MONITORING
PURGING
DISPOSING
SAMPLING

mpds SERVICES, INCORPORATED

ENVIRONMENTAL

95 AUG 25 PM 2:45

August 24, 1995

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

Attention: Ms. Susan Hugo

RE: Unocal Service Station #3538
411 W. MacArthur Boulevard
Oakland, California

Dear Ms. Hugo:

Per the request of the Unocal Corporation Project Manager, Ms. Tina R. Berry, enclosed please find our report (MPDS-UN3538-07) dated August 11, 1995 for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2321.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

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-UN3538-07
August 11, 1995

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

Attention: Ms. Tina R. Berry

RE: Quarterly Data Report
Unocal Service Station #3538
411 W. MacArthur Boulevard
Oakland, California

Dear Ms. Berry:

This data report presents the results of the most recent quarter of monitoring and sampling of the monitoring wells at the referenced site by MPDS Services, Inc.

RECENT FIELD ACTIVITIES

The monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Prior to sampling, the wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations are summarized in Table 1. The ground water flow direction during the most recent quarter is shown on the attached Figure 1.

Ground water samples were collected July 19, 1995. Prior to sampling, the wells were each purged of between 4 and 12.5 gallons of water. Samples were then collected using a clean Teflon bailer. The samples were decanted into clean VOA vials, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Tables 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.

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

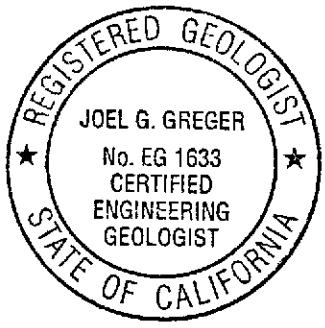
A copy of this report should be sent to Mrs. Susan Hugo of the Alameda County Health Care Services Agency.

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

Sincerely,

MPDS Services, Inc.

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

cc: Mr. Thomas Berkins, 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 19, 1995)						
MW1	54.07	18.03	23.25	0	No	4
MW2	53.37	18.01	28.00	0	No	7
MW3	53.66	18.20	25.07	0	No	5
MW4	53.82	17.82	28.71	0	No	7.5
MW5	53.64	17.59	30.12	0	No	9
MW6	59.12	12.32	30.05	0	No	12.5
(Monitored and Sampled on April 17, 1995)						
MW1*	54.88	17.22	23.22	0	--	0
MW2	53.88	17.50	28.01	0	No	7.5
MW3	54.18	17.68	25.10	0	No	5.5
MW4*	54.43	17.21	28.72	0	--	0
MW5*	54.18	17.05	30.15	0	--	0
MW6*	60.14	11.30	30.17	0	--	0
(Monitored and Sampled on January 9, 1995)						
MW1*	54.20	17.90	27.28	0	--	0
MW2	53.98	17.40	26.94	0	No	6.5
MW3	54.17	17.69	25.05	0	No	5
MW4*	54.26	17.38	28.71	0	--	0
MW5*	54.10	17.13	30.04	0	--	0
MW6*	57.71	13.73	30.20	0	--	0
(Monitored and Sampled on October 5, 1994)						
MW1*	53.55	18.55	27.25	0	--	0
MW2	53.05	18.33	27.90	0	No	7
MW3	53.28	18.58	25.09	0	No	5
MW4*	53.36	18.28	29.01	0	--	0
MW5*	53.25	17.98	30.12	0	--	0
MW6*	57.28	14.16	30.08	0	--	0

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)**
MW1	72.10
MW2	71.38
MW3	71.86
MW4	71.64
MW5	71.23
MW6	71.44

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

* Monitored only.

** The elevations of top of well casings are relative to Mean Seal Level (MSL), per the City of Oakland Benchmark #9NW10 (elevation = 75.50' MSL).

-- Sheen determination was not performed.

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
9/15/89	MW1	ND	ND	0.61	ND	ND
1/23/90	MW1	ND	1.5	2.3	ND	4.3
4/19/90	MW1	ND	ND	ND	ND	ND
7/17/90	MW1	ND	ND	ND	ND	ND
10/16/90	MW1	ND	ND	ND	ND	ND
1/15/91	MW1	ND	ND	ND	ND	ND
4/12/91	MW1	ND	ND	ND	ND	ND
7/15/91	MW1	ND	ND	ND	ND	ND
7/14/92	MW1	ND	ND	ND	ND	ND
7/14/93	MW1	ND	2.2	2.1	1.1	6.2
7/07/94	MW1	ND	ND	ND	ND	ND
10/05/94	MW1	SAMPLED ANNUALLY				
7/19/95	MW1	ND	ND	ND	ND	ND
9/15/89	MW2	290	ND	12	ND	ND
1/23/90	MW2	400	73	36	10	40
4/19/90	MW2	3,900	550	5.1	91	390
7/17/90	MW2	490	76	0.59	11	46
10/16/90	MW2	1,400	430	2.0	48	240
1/15/91	MW2	680	170	0.7	19	81
4/12/91	MW2	2,200	160	4.3	23	62
7/15/91	MW2	2,200	770	12	72	370
10/15/91	MW2	140	44	0.56	1.5	12
1/15/92	MW2	220	37	0.52	1.1	7.0
4/14/92	MW2	150	6.2	ND	ND	1.4
7/14/92	MW2	130	3.7	ND	ND	ND
10/12/92	MW2	370	3.4	0.56	ND	11
1/08/93	MW2	510♦	ND	ND	ND	ND
4/13/93	MW2	410♦♦	42	7.7	6.4	28
7/14/93	MW2	110♦	6.5	ND	ND	1.1
10/14/93	MW2	230♦	5.3	ND	ND	2.1
1/12/94	MW2	300	7.8	3.8	1.8	10
4/09/94	MW2	120	10	0.88	1.1	4.9
7/07/94	MW2	110♦	4.4	ND	ND	ND
10/05/94	MW2	720♦	20	ND	ND	3.1
1/09/95	MW2	ND	ND	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
4/17/95	MW2	93	5.6	0.62	1.7	5.5
7/19/95	MW2	77	32	0.58	1.7	4.1
9/15/89	MW3	32	ND	ND	ND	ND
1/23/90	MW3	450	110	1.2	4.4	11
4/19/90	MW3	3,100	600	27	54	220
7/17/90	MW3	4,000	270	48	130	250
10/16/90	MW3	740	210	1.4	2.5	82
1/15/91	MW3	3,200	460	1.5	120	270
4/12/91	MW3	880	170	1.1	34	110
7/15/91	MW3	9,200	1,300	230	490	1,900
10/15/91	MW3	3,100	390	34	150	390
1/15/92	MW3	3,000	590	14	310	750
4/14/92	MW3	14,000	660	48	560	2,000
7/14/92	MW3	21,000	890	200	1,200	4,300
10/12/92	MW3	3,200	160	10	230	540
1/08/93	MW3	1,100♦♦	48	0.99	0.90	93
4/13/93	MW3	12,000♦♦	290	38	760	2,300
7/14/93	MW3	6,300	190	ND	430	1,000
10/14/93	MW3	2,500	52	ND	110	250
1/12/94	MW3	3,800	78	ND	180	390
4/09/94	MW3	1,800	22	ND	140	280
7/07/94	MW3	110♦	4.5	ND	ND	ND
10/05/94	MW3	ND	ND	ND	ND	ND
1/09/95	MW3	ND	0.68	ND	ND	ND
4/17/95	MW3	3,700	80	10	270	510
7/19/95	MW3	15,000	330	27	990	2,400
9/15/89	MW4	ND	ND	ND	ND	ND
1/23/90	MW4	ND	ND	0.40	ND	ND
4/19/90	MW4	ND	ND	0.48	ND	ND
7/17/90	MW4	ND	ND	ND	ND	ND
10/16/90	MW4	ND	ND	ND	ND	ND
1/15/91	MW4	ND	ND	ND	--	ND
4/12/91	MW4	ND	ND	ND	ND	ND
7/15/91	MW4	ND	ND	ND	ND	ND
7/14/92	MW4	ND	1.3	2.5	ND	1.0

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes
7/14/93	MW4	ND	ND	ND	ND	ND
7/07/94	MW4	ND	ND	ND	ND	ND
10/05/94	MW4	SAMPLED ANNUALLY				
7/19/95	MW4	ND	ND	ND	ND	ND
11/30/92	MW5	ND	ND	ND	ND	ND
1/08/93	MW5	ND	ND	ND	ND	ND
4/13/93	MW5	ND	ND	ND	ND	ND
7/14/93	MW5	ND	ND	0.57	ND	ND
10/14/93	MW5	ND	ND	ND	ND	ND
1/12/94	MW5	ND	ND	0.84	ND	1.6
7/07/94	MW5	ND	ND	ND	ND	ND
10/05/94	MW5	SAMPLED ANNUALLY				
7/19/95	MW5	ND	ND	ND	ND	ND
11/30/92	MW6	ND	ND	ND	ND	ND
1/08/93	MW6	ND	ND	ND	ND	ND
4/13/93	MW6	ND	ND	ND	ND	ND
7/14/93	MW6	ND	0.99	2.4	ND	1.9
10/14/93	MW6	ND	ND	0.64	ND	ND
1/12/94	MW6	ND	ND	1.2	ND	2.9
7/07/94	MW6	ND	ND	ND	ND	ND
10/05/94	MW6	SAMPLED ANNUALLY				
7/19/95	MW6	ND	ND	ND	ND	ND

♦ 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 a non-gasoline mixture.

ND = Non-detectable.

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

Note: Laboratory analyses data prior to January 12, 1994, were provided by Kaprealian Engineering, Inc.

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	Total Oil & Grease (mg/L)	Tetrachloroethene*	MTBE
9/15/89	MW1	ND	ND	2.7	--
1/23/90	MW1	ND	1.5	2.1	--
4/19/90	MW1	ND	ND	2.2	--
7/17/90	MW1	ND	ND	1.7	--
10/16/90	MW1	ND	ND	2.0	--
1/15/91	MW1	ND	ND	2.1	--
4/12/91	MW1	ND	ND	2.0	--
7/15/91	MW1	ND	ND	1.8	--
7/14/92	MW1	--	--	1.4	--
7/14/93	MW1	--	--	0.95	--
7/07/94	MW1	--	--	0.83	--
7/17/95	MW1	--	--	0.52	--
4/13/93	MW2	--	--	--	200
7/14/93	MW2	--	--	--	250
4/13/93	MW3	--	--	--	1,400
7/14/93	MW3	--	--	--	860

* All EPA method 8010 constituents were non-detectable, except for tetrachloroethene as indicated.

-- Indicates analysis was not performed.

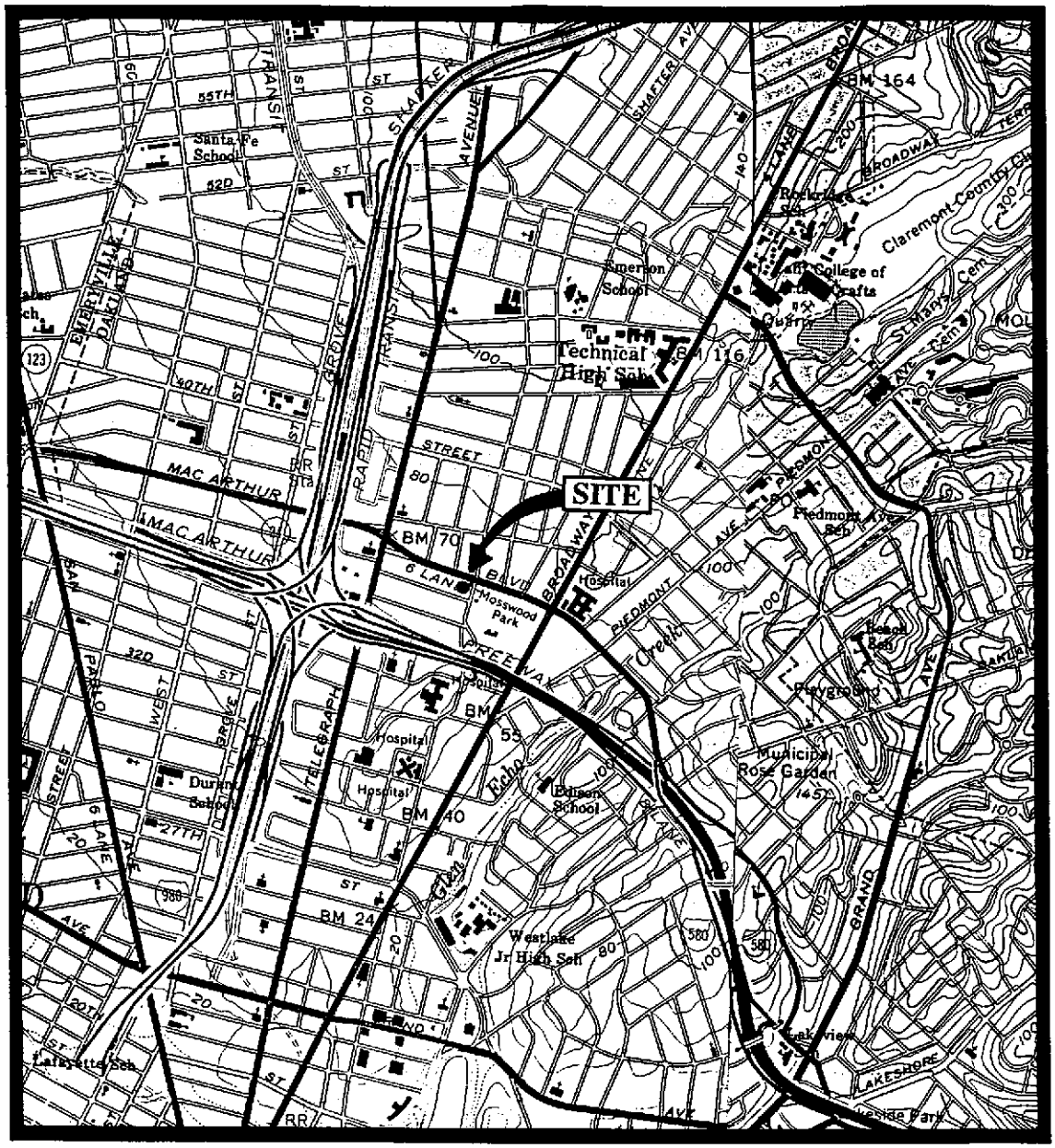
MTBE = methyl tert butyl ether.

ND = Non-detectable.

mg/L = milligrams per liter.

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

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

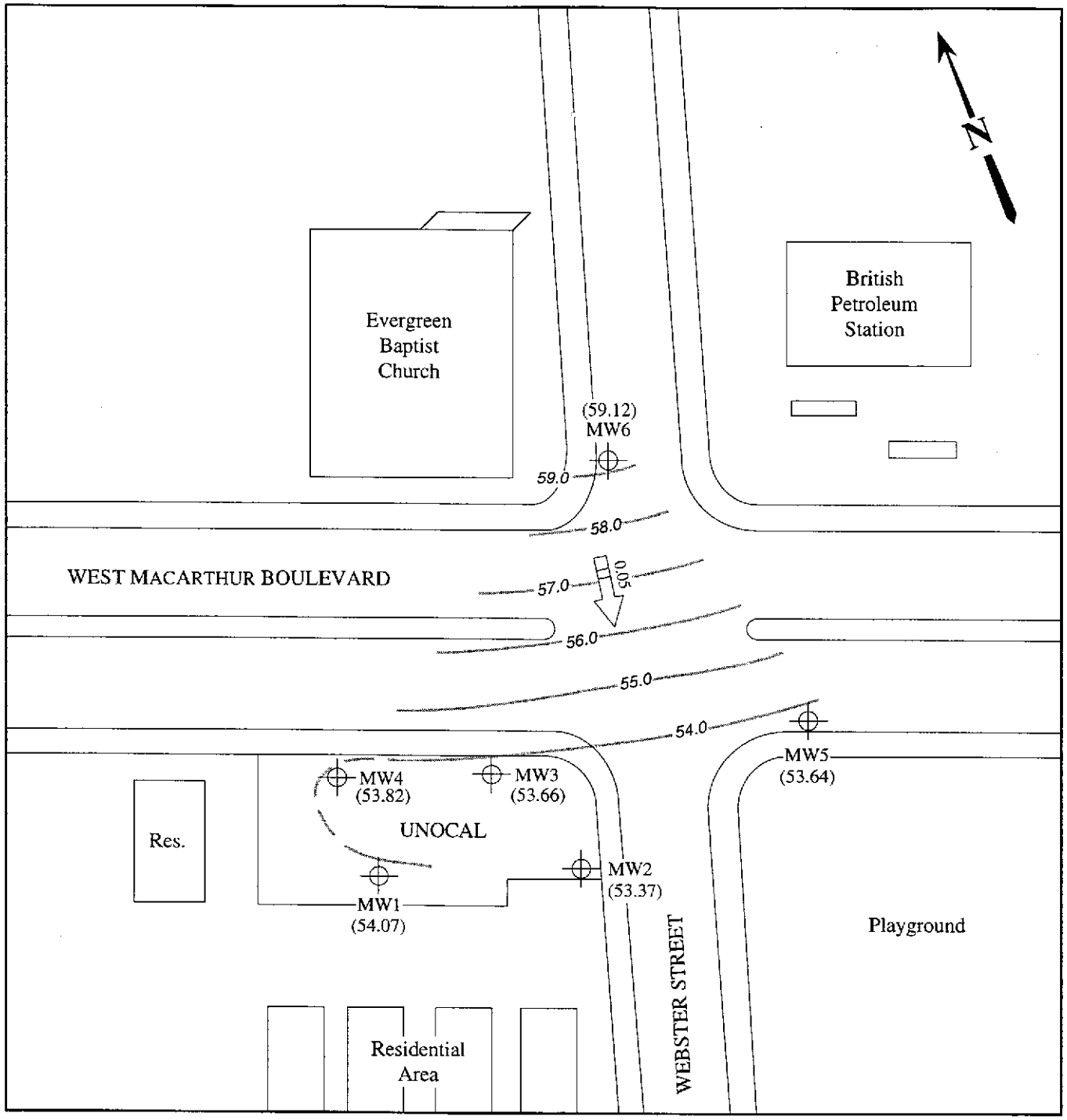


Base modified from 7.5 minute U.S.G.S. Oakland East & West Quadrangles
(both photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION # 3538** **411 W. MACARTHUR BOULEVARD** **OAKLAND, CALIFORNIA**	**LOCATION MAP**



LEGEND

- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation

0 60 120

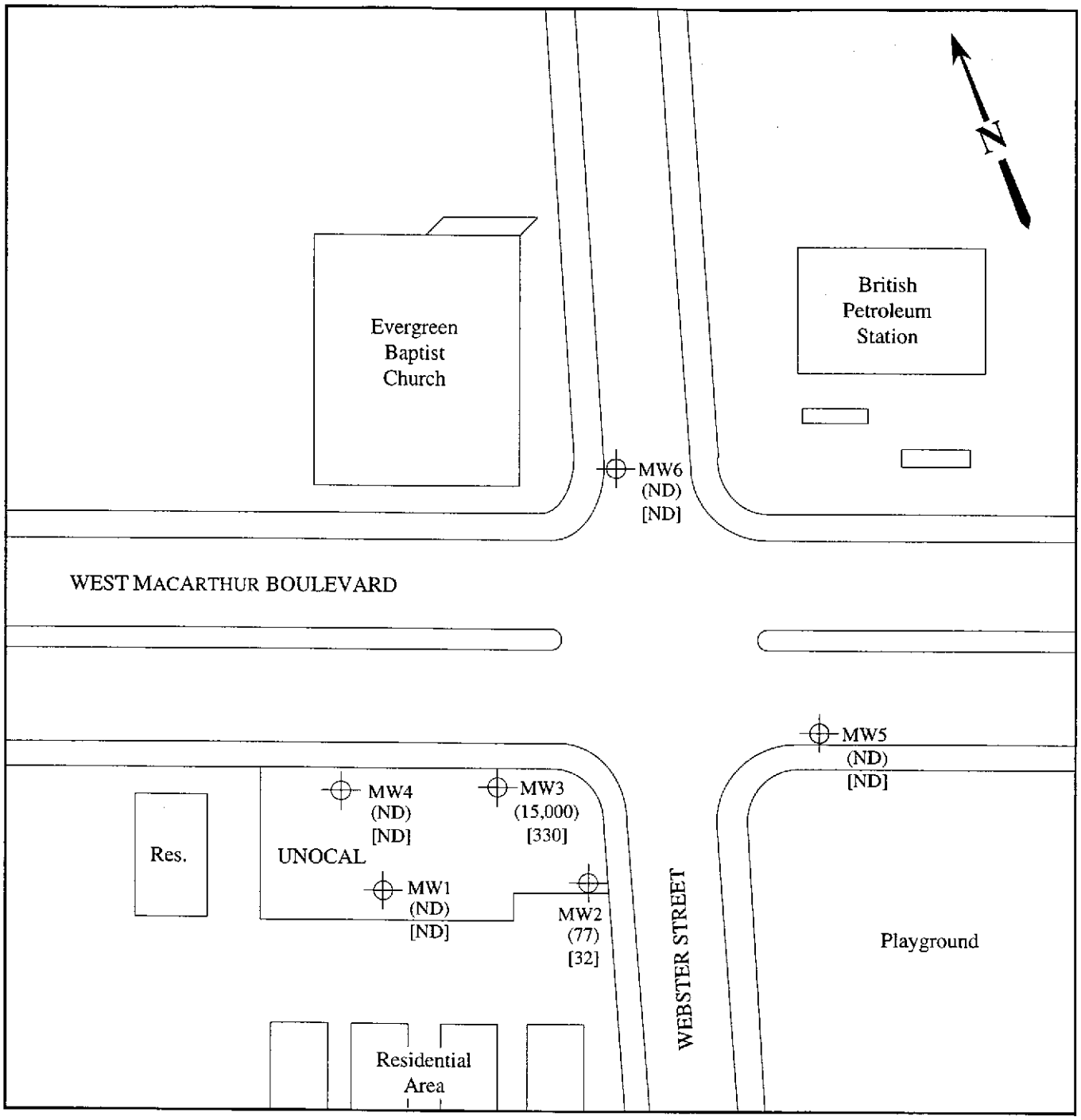
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE JULY 19, 1995 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION # 3538
411 W. MACARTHUR BOULEVARD
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 60 120

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON JULY 19, 1995

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION # 3538
411 W. MACARTHUR BOULEVARD
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 #3538, 411 W. MacArthur Blvd., Oakland	Sampled:	Jul 19, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Jul 19, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Aug 3, 1995
Attention: Sarkis Karkarian	First Sample #:	507-1293		

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
507-1293	MW-1	ND	ND	ND	ND	ND
507-1294	MW-2	77	32	0.58	1.7	4.1
507-1295	MW-3	15,000	330	27	990	2,400
507-1296	MW-4	ND	ND	ND	ND	ND
507-1297	MW-5	ND	ND	ND	ND	ND
507-1298	MW-6	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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 #3538, 411 W. MacArthur Blvd., Oakland	Sampled:	Jul 19, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received:	Jul 19, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported:	Aug 3, 1995
Attention: Sarkis Karkarian	First Sample #:	507-1293		

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
507-1293	MW-1	--	1.0	7/23/95	HP-2	103
507-1294	MW-2	Gasoline	1.0	7/25/95	HP-4	107
507-1295	MW-3	Gasoline	50	7/23/95	HP-2	116
507-1296	MW-4	--	1.0	7/23/95	HP-2	104
507-1297	MW-5	--	1.0	7/23/95	HP-2	104
507-1298	MW-6	--	1.0	7/23/95	HP-2	104

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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 #3538, 411 W. MacArthur Blvd., Oakland	Sampled:	Jul 19, 1995
2401 Stanwell Dr., Ste. 300	Sample Descript:	Water, MW-1	Received:	Jul 19, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Jul 27, 1995
Attention: Sarkis Karkarian	Lab Number:	507-1293	Reported:	Aug 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	**0.50**	**0.52**
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

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

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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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 #3538, 411 W. MacArthur Blvd., Oakland
Matrix: Liquid
QC Sample Group: 5071293-98

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	5071226	5071226	5071226	5071226
Date Prepared:	7/25/95	7/25/95	7/25/95	7/25/95
Date Analyzed:	7/25/95	7/25/95	7/25/95	7/25/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	105	105	107
Matrix Spike Duplicate % Recovery:	105	110	110	110
Relative % Difference:	4.9	4.7	4.7	3.1
LCS Batch#:	2LCS072595	2LCS072595	2LCS072595	2LCS072595
Date Prepared:	7/25/95	7/25/95	7/25/95	7/25/95
Date Analyzed:	7/25/95	7/25/95	7/25/95	7/25/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	100	105	107	107
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

Client Project ID: Unocal #3538, 411 W. MacArthur Blvd., Oakland
Matrix: Liquid
QC Sample Group: 5071293-98
Reported: Aug 3, 1995

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#:	5071296	5071296	5071296	5071296
Date Prepared:	7/23/95	7/23/95	7/23/95	7/23/95
Date Analyzed:	7/23/95	7/23/95	7/23/95	7/23/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	115	110	120	117
Matrix Spike Duplicate % Recovery:	115	110	120	115
Relative % Difference:	0.0	0.0	0.0	1.4
LCS Batch#:	1LCS072395	1LCS072395	1LCS072395	1LCS072395
Date Prepared:	7/23/95	7/23/95	7/23/95	7/23/95
Date Analyzed:	7/23/95	7/23/95	7/23/95	7/23/95
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	110	108	113	113
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

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Matrix: Liquid
QC Sample Group: 5071293-98

Reported: Aug 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	5071549	5071549	5071549
Date Prepared:	7/27/95	7/27/95	7/27/95
Date Analyzed:	7/27/95	7/27/95	7/27/95
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	117	99	84
Matrix Spike Duplicate % Recovery:	112	98	80
Relative % Difference:	4.4	1.0	4.9
LCS Batch#:	LCS072795	LCS072795	LCS072795
Date Prepared:	7/27/95	7/27/95	7/27/95
Date Analyzed:	7/27/95	7/27/95	7/27/95
Instrument I.D.#:	HP-7	HP-7	HP-7
LCS % Recovery:	111	96	74
% Recovery Control Limits:	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

Signature on File

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

CHAIN OF CUSTODY

SAMPLER: VARTKES TASHDJIAN

WITNESSING AGENCY:

UNOCAL S/S # 3538 CITY: Oakland

ADDRESS: 411 W. MacArthur Blvd.

ANALYSES REQUESTED

TURN AROUND TIME: Regular.

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010				REMARKS
MW1	7/19/95	11:07 AM	X	X		4 VOAs	Well	X			X		5071293	AD	
MW2	"	12:10 PM	X	X		2 VOAs	"	X					5071294	AB	
MW3	"	12:45 PM	X	X		"	"	X					5071295		
MW4	"	11:35 AM	X	X		"	"	X					5071296		
MW5	"	9:46 AM	X	X		"	"	X					5071297		
MW6	"	10:30 AM	X	X		"	"	X					5071298		

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
Vartkes Tashdjian (SIGNATURE)	7/19/95 3:25 pm	(SIGNATURE)	7/19/95 1525
(SIGNATURE)	7-20-95 0830	(SIGNATURE)	1400 7-20
(SIGNATURE)	7-20	(SIGNATURE)	7/20 1600
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	

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

1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE? Yes
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Yes
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? NO
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Yes

SIGNATURE: TITLE: DATE: 7/19/95

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.