4/4/94	80	8.0	ND	1.4	1.5	
	1/6/94	110	2.6	ND	1.6	1.7	
	10/6/93	110♦	12	ND	7.4	1.4	
	7/1/93	74 ♦	0.75	ND	ND	ND	
	4/2/93	120	7.2	ND	5.8	1.2	

Table 2
Summary of Laboratory Analyses
Water

		TPH as			Ethyl-		
Well#	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
MW2A (Cont)	10/20/92	96	2.8	ND	1.8	1.6	
	7/20/92	99	8.6	ND	2.4	0.95	
	4/23/92	190	15	ND	15	2.0	
	1/13/92	160	11	2.0	10	5.9	
	9/10/91	180	8.7	0.93	15	13	
	6/10/91	54	1.2	ND	ND	0.69	
	3/15/91	160	2.5	ND	ND	51	
MW2	12/12/89	660	220	6.6	13	36	
	9/13/89	170	2.0	0.38	ND	9.5	
	6/6/89	77	ND	ND	ND	ND	
MW3	7/1/96	ND	ND	ND	ND	ND	ND
	4/8/96	ND	ND	ND	ND	ND	ND
	1/10/96	100♦	ND	ND	ND	ND	
	7/14/95	130♦	ND	ND	1.3	4.2	
	4/4/95	100♦	0.62	ND	ND	ND	
	1/5/95	140♦	ND	ND	ND	ND	
	10/6/94	93♦	ND	ND	ND	ND	
	7/7/94	190♦	ND	ND	ND	ND	
	4/4/94	170◆	ND	ND	ND	ND	
	1/6/94	140◆	ND	ND	ND	ND	
	10/6/93	140◆	ND	ND	ND	ND	
	7/1/93	120♦	ND	ND	ND	ND	
	4/2/93	130♦	ND	ND	ND	ND	
	1/29/93	130◆	0.84	ND	ND	ND	
	10/20/92	180◆	ND	ND	ND	ND	
	7/20/92	120◆	ND	ND	ND	ND	
	4/23/92	150◆	1.6	ND	ND	ND	
	1/13/92	120♦	ND	ND	ND	ND	
	9/10/91	170	ND	ND	ND	ND	
	6/10/91	160	0.65	ND	ND	ND	
	3/15/91	150	ND	ND	ND	0.45	
	12/14/90	150	ND	ND	ND	ND	
	9/19/90	74	0.74	ND	ND	ND	
	6/25/90	190	1.5	0.68	ND	5.3	
	3/29/90	85	ND	ND	ND	ND	
	12/12/89	120	6.7	0.64	0.46	1.5	
	9/13/89	76	ND	ND	ND	ND	
	6/6/89	32	ND	ND	ND	ND	

Table 2
Summary of Laboratory Analyses
Water

Weil #	Date	TPH as Gasoline	Benzene	Tolluene	Ethyl- Benzene	Xylenes	МТВЕ
MW4	7/1/96	ND	ND	ND	ND	ND	ND
	4/8/96	ND	ND	ND	ND	ND	ND
	1/10/96	100♦	ND	ND	ND	1.8	
	7/14/95	89♦	ND	ND	0.97	0.52	
	4/4/95	82♦	ND	ND	ND	ND	
	1/5/95	150♦	ND	ND	ND	ND	
	10/6/94	78♦	ND	ND	ND	ND	
	7/7/94	150♦	ND	ND	ND	ND	
	4/4/94	120	0.76	0.76	ND	0.98	
	1/6/94	100♦	ND	ND	ND	ND	
	10/6/93	130♦	ND	ND	ND	ND	
	7/1/93	91♦	ND	ND	ND	ND	
	4/2/93	110♦	ND	ND	ND	ND	
	1/29/93	130♦	0.95	ND	ND	ND	
	10/20/92	110♦	ND	ND	ND	ND	
	7/20/92	80♦	ND	ND	ND	ND	
	4/23/92	120♦	ND	ND	ND	ND	
	1/13/92	58♦	ND	ND	ND	ND	
	9/10/91	56	ND	ND	ND	ND	
	6/10/91	64	ND	ND	ND	ND	
	3/15/91	53	ND	ND	ND	ND	
	12/14/90	54	ND	ND	ND	ND	
	9/19/90	61	ND	ND	ND	ND	
	6/25/90	66	ND	ND	ND	ND	
	3/29/90	120	0.39	ND	ND	ND	
	12/12/89	97	4.6	ND	ND	ND	
	9/13/89	77	ND	ND	ND	ND	
	6/6/89	37	ND	ND	ND	ND	
MW5	7/1/96	ND	ND	ND	ND	ND	ND
	4/8/96	ND	ND	ND	ND	ND	ND
	1/10/96	50♦	ND	ND	ND	ND	
	7/14/95	ND	ND	0.91	ND	1.1	
	4/4/95	ND	ND	ND	ND	ND	
	1/5/95	ND	ND	ND	ND	ND	
	10/6/94	ND	ND	ND	ND	ND	
	7/7/94	72♦	ND	ND	ND	ND	
	4/4/94	65♦	ND	ND	ND	ND	
	1/6/94	62♦	ND	ND	ND	ND	
	10/6/93	60♦	ND	ND	ND	ND	
	7/1/93	54♦	ND	ND	ND	ND	
	4/2/93	65♦	ND	ND	ND	ND	

Table 2
Summary of Laboratory Analyses
Water

Well#	Date	TPH as Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes	MTBE
MW6	7/1/96	ND	ND	ND	ND	ND	ND
,,, ,, , , , , , , , , , , , , , , , ,	4/8/96	ND	ND	ND	ND	ND	ND
	1/10/96	53♦	ND	ND	ND	ND	
	7/14/95	ND	ND	ND	ND	ND	
	4/4/95	ND	ND	ND	ND	ND	
	1/5/95	ND	ND	ND	ND	ND	
	10/6/94	ND	ND	ND	ND	ND	
	7/7/94	ND	ND	ND	ND	ND	
	4/4/94	57♦	ND	ND	ND	ND	
	1/6/94	53♦	ND	ND	ND	ND	
	10/6/93	ND	ND	ND	ND	ND	
	7/1/93	ND	ND	ND	ND	ND	
	4/2/93	ND	ND	ND	ND	ND	

- † Sequoia Analytical Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40  $\mu$ g/L in the sample collected from this well.
- 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 a gasoline and non-gasoline mixture.

MTBE = methyl tert butyl ether.

ND = Non-detectable.

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 detection 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 6, 1994, were provided by Kaprealian Engineering, Inc.

**Table 3**Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	Tetra- chloroëthene	Trichloro- ethene	1.2- Dichloro- ethane	Cis-1,2- dichloro- ethene	Total Oil & Grease (mg/L)
MW1	4/04/94*		390	38	ND	17	
	4/2/93	ND					
	1/29/93	ND	300	ND	ND	ND	
	10/20/92	ND	230	22	ND	16	
	7/20/92	62♦	200	7.4	ND	ND	
MW2	4/2/93	ND	**				
	12/12/89	1,700	30	9.0	ND	ND	1.2
	9/13/89	ND	18	6.1	4.2	1.2	ND
	6/6/89	ND	110	4.4	2.8	ND	ND
MW2A	9/10/93	65					
	1/29/93	ND	140	10	ND	ND	
	10/20/92	ND	64	11	ND	ND	
	7/20/92	ND	35	7.2	ND	4.8	ND
	4/23/92	ND	17	5.6	ND	1.9	ND
	1/13/92**	ND	33	ND	ND	2.1	ND
	6/10/91	100	150	10	ND	ND	ND
	3/15/91	ND	67	8.2	ND	2.6	ND
MW3	1/10/96		950	ND	ND	ND	**
	1/5/95		1,100	18	ND	6.2	
	1/6/94		960	ND	ND	ND	
	4/2/93	ND					
	1/29/93	ND	980	ND	ND	ND	
	10/20/92	ND	1,100	20	ND	ND	
	7/20/92	ND	1,400	25	ND	ND	
MW4	1/29/93	ND	950	ND	ND	ND	
=	7/20/92	ND	440	11	ND	ND	
	4/2/93	ND					
	10/20/92	ND	360	17	ND	ND	
MW5	4/2/93	ND	190	ND	ND	ND	
MW6	4/2/93	ND	71	ND	ND	ND	

# Table 3 Summary of Laboratory Analyses Water

- \* All EPA method 8240 constituents were non-detectable, except for concentrations of benzene at 29  $\mu$ g/L, ethylbenzene at 3.4  $\mu$ g/L, total xylenes at 19  $\mu$ g/L, and trans-1,2-dichloroethene at 2.4  $\mu$ g/L.
- \*\* 1,1,2-trichloroethane was detected at a concentration of 9.9 μg/L.
- Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear be diesel.

ND = Non-detectable.

-- Indicates analysis was not performed.

mg/L = milligrams per liter.

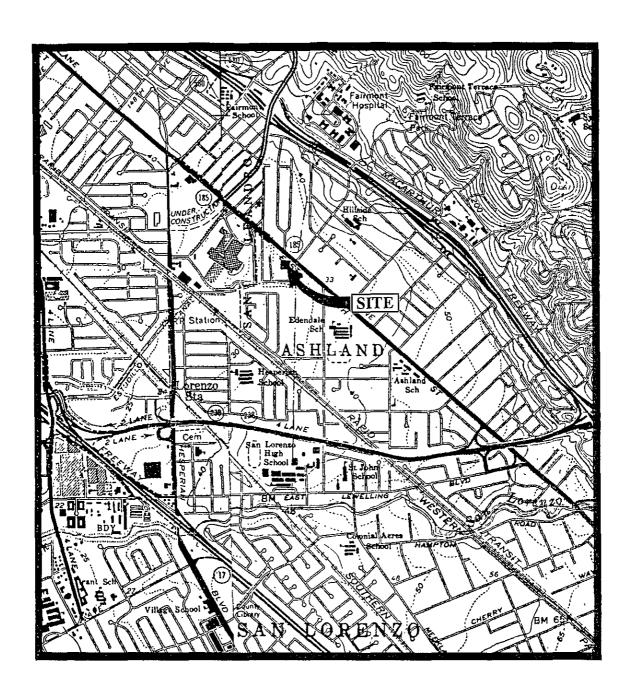
Results are in micrograms per liter (µg/L), unless otherwise indicated.

Note:

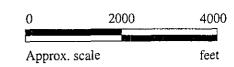
All EPA method 8010 constituents were non-detectable in all of the ground water samples, except as indicated.

Laboratory analyses data prior to January 6, 1994, were provided by Kaprealian Engineering, Inc.



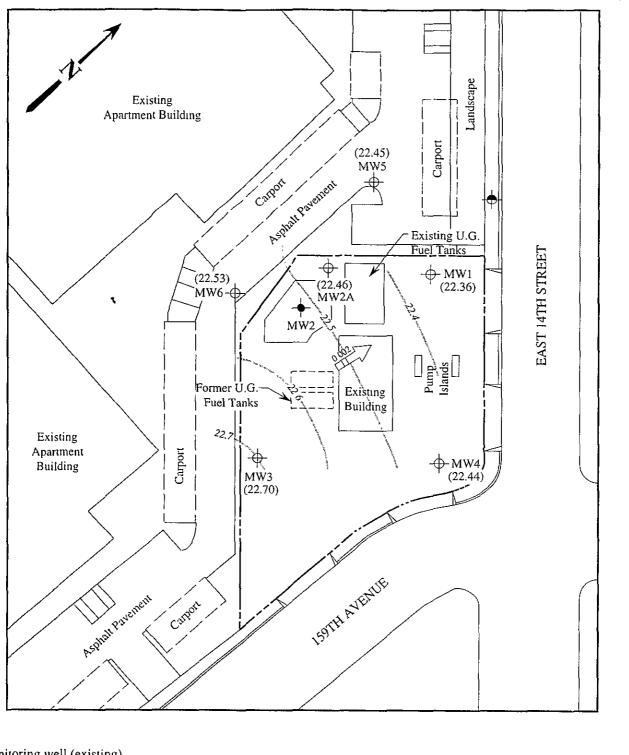


Base modified from 7.5 minute U.S.G.S. Hayward and San Leandro Quadrangles (both photorevised 1980)





UNOCAL SERVICE STATION #6277 15803 E. 14TH STREET SAN LEANDRO, CALIFORNIA LOCATION MAP



#### **LEGEND**

- Monitoring well (previously attempted)
- -- Monitoring well (destroyed February 1, 1990)
  - ) Ground water elevation in feet above Mean Sea Level
  - > Direction of ground water flow with approximate hydraulic gradient
  - Contours of ground water elevation

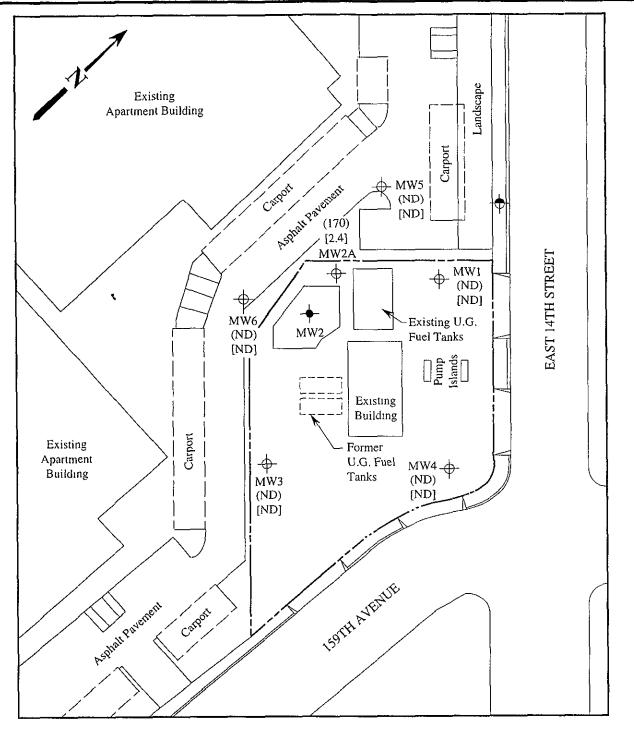


#### POTENTIOMETRIC SURFACE MAP FOR THE JULY 1, 1996 MONITORING EVENT



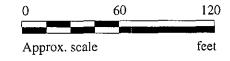
UNOCAL SERVICE STATION #6277 15803 E. 14TH STREET SAN LEANDRO, CALIFORNIA

FIGURE



### **LEGEND**

- + Monitoring well (existing)
- Monitoring well (previously attempted)
- ( ) Concentration of TPH as gasoline in  $\mu$ g/L
- [ ] Concentration of benzene in µg/L
- ND Non-detectable



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 1, 1996



UNOCAL SERVICE STATION #6277 15803 E. 14TH STREET SAN LEANDRO, CALIFORNIA FIGURE



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Client Project ID: Matrix Descript:

直接支持部份 经分摊帐 人名马尔托 Unocal #6277, 15803 E 14th, San Leandro Water

Sampled: Jul 1, 1996 Jul 1, 1996

Attention: Jarrel Crider

Analysis Method:

EPA 5030/8015 Mod./8020

Received: Reported:

Jul 18, 1996

First Sample #: 607-0326 2000 — Али 1970 — 1970 — 1970 — 1970 — 1970 — 1970 жылы түрүү күрүүү бүрүү бүрүү бүрүү бүрүү бүрүү бүрүү бүрүү

#### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons μg/L	<b>Benzene</b> μg/L	<b>Toluene</b> μg/L	Ethyl Benzene μg/L	Total Xylenes μg/L
607-0326	MW-1	ND	ND	ND	ND	ND
607-0327	MW-2A	170	2.4	ND	0.65	2.0
607-0328	MW-3	ND	ND	ND	ND	ND
607-0329	MW-4	ND	ND	ND	ND	ND
607-0330	MW-5	ND	ND	ND	ND	ND
607-0331	MW-6	ND	ND	ND	ND	ND
607-0332	ES-1	ND	ND	0.54	ND	ND
607-0333	ES-2	ND	ND	ND	ND	ND
607-0334	ES-3	ND	ND	0.69	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50	
			0.00	0.00	0.00	1

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 & #1894

Signature on File

Alan B. Kemp Project Manager



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

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

Matrix Descript: Analysis Method:

MPDS Services Client Project ID: Unocal #6277, 15803 E 14th, San Leandro Sampled: Jul 1, 1996

Received:

Jul 1, 1996

First Sample #: างวิทา (โดย โดย ) ค.ศ. พระทางการค่า สามารถใช้เคย เป็นเดิด เป็นสามารถสามารถสามารถสามารถสามารถสามารถสามารถสามารถ

EPA 5030/8015 Mod./8020 607-0326

Reported:

Jul 18, 1996

#### 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
607-0326	MW-i		100	7/14/96	HP-2	120
607-0327	MW-2A	Gasoline	1.0	7/14/96	HP-2	129
607-0328	мw-з		1.0	7/14/96	HP-2	128
607-0329	MW-4		1.0	7/14/96	HP-2	129
607-0330	MW-5		1.0	7/14/96	HP-2	124
607-0331	MW-6		1.0	7/14/96	HP-2	125
607-0332	ES-1		1.0	7/15/96	HP-4	101
607-0333	ES-2		1.0	7/15/96	HP-4	100
607-0334	ES-3		1.0	7/15/96	HP-4	100

**SEQUOIA ANALYTICAL, #1271** & #1894

Signature on File

Alan B. Kemp Project Manager



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Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

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

Client Project ID: Sample Descript: Water Analysis for:

Unocal #6277, 15803 E 14th, San Leandro

Received:

Sampled: Jul 1, 1996 Jul 1, 1996

First Sample #:

MTBE (Modified EPA 8020) 607-0326

and the state of the state of the committee experience of the particles of

Analyzed: Reported:

Jul 14, 1996 Jul 18, 1996

#### LABORATORY ANALYSIS FOR:

#### MTBE (Modified EPA 8020)

Sample Number	Sample Description	Detection Limit μg/L	Sample Result µg/L
607-0326	MW-1	50	230
607-0327	MW-2A	40	N.D.
607-0328	MW-3	40	N.D.
607-0329	MW-4	40	N.D.
607-0330	MW-5	40	N.D.
607-0331	MW-6	40	N.D.

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

**SEQUOIA ANALYTICAL, #1894** 

Signature on File

Alan B. Kemp Project Manager



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Attention: Jarrel Crider

Client Project ID: Matrix:

Unocal #6277, 15803 E 14th, San Leandro

Liquid

QC Sample Group: 6070326-334

Reported:

Jul 18, 1996

#### **QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl	Xylenes
			Benzene	
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	S. Chullakorn	S. Chullakorn	S. Chullakorn	S. Chullakorn
MS/MSD				
Batch#:	6070061	6040004	0070004	007001
Daten#.	0070001	6070061	6070061	6070061
Date Prepared:	7/15/96	7/15/96	7/15/96	7/15/96
Date Analyzed:	7/15/96	7/15/96	7/15/96	7/15/96
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:	95	95	90	93
•				
Matrix Spike				
Duplicate %				
Recovery:	90	95	90	93
Relative %				
Difference:	5.4	0.0	0.0	0.0

LCS Batch#:	4LCS071596	4LCS071596	4LCS071596	4LCS071596		
Date Prepared: Date Analyzed: Instrument I.D.#:	7/15/96 7/15/96 HP-4	7/15/96 7/15/96 HP-4	7/15/96 7/15/96 HP-4	7/15/96 7/15/96 HP-4		
LCS % Recovery:	85	90	85	87		
% 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.



680 Chesapeake Drive 404 N. Wiget Lane

Redwood City, CA 94063 (415) 364-9600 Walnut Creek, CA 94598 819 Striker Avenue, Suite 8 Sacramento, CA 95834

(510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Attention: Jarrel Crider

Client Project ID: Unocal #6277, 15803 E 14th, San Leandro

Matrix: Liquid

QC Sample Group: 6070326-334 The property of the property of the second property of the property of the second of t

Reported:

Jul 18, 1996

#### QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes
			Benzene	
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	Z.T.	Z.T.	Z.T.	Z.T.
MS/MSD				
Batch#:	MS071496	MS071496	MS071496	MS071496
Date Prepared:	7/14/96	7/14/96	7/14/96	7/14/96
Date Analyzed:	7/14/96	7/14/96	7/14/96	7/14/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	10 μg/L	10 μg/L	10 μg/L	30 μg/L
Matrix Spike				
% Recovery:	113	116	129	129
Matrix Spike				
Duplicate %				
Recovery:	105	112	134	126
Relative %				
Difference:	6.8	3.5	3.9	2. <b>4</b>
				=: :

LCS Batch#:	LCS071496	LCS071496	LCS071496	LCS071496	
Date Prepared:	7/14/96	7/14/96	7/14/96	7/14/96	
Date Analyzed:	7/14/96	7/14/96	7/14/96	7/14/96	
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	
LCS %					
Recovery:	98	103	112	118	
% Recovery					 
Control Limits:	60-140	60-140	60-140	60-140	

## **SEQUOIA ANALYTICAL, #1894**

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.

# M P D S Services, Inc.

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

9607046

### CHAIN OF CUSTODY

SAMPLER NICHOLAS PERROW				UNOCAL SIS # 6277 CITY: SAN CEANDRO						<del></del>	TURN AROUND TIME:					
WITNESSING AGENCY			ADDRESS: 15803 E. 14TH					TPH-GAS BTEX	TPH-DIESEL		0	BF	-			REG.
SAMPLE ID NO	DATE	TIME	WATER	GRAß	СОМР	NO OF CONT	SAMPLING LOCATION	TPH BTE	тен-	100	8010	SLLY,		l 	· .	REMARKS
MW-1	7/1/96	12:40	V	/		4VOAS	WEU	~						6070	326	AD
MW-2A	4	10:20		ب		4	Lj	~	_						327	f
MW-2A MW-3 MW-4 NW-5	Ч	10:45	/	ー		"	i <sub>t</sub>							6070	328	
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MN-6	L <sub>I</sub>	10:10		<u> </u>		11	//						- `(	5070	331	<b>↓</b>
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					THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:  1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?											
7/1196 13:25			25		ISEMPTONE )			MPLES RE	Yes							
MATURE TO SIGNATURE SIGNATURE					12		3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?						· · · · · · · · · · · · · · · · · · ·			
		)	72	17		SIGNATURE (S		4. WERE S		APPROPRI	ATE CONT	ainers an	D PROPER	LY PACKA		1-2)
iGNATURÉ)						SIGNATURE)		SIGNATU	RE:	Tis	X	TIT		clyst	DA	TE: 07/41/91

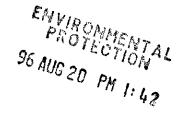
# M P D S Services, Inc.

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

CHAIN OF CUSTODY

NICHOLAS PERROW  UNOCAL S/S # 62-77 CITY: SAN CEANPRO										ANALYSES REQUESTED							
NICH	IOLAS PERRI	ow	S/S #	627	7_ CITY: >>	ļ			TURN AROUND TIME:								
WITNESSING AGENCY			ADDRESS: 15803 E. 14T4					TPH-DIESEL					1		PEG-		
SAMPLE ID NO.	DATE	TIME	WATER	GRAB COM	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-I	TOG	8010					REG- REMARKS		
ES-1	7/1/96		_		(UOA	いしん	/	, 1	6070	332							
ES-2	1,				1,	1,			6070	)333							
ES-3	<b>L</b>		_		6)	`			6070	)334							
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RELINQUISHED BY: DATE/TIME RECEIVED BY:						THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:  1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?											
SIGNATURE)			7/1/9	6 25	ISIGNATURE			2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED?									
Leco		7/2/92 ISIGNATUREI			3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?												
SIGNATURE)	10	7	27	1730	E		4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED?							\			
SIGNATURE) (SIGNATURE)							SIGNATU	IRE!	tw	<u>U</u>	TITLI	#n	dyst	DA	TE: 07/96		





August 16, 1996

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

Attn: Mr. Scott Seery

RE: Unocal Service Station #6277

15803 E. 14th Street San Leandro, California

Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Mr. David J. Camille, enclosed please find our report (MPDS-UN6277-10) dated July 26, 1996 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) 277-2335.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/dr

Enclosure

cc: Mr. David J. Camille