

MONITORING
PURGING
DISPOSING
SAMPLING

MPDS

SERVICES, INCORPORATED

RECEIVED
55 FEB 14 PM 1:55

MPDS-UN6277-08
February 5, 1996

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

STD
2422

Attention: Mr. David J. Camille

RE: Semi-Annual 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 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. 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 semi-annual period is shown on the attached Figure 1.

Ground water samples were collected on January 10, 1996. Prior to sampling, the wells were each purged of between 9 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. Equipment blank, Field blank and Trip 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 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 Mr. Scott Seery of the Alameda County Health Care Services Agency.

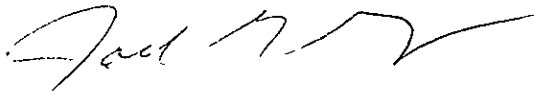
If you have any questions regarding this report, please do not hesitate to call Mr. Joel G. Greger at (510) 602-5120.

Sincerely,

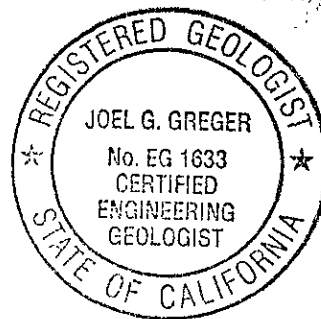
MPDS Services, Inc.



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

cc: Mr. Robert H. Kezerian, Kaprealian Engineering, Inc.

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

<u>Well #</u>	<u>Well Casing Elevation (feet)*</u>
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

<u>Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
MW1	1/10/96▼	220	35	ND	2.0	7.6
	7/14/95	410	77	ND	7.4	30
	4/04/95	410◆	19	ND	ND	ND
	1/05/95	780	30	ND	ND	9.1
	10/06/94	970	19	ND	ND	13
	7/07/94	2,100◆◆	250	ND	57	200
	4/04/94	1,100	15	ND	ND	7.4
	1/06/94	260	21	ND	2.5	14
	10/06/93	1,200◆	36	ND	ND	23
	7/01/93	510	100	0.79	5.7	52
	4/02/93	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
	6/06/89	590	ND	ND	ND	ND
	MW2A	1/10/96	89	1.2	ND	ND
7/14/95		60	3.0	ND	1.3	2.4
4/04/95		67◆	1.0	ND	ND	ND
1/05/95		140◆	1.4	ND	ND	ND
10/06/94		71	6.4	ND	2.1	2.4
7/07/94		90	5.2	ND	1.5	2.2
4/04/94		80	8.0	ND	1.4	1.5
1/06/94		110	2.6	ND	1.6	1.7
10/06/93		110◆	12	ND	7.4	1.4

TABLE 2 (Continued)

**SUMMARY OF LABORATORY ANALYSES
 WATER**

<u>Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
MW2A	7/01/93	74♦	0.75	ND	ND	ND
(Cont)	4/02/93	120	7.2	ND	5.8	1.2
	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
	6/06/89	77	ND	ND	ND	ND
MW3	1/10/96	100♦	ND	ND	ND	ND
	7/14/95	130♦	ND	ND	1.3	4.2
	4/04/95	100♦	0.62	ND	ND	ND
	1/05/95	140♦	ND	ND	ND	ND
	10/06/94	93♦	ND	ND	ND	ND
	7/07/94	190♦	ND	ND	ND	ND
	4/04/94	170♦	ND	ND	ND	ND
	1/06/94	140♦	ND	ND	ND	ND
	10/06/93	140♦	ND	ND	ND	ND
	7/01/93	120♦	ND	ND	ND	ND
	4/02/93	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
	6/06/89	32	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
MW4	1/10/96	100♦	ND	ND	ND	1.8
	7/14/95	89♦	ND	ND	0.97	0.52
	4/04/95	82♦	ND	ND	ND	ND
	1/05/95	150♦	ND	ND	ND	ND
	10/06/94	78♦	ND	ND	ND	ND
	7/07/94	150♦	ND	ND	ND	ND
	4/04/94	120	0.76	0.76	ND	0.98
	1/06/94	100♦	ND	ND	ND	ND
	10/06/93	130♦	ND	ND	ND	ND
	7/01/93	91♦	ND	ND	ND	ND
	4/02/93	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	
6/06/89	37	ND	ND	ND	ND	
MW5	1/10/96	50♦	ND	ND	ND	ND
	7/14/95	ND	ND	0.91	ND	1.1
	4/04/95	ND	ND	ND	ND	ND
	1/05/95	ND	ND	ND	ND	ND
	10/06/94	ND	ND	ND	ND	ND
	7/07/94	72♦	ND	ND	ND	ND
	4/04/94	65♦	ND	ND	ND	ND
	1/06/94	62♦	ND	ND	ND	ND
	10/06/93	60♦	ND	ND	ND	ND
	7/01/93	54♦	ND	ND	ND	ND
4/02/93	65♦	ND	ND	ND	ND	

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

<u>Well #</u>	<u>Date</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-benzene</u>	<u>Xylenes</u>
MW6	1/10/96	53♦	ND	ND	ND	ND
	7/14/95	ND	ND	ND	ND	ND
	4/04/95	ND	ND	ND	ND	ND
	1/05/95	ND	ND	ND	ND	ND
	10/06/94	ND	ND	ND	ND	ND
	7/07/94	ND	ND	ND	ND	ND
	4/04/94	57♦	ND	ND	ND	ND
	1/06/94	53♦	ND	ND	ND	ND
	10/06/93	ND	ND	ND	ND	ND
	7/01/93	ND	ND	ND	ND	ND
	4/02/93	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 µg/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.

ND = Non-detectable.

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

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

TABLE 3
 SUMMARY OF LABORATORY ANALYSES
 WATER

<u>Well #</u>	<u>Date</u>	<u>TPH as Diesel</u>	<u>Tetra-chloroethene</u>	<u>Trichloro-ethene</u>	<u>1,2-Dichloro-ethane</u>	<u>Cis-1,2-Dichloro-ethene</u>	<u>Total Oil & Grease (mg/L)</u>
MW1	4/04/94*	--	390	38	ND	17	--
	4/02/93	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	4/02/93	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
	6/06/89	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	--
	1/05/95	--	1,100	18	ND	6.2	--
	1/06/94	--	960	ND	ND	ND	--
	4/02/93	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	--
	4/02/93	ND	--	--	--	--	--
	10/20/92	ND	360	17	ND	ND	--
MW5	4/02/93	ND	190	ND	ND	ND	--
MW6	4/02/93	ND	71	ND	ND	ND	--

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

* All EPA method 8240 constituents were non-detectable, except for concentrations of benzene at 29 $\mu\text{g/L}$, ethylbenzene at 3.4 $\mu\text{g/L}$, total xylenes at 19 $\mu\text{g/L}$, and trans-1,2-dichloroethene at 2.4 $\mu\text{g/L}$.

** 1,1,2-trichloroethane was detected at a concentration of 9.9 $\mu\text{g/L}$.

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

ND = Non-detectable.

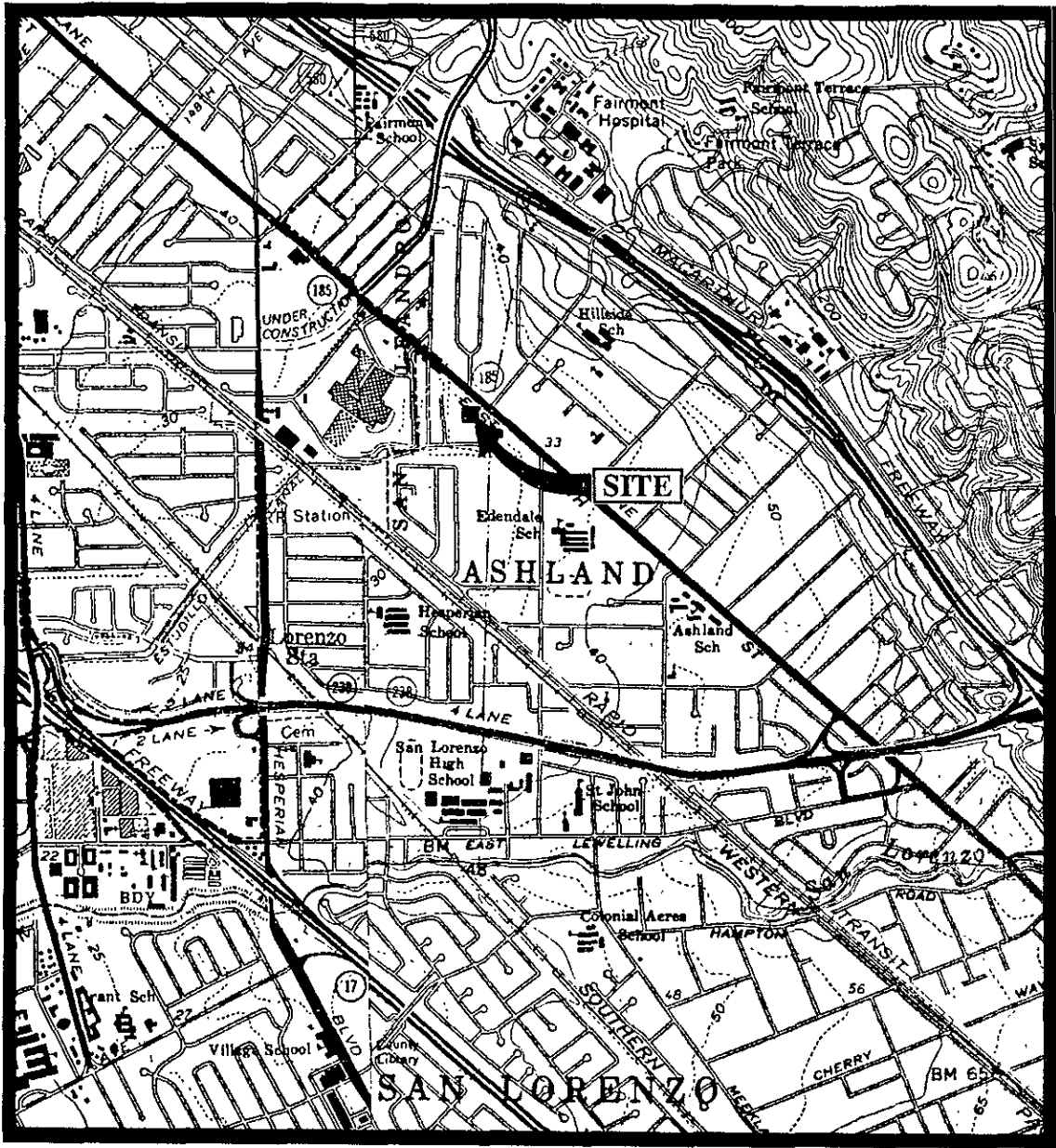
-- Indicates analysis was not performed.

mg/L = milligrams per liter.

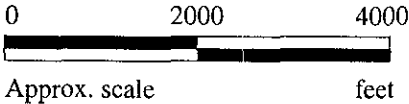
Results are in micrograms per liter ($\mu\text{g/L}$), unless otherwise indicated.

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

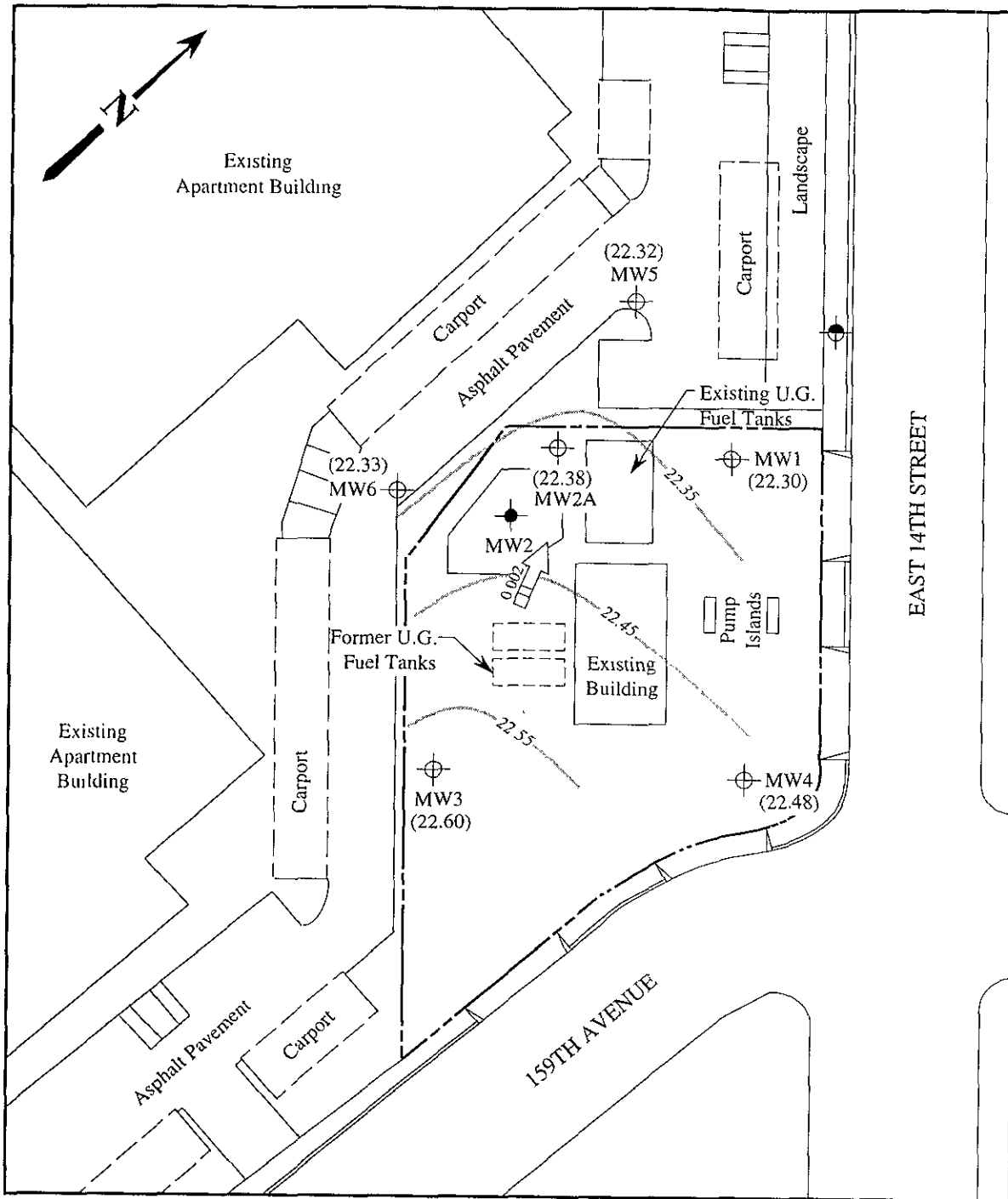
- Laboratory analyses data prior to January 6, 1994, were provided by Kaprealian Engineering, Inc.



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

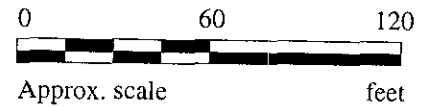


	<p>UNOCAL SERVICE STATION #6277 15803 E. 14TH STREET SAN LEANDRO, CALIFORNIA</p>	<p>LOCATION MAP</p>
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LEGEND

- ⊕ Monitoring well (existing)
- 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

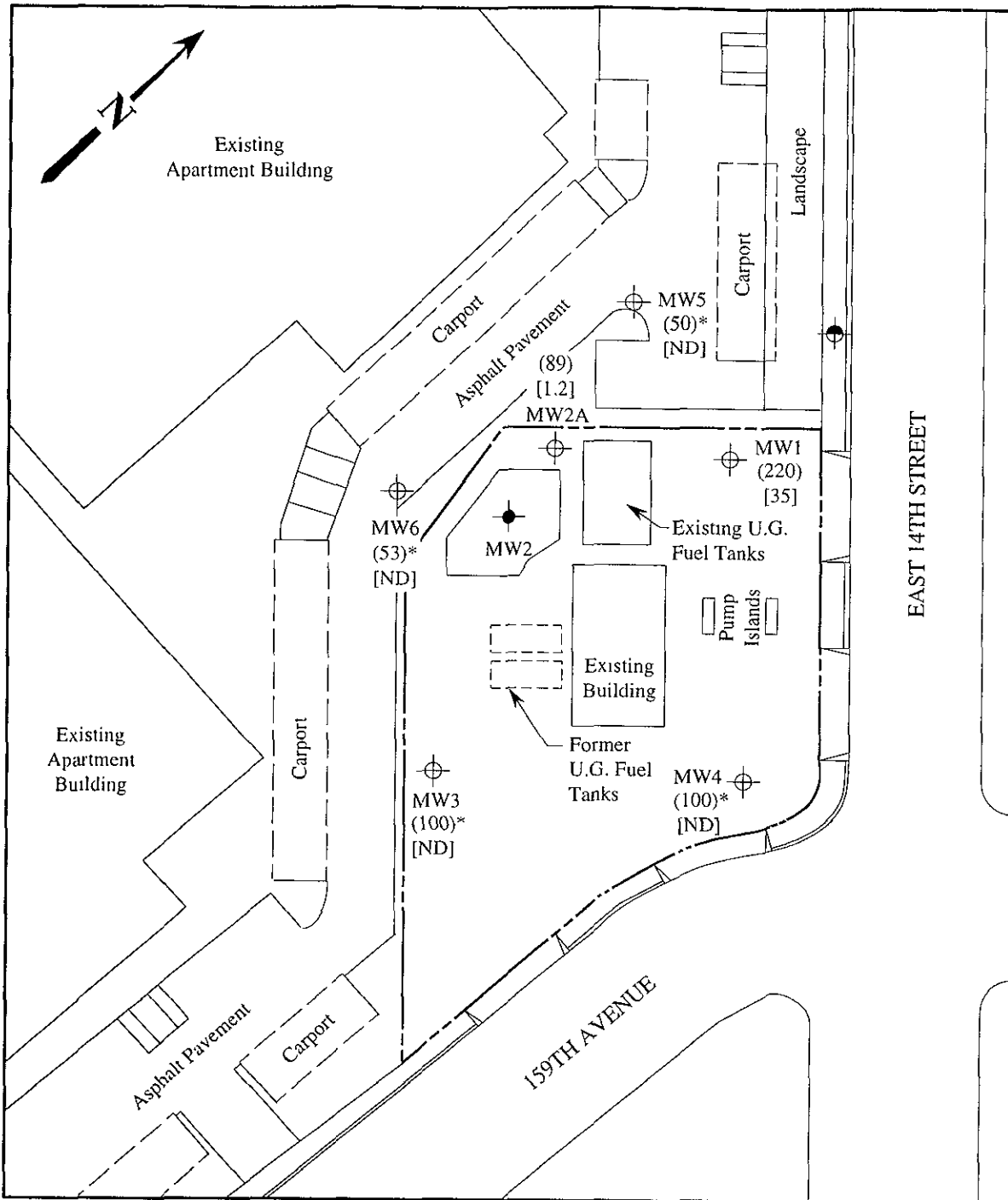


POTENTIOMETRIC SURFACE MAP FOR THE JANUARY 10, 1996 MONITORING EVENT

MPDS SERVICES, INCORPORATED

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

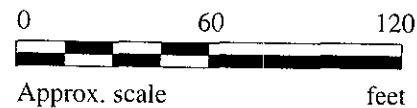
**FIGURE
1**



LEGEND

- ⊕ Monitoring well (existing)
- Monitoring well (previously attempted)
- ⊖ Monitoring well (destroyed February 1, 1990)
- () Concentration of TPH as gasoline in $\mu\text{g/L}$
- [] Concentration of benzene in $\mu\text{g/L}$
- ND Non-detectable

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



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JANUARY 10, 1996



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

FIGURE
2



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

Client Project ID: Unocal #6277, 15803 E 14th St., San Leandro
 Matrix Descript: Water
 Analysis Method: EPA 5030/8015 Mod./8020
 First Sample #: 601-0708

Sampled: Jan 10, 1996
 Received: Jan 10, 1996
 Reported: Jan 31, 1996

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
601-0708	MW-1	220	35	ND	2.0	7.6
601-0709	MW-2A	89	1.2	ND	ND	0.58
601-0710	MW-3	100*	ND	ND	ND	ND
601-0711	MW-4	100*	ND	ND	ND	1.8
601-0712	MW-5	50*	ND	ND	ND	ND
601-0713	MW-6	53*	ND	ND	ND	ND
601-0714	ES1	ND	ND	ND	ND	ND
601-0715	ES2	ND	ND	ND	ND	ND
601-0716	ES3	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50
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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

Please Note:
 * This sample does not appear to contain gasoline.





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

Client Project ID: Unocal #6277, 15803 E 14th St., San Leandro
 Matrix Descript: Water
 Analysis Method: EPA 5030/8015 Mod./8020
 First Sample #: 601-0708

Sampled: Jan 10, 1996
 Received: Jan 10, 1996
 Reported: Jan 31, 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
601-0708	MW-1	Gasoline	1.0	1/23/99	HP-9	101
601-0709	MW-2A	Gasoline	1.0	1/23/99	HP-9	106
601-0710	MW-3	Discrete Peaks*	1.0	1/25/99	HP-2	99
601-0711	MW-4	Discrete Peaks*	1.0	1/23/99	HP-9	92
601-0712	MW-5	Discrete Peaks*	1.0	1/23/99	HP-9	96
601-0713	MW-6	Discrete Peaks*	1.0	1/23/99	HP-9	94
601-0714	ES1	--	1.0	1/23/99	HP-9	80
601-0715	ES2	--	1.0	1/23/99	HP-9	91
601-0716	ES3	--	1.0	1/23/99	HP-9	98

SEQUOIA ANALYTICAL, #1271

Signature on File
 Alan B. Kemp
 Project Manager

Please Note:
 * "Discrete Peaks" refers to unidentified peaks in the EPA 8010 range.





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

Client Project ID: Unocal #6277, 15803 E 14th St., San Leandro
Sample Descript: Water, MW-3
Analysis Method: EPA 5030/8010
Lab Number: 601-0710

Sampled: Jan 10, 1996
Received: Jan 10, 1996
Analyzed: Jan 12, 1996
Reported: Jan 31, 1996

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane.....	100	N.D.
Bromoform.....	100	N.D.
Bromomethane.....	200	N.D.
Carbon tetrachloride.....	100	N.D.
Chlorobenzene.....	100	N.D.
Chloroethane.....	200	N.D.
2-Chloroethylvinyl ether.....	200	N.D.
Chloroform.....	100	N.D.
Chloromethane.....	200	N.D.
Dibromochloromethane.....	100	N.D.
1,3-Dichlorobenzene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.
1,1-Dichloroethane.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.
1,1-Dichloroethene.....	100	N.D.
cis-1,2-Dichloroethene.....	100	N.D.
trans-1,2-Dichloroethene.....	100	N.D.
1,2-Dichloropropane.....	100	N.D.
cis-1,3-Dichloropropene.....	100	N.D.
trans-1,3-Dichloropropene.....	100	N.D.
Methylene chloride.....	1,000	N.D.
1,1,2,2-Tetrachloroethane.....	100	N.D.
Tetrachloroethene.....	100	950
1,1,1-Trichloroethane.....	100	N.D.
1,1,2-Trichloroethane.....	100	N.D.
Trichloroethene.....	100	N.D.
Trichlorofluoromethane.....	100	N.D.
Vinyl chloride.....	200	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager





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

Client Project ID: Unocal #6277, 15803 E 14th St., San Leandro
Matrix: Liquid

QC Sample Group: 6010708-716

Reported: Jan 31, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	T. Granicher	T. Granicher	T. Granicher	T. Granicher

MS/MSD

Batch#: 6010825 6010825 6010825 6010825

Date Prepared: 1/25/96 1/25/96 1/25/96 1/25/96

Date Analyzed: 1/25/96 1/25/96 1/25/96 1/25/96

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: 125 120 120 122

Matrix Spike

**Duplicate %
Recovery:** 125 120 125 122

Relative %

Difference: 0.0 0.0 4.1 0.0

LCS Batch#: 1LCS012596 1LCS012596 1LCS012596 1LCS012596

Date Prepared: 1/25/96 1/25/96 1/25/96 1/25/96

Date Analyzed: 1/25/96 1/25/96 1/25/96 1/25/96

Instrument I.D.#: HP-2 HP-2 HP-2 HP-2

LCS %

Recovery: 115 110 110 113

% Recovery Control Limits:	71-133	72-128	72-130	71-120
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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, #1271

Signature on File

Alan B. Kemp
Project Manager





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

Client Project ID: Unocal #6277, 15803 E 14th St., San Leandro
Matrix: Liquid

QC Sample Group: 6010708-716

Reported: Jan 31, 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#:	6010716	6010716	6010716	6010716
Date Prepared:	1/23/96	1/23/96	1/23/96	1/23/96
Date Analyzed:	1/23/96	1/23/96	1/23/96	1/23/96
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:	110	100	95	103
Matrix Spike Duplicate % Recovery:	95	80	85	93
Relative % Difference:	15	11	11	10

LCS Batch#:	4LCS012396	4LCS012396	4LCS012396	4LCS012396
Date Prepared:	1/23/96	1/23/96	1/23/96	1/23/96
Date Analyzed:	1/23/96	1/23/96	1/23/96	1/23/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	100	95	90	95

% Recovery Control Limits:	71-133	72-128	72-130	71-120
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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, #1271

Signature on File

Alan B. Kemp
Project Manager





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

Client Project ID: Unocal #6277, 15803 E 14th St., San Leandro
Matrix: Solid

QC Sample Group: 6010708-713

Reported: Jan 31, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	I.Z.	I.Z.	I.Z.

MS/MSD

Batch#:	6010710	6010710	6010710
Date Prepared:	1/12/96	1/12/96	1/12/96
Date Analyzed:	1/12/96	1/12/96	1/12/96
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	134	99	91
Matrix Spike Duplicate % Recovery:	134	96	90
Relative % Difference:	0.0	3.1	1.1

LCS Batch#:	LCS011296	LCS011296	LCS011296
Date Prepared:	1/12/96	1/12/96	1/12/96
Date Analyzed:	1/12/96	1/12/96	1/12/96
Instrument I.D.#:	HP-7	HP-7	HP-7
LCS % Recovery:	127	91	86

% Recovery Control Limits:	28-167	35-146	38-150
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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, #1271

Signature on File

Alan B. Kemp
Project Manager





Sequoia Analytical

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

Date: 2/1/96

Sequoia Analytical has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 µg/L in the following site(s):

Client Project I.D. - **Unocal #6277- San Leandro**

Sequoia Work Order # - **9601193**

Sample Number:

6010708

Sample Description:

MW-1

SEQUOIA ANALYTICAL, #1271



Alan B. Kemp
Project Manager



MONITORING
PURGING
DISPOSING
SAMPLING

MPDS

SERVICES, INCORPORATED

February 13, 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

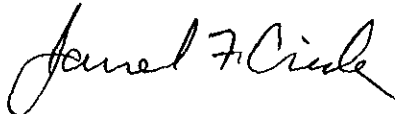
Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Mr. David J. Camille, enclosed please find our 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) 277-2335.

Sincerely,

MPDS Services, Inc.



Jarrel F. Crider

/jfc

Enclosure

cc: Mr. David J. Camille