M P D S
SERVICES, INCORPORATED

MPDS-UN0752-01
February 3, 1994

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 #0752
800 Harrison Street
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 on January 3, 1994. Prior to sampling, the wells were each purged of between 7 and 9.5 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.

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, 3 and 4. 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 400
Concord, California 94520
Tel: (510) 602-5120 Fax: (510) 689-1918

DISTRIBUTION

A copy of this report should be sent to Ms. Jennifer Eberle of the Alameda County Health Care Services Agency, and to the Regional Water Quality Control Board, San Francisco Bay Region.

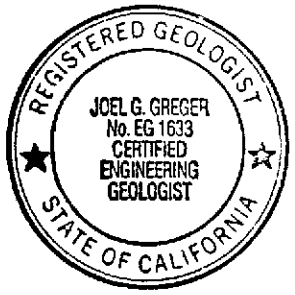
If you have any questions regarding this report, please do not hesitate to call at (510) 602-5120.

Sincerely,

MPDS Services, Inc.

Joel G. Greger, C.E.G.
Senior Engineering Geologist

License No. EG 1633
Exp. Date 6/30/94



/dlh

Attachments: Tables 1 through 4
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)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)	Total Well Depth (feet)◆
(Monitored and Sampled on January 3, 1994)						
MW1	14.17	20.52	0	No	9.5	33.85
MW2	14.51	20.21	0	No	7.5	31.00
MW3	13.74	19.40	0	No	8.5	31.35
MW4	13.78	18.93	0	No	9.5	32.58
MW5	13.90	19.05	0	No	9	31.95
MW6	13.62	18.54	0	No	9	31.58
MW7	13.29	18.91	0	No	9.5	32.23
MW8	13.27	18.73	0	No	7	28.74
(Monitored and Sampled on October 5, 1993)						
MW1	14.39	20.30	0	No	10	
MW2	14.77	19.95	0	No	8	
MW3	13.94	19.20	0	No	10	
MW4	13.97	18.74	0	No	10	
MW5	14.12	18.83	0	No	10	
MW6	13.81	18.35	0	No	10	
MW7	13.44	18.76	0	No	10	
MW8	13.43	18.57	0	No	8	

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)	Total Well Depth (feet)◆
(Monitored and Sampled on July 23, 1993)						
MW1	14.81	20.13	0	No	10	
MW2	15.16	19.81	0	No	8	
MW3	14.39	19.00	0	No	9	
MW4	14.40	18.72	0	No	10	
MW5	14.51	18.74	0	No	10	
MW6	14.25	18.17	0	No	10	
MW7	13.89	18.60	0	No	10	
MW8	13.88	18.45	0	No	8	
(Monitored and Sampled on December 21, 1992)						
MW1	13.77	21.17	0	No	9	
MW2	14.12	20.85	0	No	7	
MW3	13.37	20.02	0	No	7	
MW4	13.39	19.73	0	No	9	
MW5	13.50	19.75	0	No	9	
MW6	13.25	19.17	0	No	9	

Well #	Well Cover Elevation (feet)*	Well Casing Elevation (feet)**
MW1	34.94	34.69
MW2	34.97	34.72
MW3	33.39	33.14
MW4	33.12	32.71
MW5	33.25	32.95
MW6	32.42	32.16
MW7	32.49	32.20
MW8	32.33	32.00

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

◆ The depth to water level and total well depth measurements were taken from the top of the well casings. Prior to October 5, 1993, the water level and total well depth measurements were taken from the top of the well covers.

* The elevations of the top of the well covers have been surveyed 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 MSL).

** Relative to MSL.

Note: Monitoring data prior to January 3, 1994, were provided by Kaprealian Engineering, Inc.

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH as Diesel
1/03/94	MW1	ND	ND	ND	ND	ND	ND
	MW2	260	25	ND	5.5	26	--
	MW3	4,900	830	100	170	150	--
	MW4	210	ND	ND	0.76	1.6	--
	MW5	1,500	44	ND	42	46	--
	MW6	1,400	57	ND	8.5	11	--
	MW7	ND	0.93	ND	0.75	1.9	--
	MW8	ND	ND	ND	ND	ND	--
10/05/93	MW1	92**	1.5	ND	ND	0.72	57♦
	MW2	120	12	ND	2.1	12	--
	MW3	9,200	720	88	140	140	--
	MW4	130**	ND	ND	ND	ND	--
	MW5	1,700	70	6.2	54	40	--
	MW6	1,400	34	ND	5.3	7.3	--
	MW7	360	10	1.2	0.91	0.99	--
	MW8	120**	1.7	ND	ND	ND	--
7/23/93	MW1	ND	0.50	0.66	ND	ND	ND
	MW2	66	1.8	ND	2.5	2.0	--
	MW3	4,400	660	26	160	82	--
	MW4	85*	ND	ND	ND	ND	--
	MW5	2,000	122	8.0	68	47	--
	MW6	580	19	0.99	3.4	2.7	--
	MW7	790	23	3.3	28	5.4	--
	MW8	260	5.1	ND	0.60	ND	--

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH as Diesel
4/28/93	MW1	920	3.1	2.3	1.2	9.7	470♦♦
	MW2	1,300	76	1.9	130	87	--
	MW3	2,600	220	7.6	41	27	--
	MW4	ND	ND	ND	ND	ND	--
	MW5	6,700	200	190	250	430	--
	MW6	1,200	54	1.5	11	5.3	--
	MW7	110	2.8	1.3	1.4	1.7	--
	MW8	450	18	1.8	1.8	1.4	--
12/21/92	MW1	95	0.69	ND	ND	1.0	ND
	MW2	960	97	3.2	74	96	--
	MW3	8,500	1,500	150	310	330	--
	MW4	220*	ND	ND	0.97	0.74	--
	MW5	1,700	51	4.7	83	34	--
	MW6	2,300	370	11	39	15	--
10/19/92	MW4	480	0.51	2.1	2.8	6.8	--
	MW5	2,700	61	5.0	100	61	--
	MW6	3,900	420	12	60	28	--
9/15/92	MW1	76	1.0	ND	ND	ND	ND
	MW2	1,300	91	5.7	80	110	--
	MW3	10,000	1,900	330	400	580	--
6/30/92	MW1	ND	ND	ND	ND	ND	120
	MW2	76	9.3	0.76	4.8	6.9	--
	MW3	8,900	1,900	210	430	550	--
4/02/92	MW1	ND	ND	ND	ND	ND	94
	MW2	88	12	0.32	6.3	7.2	--
	MW3	8,000	1,400	200	300	310	--

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH as Diesel
12/30/91	MW1	ND	ND	ND	ND	ND	ND
	MW2	91	16	0.89	11	1.9	--
	MW3	7,200	2,100	690	410	550	--
9/30/91	MW1	ND	ND	ND	ND	ND	ND
	MW2	130	18	0.53	14	9.6	--
	MW3	6,800	1,400	130	290	240	--
6/05/91	MW1	47	ND	ND	ND	ND	ND
	MW2	49	ND	ND	ND	ND	--
	MW3	5,800	1,200	40	140	97	--

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

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

* 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 appeared to be a non-gasoline mixture.

ND = Non-detectable.

-- Indicates analysis was not performed.

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

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

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	Chloroform	Tetrachloroethene	Trichloroethene
1/03/94	MW1*	16	1.4	0.93
	MW4**	9.0	1.0	ND
	MW8♦	1.5	1.2	ND
10/05/93	MW1	13	1.3	0.66
7/23/93	MW1	16	1.3	0.91
4/28/93	MW1♦♦	12	0.89	0.85
12/21/92	MW1	12	1.4	0.83
9/15/92	MW1	12	2.2	1.3
6/30/92	MW1	9.5	2.2	1.3
4/02/92	MW1	7.1	2.6	1.4
12/30/91	MW1	6.4	2.1	0.9
9/30/91	MW1	--	--	--
6/04/91	MW1	7.8	2.9	1.3

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

* 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 make-up.

** MTBE was detcted at a concentration of 240 µg/L.

♦ 1,2-Dichloroethane was detected at a concentration of 4.0 µg/L, and MTBE was detected at a concentration of 51 µg/L.

♦♦ 1,2-Dichloroethane was detected at a concentration of 1.1 µg/L.

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 for the above compounds.

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

TABLE 4

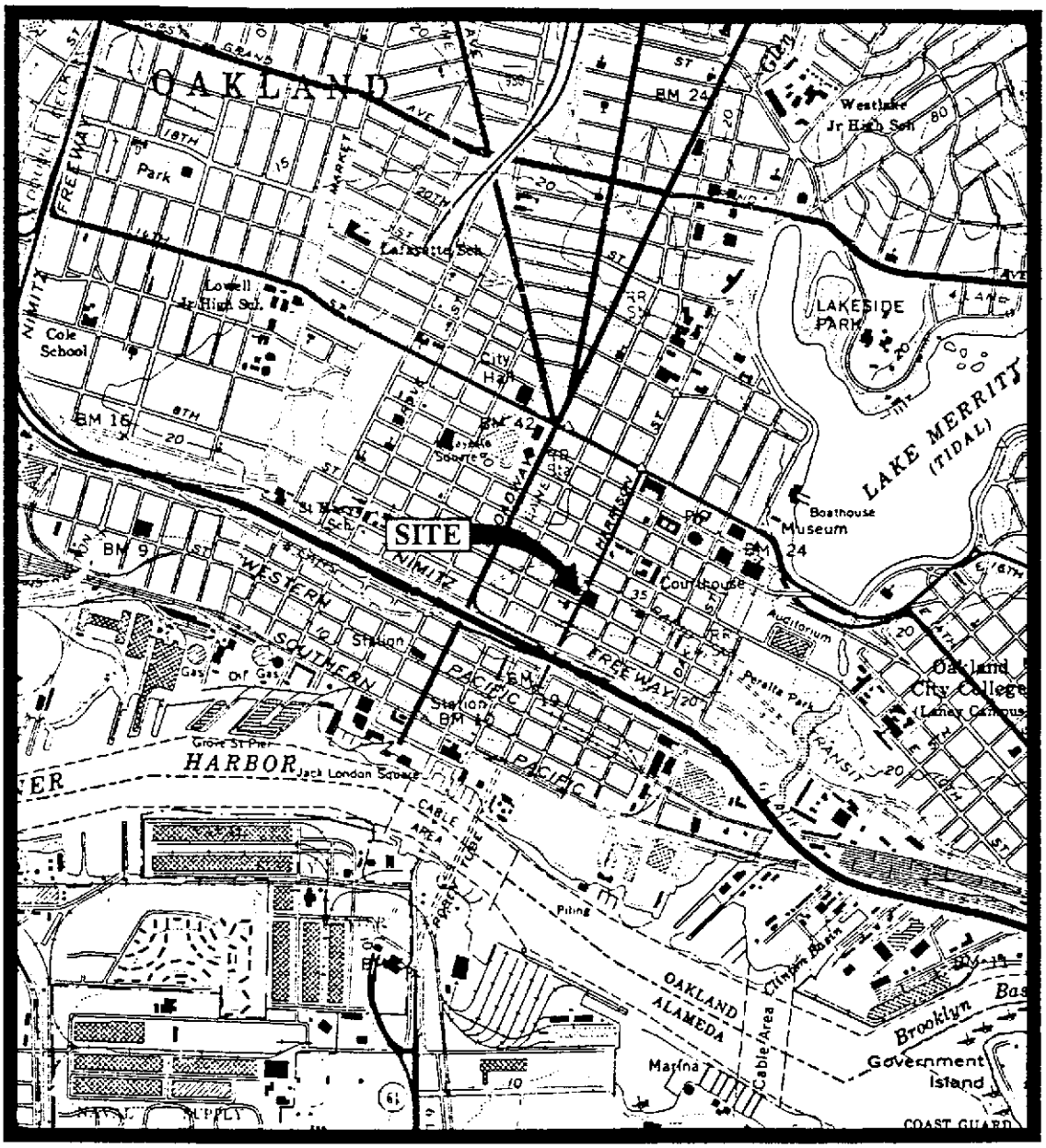
SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TOG	Cadmium	Chromium	Lead	Nickel	Zinc
4/02/92	MW1	ND	ND	0.015	0.016	ND	0.020
12/30/91	MW1	ND	ND	0.0078	0.0057	ND	0.046
9/30/91	MW1	ND	ND	0.019	ND	ND	0.11
6/05/91	MW1	ND	ND	0.0083	0.011	0.063	0.023

ND = Non-detectable.

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

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

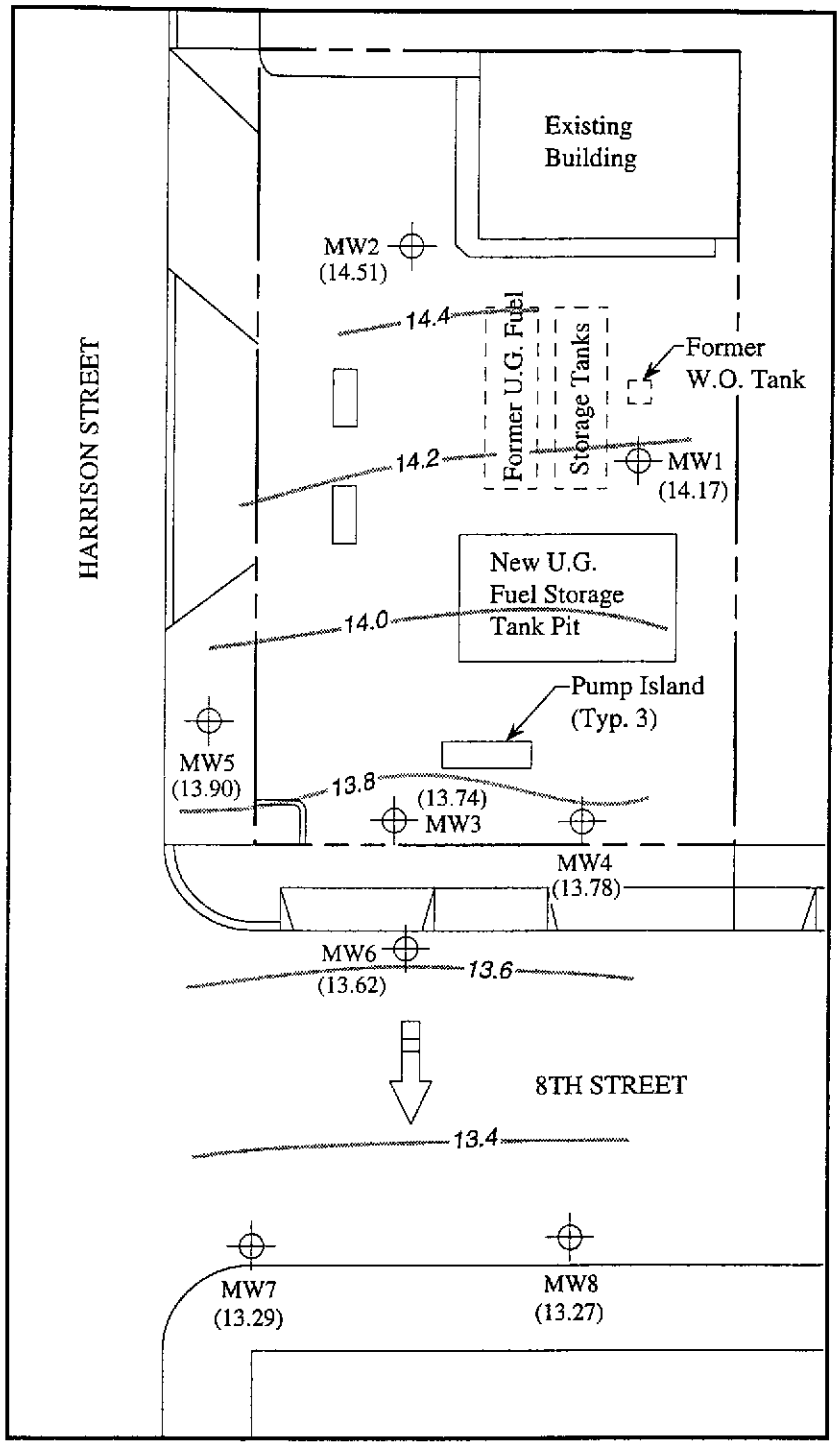


Base modified from 7.5 minute U.S.G.S. Oakland West Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

M P D S SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #0752** **800 HARRISON STREET** **OAKLAND, CALIFORNIA**	**LOCATION MAP**



LEGEND

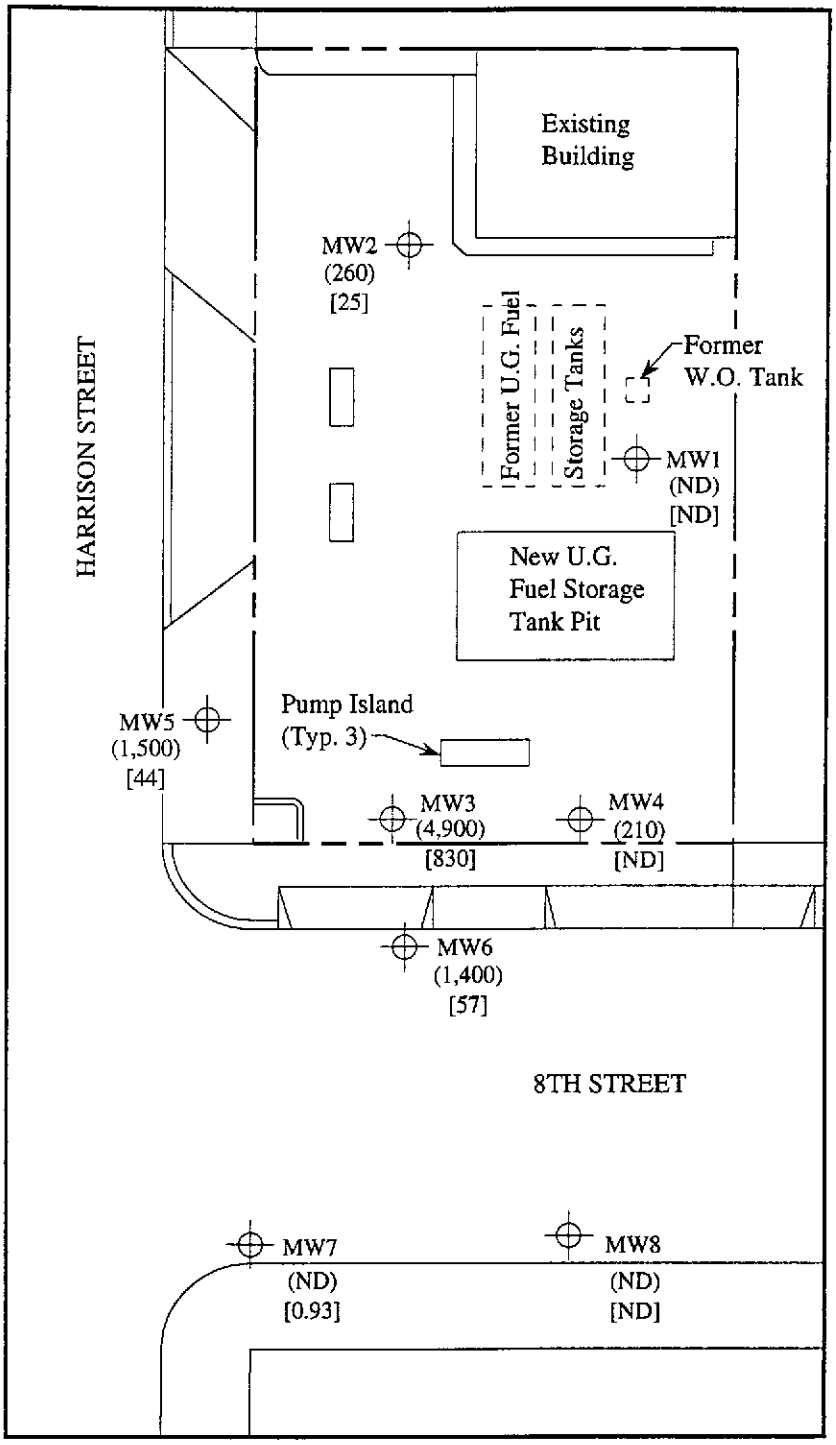
- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- Contours of ground water elevation
- Direction of ground water flow

0 30 60

Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE JANUARY 3, 1994 MONITORING EVENT

M P D S 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 JANUARY 3, 1994

M P D S SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #0752** **800 HARRISON STREET** **OAKLAND, CALIFORNIA**	FIGURE **2**

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Jan 13, 1994
Attention: Avo Avedessian	First Sample #:	401-0049		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 401-0049 MW-1	Sample I.D. 401-0050 MW-2	Sample I.D. 401-0051 MW-3	Sample I.D. 401-0052 MW-4	Sample I.D. 401-0053 MW-5	Sample I.D. 401-0054 MW-6
Purgeable Hydrocarbons	50	N.D.	260	4,900	210	1500	1400
Benzene	0.5	N.D.	25	830	N.D.	44	57
Toluene	0.5	N.D.	N.D.	100	N.D.	N.D.	N.D.
Ethyl Benzene	0.5	N.D.	5.5	170	0.76	42	8.5
Total Xylenes	0.5	N.D.	26	150	1.6	46	11
Chromatogram Pattern:		--	Gasoline	Gasoline	Gasoline	Gasoline	Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	20	1.0	10	10
Date Analyzed:	1/7/94	1/7/94	1/7/94	1/7/94	1/10/94	1/7/94
Instrument Identification:	HP-4	HP-5	HP-5	HP-4	HP-2	HP-5
Surrogate Recovery, %: (QC Limits = 70-130%)	89	90	93	87	114	102

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Jan 13, 1994
Attention: Avo Avedessian	First Sample #:	401-0055		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 401-0055 MW-7	Sample I.D. 401-0056 MW-8	Sample I.D. Method Blank
Purgeable Hydrocarbons	50	N.D.	N.D.	
Benzene	0.5	0.93	N.D.	
Toluene	0.5	N.D.	N.D.	
Ethyl Benzene	0.5	0.75	N.D.	
Total Xylenes	0.5	1.9	N.D.	
Chromatogram Pattern:		--	--	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	1/7/94	1/7/94	1/7/94
Instrument Identification:	HP-5	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	93	97	98

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 3510/3520/8015	Reported:	Jan 13, 1994
Attention: Avo Avedessian	First Sample #:	401-0049		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 401-0049 MW-1	Sample I.D. Method Blank
Extractable Hydrocarbons	50	N.D.	
Chromatogram Pattern:		--	

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	1/4/94	1/4/94
Date Analyzed:	1/6/94	1/5/94
Instrument Identification:	HP-3B	HP-3B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 3510/3520/8015	Reported:	Jan 13, 1994
Attention: Avo Avedessian	First Sample #:	401-0049		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS A FUEL FINGERPRINT

Analyte	Reporting Limit µg/L	Sample I.D. 401-0049 MW 1
Extractable Hydrocarbons	50	

Chromatogram Pattern: Total Extractable Petroleum Hydrocarbons in this sample were not detected in high enough concentrations to compare with known standards and approximate their make-up.

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	1/4/94
Date Analyzed:	1/6/94
Instrument Identification:	HP-3B

Extractable Hydrocarbons are quantitated against fresh Gasoline, Kerosene, Paint Thinner, Stoddard Solvent and Diesel standards.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water	Received:	Jan 3, 1994
Concord, CA 94520	Analysis for:	MTBE (EPA 8020 Modified)		
Attention: Avo Avedessian	First Sample #:	401-0052	Analyzed:	Jan 7, 1994
			Reported:	Jan 13, 1994

LABORATORY ANALYSIS FOR: MTBE (EPA 8020 Modified)

Sample Number	Sample Description	Detection Limit µg/L	Sample Result µg/L
401-0052	MW 4	0.60	240
401-0056	MW 8	0.60	51

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

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 1	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Jan 4, 1994
Attention: Avo Avedessian	Lab Number:	401-0049	Reported:	Jan 13, 1994

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**	**18**
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**	**1.4**
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	**0.50**	**0.93**
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

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 4	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Jan 4, 1994
Attention: Avo Avedessian	Lab Number:	401-0052	Reported:	Jan 13, 1994

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**	**9.0**
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**	**1.0**
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

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland	Sampled:	Jan 3, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 8	Received:	Jan 3, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Jan 4, 1994
Attention: Avo Avedessian	Lab Number:	401-0056	Reported:	Jan 13, 1994

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**	**1.5**
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**	**4.0**
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**	**1.2**
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

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal 0752, 800 Harrison Street, Oakland
Matrix: Liquid
QC Sample Group: 4010049-56

Reported: Jan 13, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 815
Analyst:	A.T.	A.T.	A.T.	A.T.	K.W.
MS/MSD Batch#:	4010109	4010109	4010109	4010109	BLK010494
Date Prepared:	1/7/94	1/7/94	1/7/94	1/7/94	1/4/94
Date Analyzed:	1/7/94	1/7/94	1/7/94	1/7/94	1/5/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	90	90	95	93	89
Matrix Spike Duplicate % Recovery:	85	90	90	92	96
Relative % Difference:	5.7	0.0	5.4	1.1	7.6
LCS Batch#:	2LCS010794	2LCS010794	2LCS010794	2LCS010794	BLK010494
Date Prepared:	1/7/94	1/7/94	1/7/94	1/7/94	1/4/94
Date Analyzed:	1/7/94	1/7/94	1/7/94	1/7/94	1/5/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B
LCS % Recovery:	102	101	106	102	89
% Recovery Control Limits:	71-133	72-128	72-130	71-120	28-122

SEQUOIA ANALYTICAL

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

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal 0752, 800 Harrison Street, Oakland
Matrix: Liquid
QC Sample Group: 4010049-56

Reported: Jan 13, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A.T.	A.T.	A.T.	A.T.
MS/MSD Batch#:	4010220	4010220	4010220	4010220
Date Prepared:	1/10/94	1/10/94	1/10/94	1/10/94
Date Analyzed:	1/10/94	1/10/94	1/10/94	1/10/94
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:	107	105	106	103
Matrix Spike Duplicate % Recovery:	107	100	101	101
Relative % Difference:	0.0	4.9	4.9	1.9
LCS Batch#:	1LCS011094	1LCS011094	1LCS011094	1LCS011094
Date Prepared:	1/10/94	1/10/94	1/10/94	1/10/94
Date Analyzed:	1/10/94	1/10/94	1/10/94	1/10/94
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	108	105	105	105
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

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

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal 0752, 800 Harrison Street, Oakland
Matrix: Liquid
QC Sample Group: 4010049-56

Reported: Jan 13, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J.F.	J.F.	J.F.	J.F.
MS/MSD Batch#:	4010037	4010037	4010037	4010037
Date Prepared:	1/7/94	1/7/94	1/7/94	1/7/94
Date Analyzed:	1/7/94	1/7/94	1/7/94	1/7/94
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	100	100	100	98
Matrix Spike Duplicate % Recovery:	105	105	100	100
Relative % Difference:	4.9	4.9	0.0	2.0
LCS Batch#:	3LCS010794	3LCS010794	3LCS010794	3LCS010794
Date Prepared:	1/7/94	1/7/94	1/7/94	1/7/94
Date Analyzed:	1/7/94	1/7/94	1/7/94	1/7/94
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	104	101	99	99
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

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
1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 0752, 800 Harrison Street, Oakland
2401 Stanwell Dr., Ste. 400	Matrix:	Liquid
Concord, CA 94520		
Attention: Avo Avedessian	QC Sample Group:	4010049, 4010052 & 4010056
	Reported:	Jan 13, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010
Analyst:	K.N.	K.N.	K.N.
MS/MSD Batch#:	3121622	3121622	3121622
Date Prepared:	1/4/94	1/4/94	1/4/94
Date Analyzed:	1/4/94	1/4/94	1/4/94
Instrument I.D.#:	HP-5890/1	HP-5890/1	HP-5890/1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	74	100	100
Matrix Spike Duplicate % Recovery:	74	100	100
Relative % Difference:	0.0	0.0	0.0
LCS Batch#:	LCS010494	LCS010494	LCS010494
Date Prepared:	1/4/94	1/4/94	1/4/94
Date Analyzed:	1/4/94	1/4/94	1/4/94
Instrument I.D.#:	HP-5890/1	HP-5890/1	HP-5890/1
LCS % Recovery:	78	100	97
% Recovery Control Limits:	28-167	35-146	38-150

SEQUOIA ANALYTICAL

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

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal 0752, 800 Harrison Street, Oakland

QC Sample Group: 401-0049

Reported: Jan 13, 1994

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA 8015	EPA 8015
Analyst:	K.W.	K.W.
Reporting Units:	µg/L	µg/L
Date Analyzed:	Jan 6, 1994	Jan 5, 1994
Sample #:	401-0049	Method Blank
Surrogate % Recovery:	104	98

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL
1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services
2401 Stanwell Dr., Ste. 400
Concord, CA 94520
Attention: Avo Avedessian

Client Project ID: Unocal 0752, 800 Harrison Street, Oakland

QC Sample Group: 4010049, 4010052 & 4010056

Reported: Jan 13, 1994

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8010
Analyst:	K.Nill	K.Nill	K.Nill	K.Nill
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Jan 4, 1994	Jan 4, 1994	Jan 4, 1994	Jan 4, 1994
Sample #:	401-0049	401-0052	401-0056	Method Blank
Surrogate #1 % Recovery:	129	90	94	127
Surrogate #2 % Recovery:	133	107	112	124

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

MPDS
Services, Inc.

CHAIN OF CUSTODY

SAMPLER: STEVE
WITNESSING AGENCY:
SITE NAME & ADDRESS: UNO-# 0752 OAKLAND, 800 HARRISON STREET
TURN AROUND TIME: REGULAR

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G BTXE	TPH-D	8010	MTBE	WATER FUEL FINGERPRINT			REMARKS
MW-1	1-3-94			X	X		6	MW	X	X	X		X			4010049 A-F
MW-2	"			X	X		2	"	X							0050 A-B
MW-3	"			X	X		2	"	X							0051 ↓
MW-4	"			X	X		6	"	X		X	X				0052 A-F
MW-5	"			X	X		2	"	X							0053 A-B
MW-6	"			X	X		2	"	X							0054 ↓
MW-7	"			X	X		2	"	X							0055 ↓
MW-8	"			X	X		6	"	X		X	X				0056 A-F

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
STEVE	1/3/94 4:15p	Melissa Creusere
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in 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

Melissa Creusere — Signature; Sample Control — Title; 1/3/94 — Date

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel. 510 602 5100 Fax: 510 602 0602