MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

December 15, 1994

City of San Leandro
Development Services
835 E. 14th Street
San Leandro, CA 94577

RE: Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Per the request of the Unocal Corporation Project Manager, Mr. Edward C. Ralston, enclosed please find our report (MPDS-UN2512-02) dated December 6, 1994 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) 277-2311.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

Jarrel F. Crider

/jfc

Enclosure

cc: Mr. Edward C. Ralston

2401 Stanwell Drive Suite 400 Concord CA 94520
TEL (510) 602-5120 FAX (510) 689-1918

MONITORING
PURGING
DISPOSING
SAMPLING
mpds SERVICES, INCORPORATED

MPDS-UN2512-02
December 6, 1994

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

Attention: Mr. Edward C. Ralston

RE: Quarterly Report
Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Dear Mr. Ralston:

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 not shown on a separate figure, due to unavailability of new survey data of monitoring wells. The monitoring well covers were damaged during site demolition and excavation activities, therefore, they need to be re-surveyed.

Ground water samples were collected on September 8, 1994. Prior to sampling, the wells were each purged of between 10 and 12 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. 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, TPH as diesel, and benzene

detected in the ground water samples collected this quarter are shown on the attached Figure 1. 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 the Alameda County Health Care Services Agency, and to the City of San Leandro.

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

Sincerely,

MPDS Services, Inc.

Sarkis A. 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
Figure 1
Laboratory Analyses
Chain of Custody documentation

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

TABLE 1

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)♦	Total Well Depth (feet)♦	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on September 8, 1994)						
MW1	N/A	15.81	32.72	0	No	12
MW2	N/A	16.22	32.61	0	No	11.5
MW3*	N/A	15.54	32.54	★★	N/A	0
MW4	N/A	15.72	32.21	0	No	11.5
MW5	WELL WAS INACCESSIBLE					
MW6	WELL WAS INACCESSIBLE					
MW7	N/A	15.32	29.88	0	No	10
(Monitored and Sampled on June 9, 1994)						
MW1	N/A	15.22	32.68	0	No	12
MW2	N/A	15.48	32.56	0	No	12
MW3	N/A	14.74	32.51	0	No	12.5
MW4	N/A	15.08	32.10	0	No	12
MW5	WELL WAS INACCESSIBLE					
MW6	WELL WAS INACCESSIBLE					
MW7	N/A	14.43	29.82	0	No	10.5
(Monitored and Sampled on October 30, 1992)						
MW1*	16.11	16.58	★	0	--	0
MW2	**	17.38	★	0	No	11
MW3	**	17.08	★	0.07	N/A	0
MW4	WELL WAS INACCESSIBLE					
MW5	WELL WAS INACCESSIBLE					
MW6	16.12	17.07	★	0	No	11
MW7	15.78	16.31	★	0	No	10
(Monitored and Sampled on May 26, 1992)						
MW1*	16.79	15.90	★	0	--	0
MW2	16.74	16.30	★	0	No	13
MW3	16.76▲	16.06	★	0.12	N/A	0
MW4	16.76	15.62	★	0	No	13
MW5*	16.80	16.22	★	0	--	0
MW6	16.85	16.34	★	0	No	13
MW7	16.79	15.30	★	0	No	13

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Cover Elevation (feet)▲	Well Casing Elevation (feet)
MW1	32.69	NA
MW2	33.04	NA
MW3	32.73	NA
MW4	32.38	NA
MW5	33.02	NA
MW6	33.19	NA
MW7	32.09	NA

◆ The depth to water level and total well depth measurements were taken from the top of the well casings. Prior to June 9, 1994, the depth to water level and total well depth were taken from the top of well covers.

* Monitored only.

** The Christy boxes for wells MW1 through MW6 were damaged during recent tank removal and soil excavation activities at the site; therefore, the ground water elevation could not be accurately determined.

▲ The previous elevations of the top of the well covers before site excavation works, were surveyed relative to Mean Sea Level.

★ Total well depth was not measured.

★★ Smear was observed on sounder. However, unable to measure exact thickness of product.

-- Sheen determination was not performed.

N/A = Not Applicable.

NA = Not Available.

Note: Monitoring data prior to June 9, 1994, were provided by Kaprealian Engineering, Inc.

TABLE 2

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
9/08/94	MW1	--	160♦♦	ND	1.6	ND	3.1	--
	MW2	--	3,000♦	ND	ND	ND	17	--
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	MW4	ND	300♦	ND	ND	ND	ND	--
	MW5	WELL WAS INACCESSIBLE						
	MW6	WELL WAS INACCESSIBLE						
	MW7	--	ND	ND	1.3	ND	1.6	--
6/09/94	MW1	--	580♦	ND	ND	ND	ND	--
	MW2	--	1,900♦♦	6.7	ND	66	ND	--
	MW3	17,000*	69,000	1,300	7,100	1,900	11,000	--
	MW4	ND	780♦	ND	ND	ND	ND	--
	MW5	WELL WAS INACCESSIBLE						
	MW6	WELL WAS INACCESSIBLE						
	MW7	--	610♦	ND	ND	ND	ND	--
10/30/92	MW1	NOT SAMPLED						
	MW2	--	1,200♦	ND	ND	ND	ND	--
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	MW4	WELL WAS INACCESSIBLE						
	MW5	NOT SAMPLED						
	MW6	--	ND	ND	ND	ND	ND	--
	MW7	--	ND	ND	ND	ND	ND	--
5/26/92	MW1	NOT SAMPLED						
	MW2	--	2,900	8.8	9.3	54	36	--
	MW3▲	2,400,000	1,300,000	5,100	66,000	20,000	160,000	880
	MW4	ND	120	0.59	0.82	ND	1.9	--
	MW5	NOT SAMPLED						
	MW6	--	ND	ND	ND	ND	0.65	--
	MW7	--	ND	ND	ND	ND	0.60	--
2/27/92	MW1	NOT SAMPLED						
	MW2	--	330	12	12	10	93	--
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	MW4	ND	43	ND	1.0	0.37	2.5	--
	MW5	NOT SAMPLED						
	MW6	--	ND	3.2	ND	ND	3.8	--
	MW7	--	38	ND	0.97	0.69	4.0	--

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
11/19/91	MW1	NOT SAMPLED						
	MW2	--	220	2.5	8.4	2.4	14	--
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	MW4	ND	ND	ND	ND	ND	ND	--
	MW5	NOT SAMPLED						
	MW6	--	ND	ND	ND	ND	ND	--
8/15/91	MW1	NOT SAMPLED						
	MW2	--	ND	ND	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT						
	MW4	ND	ND	ND	ND	ND	ND	ND
	MW5	NOT SAMPLED						
	MW6	--	ND	ND	ND	ND	ND	ND
5/24/91	MW1	--	ND	ND	ND	ND	ND	ND
	MW2	--	ND	1.5	ND	ND	ND	ND
	MW3	2,000	23,000	940	3,400	590	2,600	ND
	MW4	ND	ND	0.64	ND	ND	ND	ND
	MW5	ND	ND	ND	ND	ND	ND	ND
	MW6	--	ND	ND	ND	ND	ND	ND
2/04/91	MW1	ND	ND	ND	0.31	ND	0.62	ND
	MW2	ND	ND	ND	0.38	ND	0.87	ND
	MW3	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT						
	MW4	ND	ND	ND	0.72	ND	1.1	ND
	MW5	ND	ND	ND	0.35	ND	ND	ND
	MW6	ND	ND	ND	ND	ND	ND	ND
11/06/90	MW1	ND	ND	ND	ND	ND	ND	
	MW2	ND	ND	ND	0.42	ND	1.4	ND
	MW3	940	16,000	820	1,500	2,200	770	ND
	MW4	ND	ND	ND	0.36	ND	0.98	ND
	MW5	ND	ND	ND	ND	ND	ND	ND
	MW6	ND	ND	1.6	0.35	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
8/09/90	MW1	ND	ND	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND	ND	ND
	MW3	500	1,900	56	140	140	31	ND
	MW4	ND	ND	ND	ND	ND	ND	ND
	MW5	ND	ND	ND	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND	ND	ND
5/10/90	MW1	ND	ND	ND	ND	ND	ND	ND
	MW2	ND	43	ND	1.0	ND	ND	ND
	MW3	850	6,200	94	460	160	540	2.8
	MW4	88	54	ND	2.0	ND	0.37	ND
	MW5	83	ND	ND	ND	ND	0.31	ND
	MW6	ND	ND	ND	1.2	ND	ND	ND
2/23/90	MW1	ND	ND	ND	ND	ND	ND	ND
	MW2	ND	44	ND	ND	ND	ND	ND
	MW3	350	ND	0.32	ND	ND	ND	1.3
	MW4	ND	ND	ND	ND	ND	ND	ND
	MW5	ND	ND	ND	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND	ND	ND
11/21/89	MW1	ND	ND	ND	ND	ND	ND	8.9
	MW2	ND	48	ND	0.51	ND	ND	1.6
	MW3	110	1,900	ND	ND	ND	ND	3.8
	MW4	ND	ND	ND	ND	ND	ND	ND
	MW5	70	ND	ND	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND	ND	ND
8/29/89	MW4	120	ND	ND	ND	ND	ND	ND
	MW5	100	ND	ND	0.94	0.30	ND	ND
	MW6	ND	ND	ND	ND	ND	ND	ND
8/10/89	MW1	ND	ND	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	0.39	ND	ND	ND
	MW3	860	3,200	73	140	35	240	ND
4/25/89	MW1	100	ND	0.31	ND	ND	ND	--
	MW2	ND	32	0.35	ND	ND	ND	--
	MW3	5,700	56	ND	ND	0.31	0.49	--

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

TOG = Total Oil & Grease

* Sequoia Analytical Laboratory reported that they hydrocarbons detected appeared to be a diesel and non-diesel mixture

♦ 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.

▲ Free product was detected in well MW3; however, a water sample was collected and analyzed to determine if the product was predominantly hydrocarbon based.

-- Indicates analysis was not performed.

ND = Non-detectable.

mg/L = milligrams per liter.

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

Note: Monitoring data prior to June 9, 1994, were provided by Kaprealian Engineering, Inc.

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	Tetrachloro-ethene	1,1-Dichloro-ethane	1,1,1-Trichloro-ethane	Chloro-methane	1,1-Dichloro-ethene	1,2-Dichloro-benzene
9/08/94	MW1	1.2	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW4***	1.8	ND	ND	ND	ND	ND
	MW5	WELL WAS INACCESSIBLE					
	MW6	WELL WAS INACCESSIBLE					
	MW7	0.76	ND	ND	ND	ND	ND
6/09/94	MW1	1.0	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND	ND
	MW4**	2.8	8.8	0.83	ND	0.51	ND
	MW5	WELL WAS INACCESSIBLE					
	MW6	WELL WAS INACCESSIBLE					
	MW7	0.67	ND	ND	ND	ND	ND
10/30/92	MW2	ND	ND	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW4	WELL WAS INACCESSIBLE					
	MW6	1.2	ND	ND	ND	ND	ND
	MW7	2.2	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	Tetrachloro-ethene	1,1-Dichloro-ethane	1,1,1-Trichloro-ethane	Chloro-methane	1,1-Dichlo-roethene	1,2-Dichloro-benzene
5/26/92	MW2	ND	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND	ND
	MW4	2.4	13	3.5	ND	0.83	ND
	MW6	1.1	ND	ND	ND	ND	1.7
	MW7	2.2	ND	ND	ND	ND	ND
2/27/92	MW2	ND	ND	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW4	3.5	6.0	ND	ND	ND	ND
	MW6	1.5	ND	ND	ND	ND	1.6
	MW7	2.4	ND	ND	ND	ND	ND
11/19/91	MW2	ND	ND	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW4	3.4	ND	ND	ND	ND	ND
	MW6	1.3	ND	ND	ND	ND	ND
8/15/91	MW2	ND	ND	ND	ND	ND	ND
	MW3	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					
	MW4	3.6	ND	ND	ND	ND	ND
	MW6	1.2	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	Tetrachloro-ethene	1,1-Dichloro-ethane	1,1,1-Trichloro-ethane	Chloro-methane	1,1-Dichloro-roethene	1,2-Dichloro-benzene
5/24/91	MW1	4.6	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND	ND
	MW4	4.1	2.5	3.9	ND	ND	ND
	MW5	0.89	ND	ND	ND	ND	ND
	MW6	0.88	ND	ND	5.6	ND	ND
11/06/90	MW1	4.8	ND	ND	ND	ND	ND
	MW2	ND	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND	ND
	MW4	2.9	ND	ND	ND	ND	ND
	MW5	0.7	ND	ND	ND	ND	ND
	MW6	1.2	ND	ND	ND	ND	ND
4/25/89	MW1*	3.3	ND	ND	ND	ND	ND
	MW2	0.68	ND	ND	ND	ND	ND
	MW3	1.0	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

* Trichloroethene was detected at 0.55 µg/L.

** Trichloroethene was detected at 0.70 µg/L.

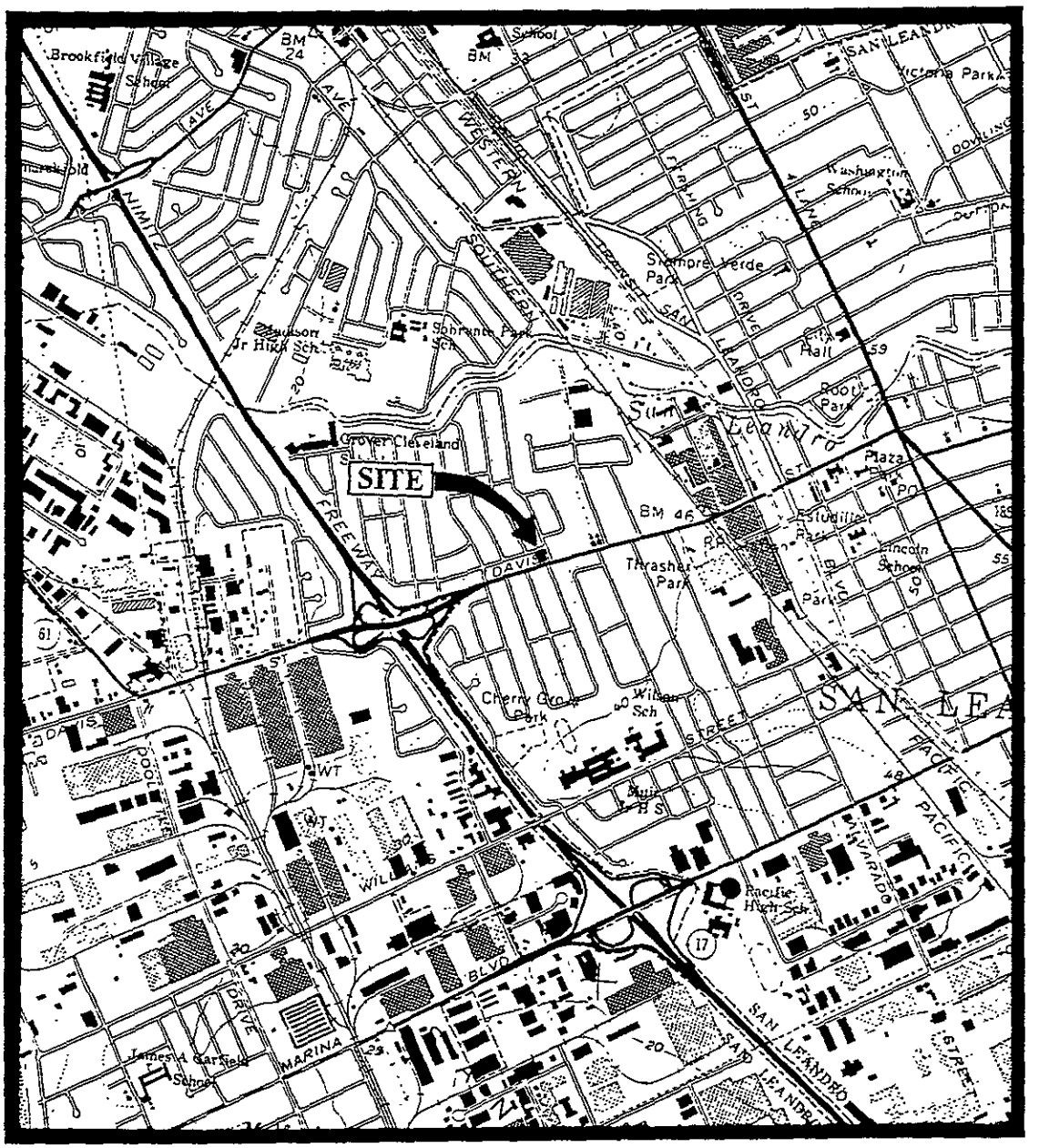
*** Trichloroethene was detected at 0.60 µg/L and 1,2 Dichloroethane was detected at 4.8 µg/L.

ND - Non-detectable.

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

Note: - All EPA method 8010 constituents were non-detectable, except for those shown in the above table.

- Laboratory analyses data prior to June 9, 1994, were provided by Kaprealian Engineering, Inc.

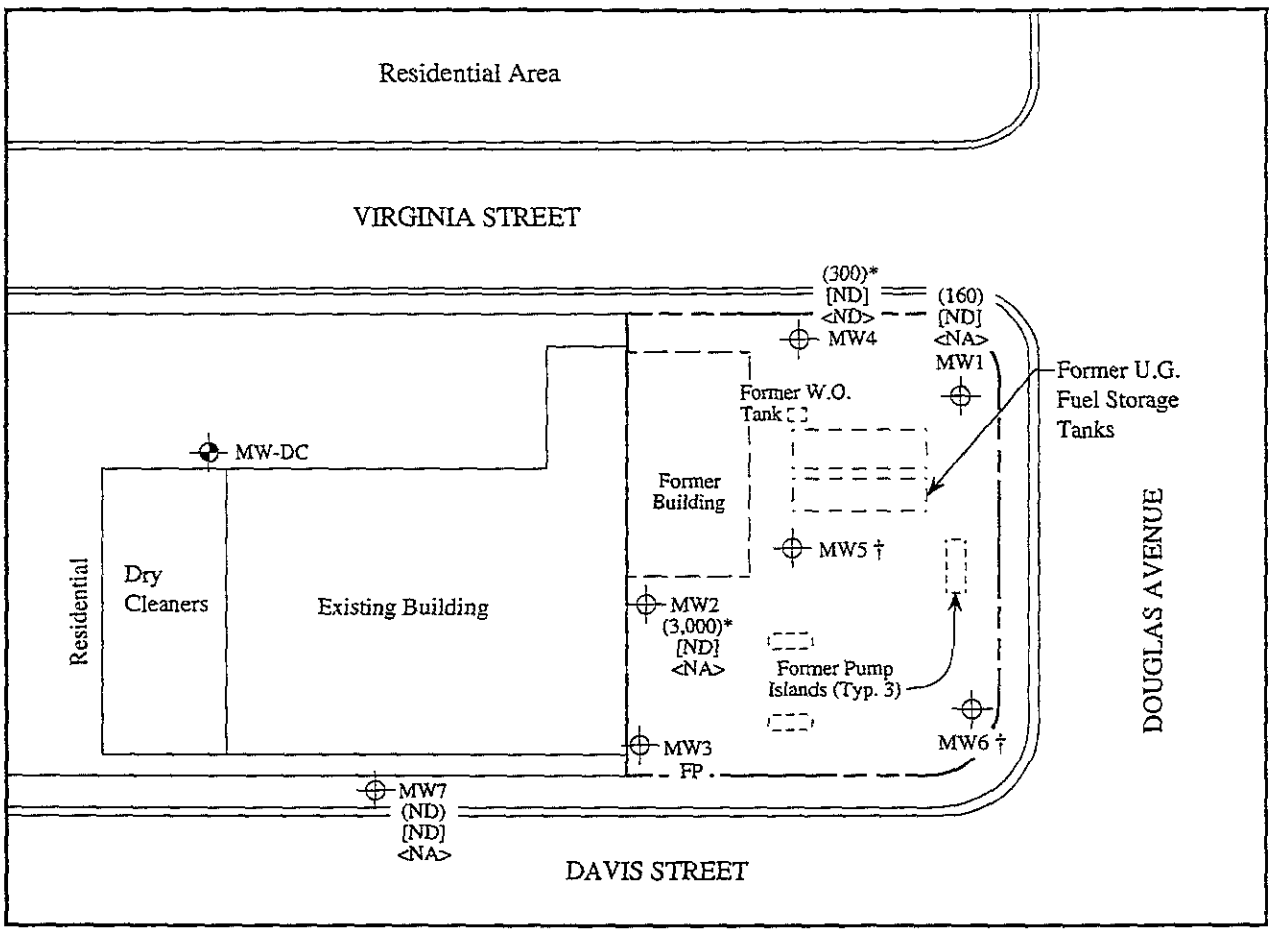


Base modified from 7 5 minute U S G.S San Leandro Quacrangle (photorevised 1980)

0 2000 4000

Approx scale feet

mpds SERVICES, INCORPORATED	FORMER UNOCAL S/S #2512 1300 DAVIS STREET SAN LEANDRO, CALIFORNIA	LOCATION MAP



LEGEND

- ⊕ Monitoring well (by KEI – existing)
- ⊕ Monitoring well (by others – existing)
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- < > Concentration of TPH as diesel in µg/L

ND = Non-detectable NA = Not analyzed, FP = Free product

† Well was inaccessible

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

0 50 100

Approx scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON SEPTEMBER 8, 1994

MPDS SERVICES, INCORPORATED

FORMER UNOCAL S/S #2512
1300 DAVIS STREET
SAN LEANDRO, CALIFORNIA

FIGURE
1

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 9406: (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #2512, 1300 Davis St., San Leandro	Sampled:	Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Matrix Descript:	Water	Received:	Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Sep 27, 1994
Attention: Avo Avedessian	First Sample #:	409-0549		

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
409-0549	MW 1	160^	ND	1.6	ND	3.1
409-0550	MW 2	3,000*	ND	ND	ND	17
409-0551	MW 4	300*	ND	ND	ND	ND
409-0552	MW 7	ND	ND	1.3	ND	1.6

* Hydrocarbons detected did not appear to be gasoline.
^ Hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

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
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #2512, 1300 Davis St., San Leandro	Sampled:	Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Matrix Descript:	Water	Received:	Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Sep 27, 1994
Attention: Avo Avedessian	First Sample #:	409-0549		

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%)
409-0549	MW 1	Gasoline & Discrete Peak^	1.0	9/15/94	HP-5	117
409-0550	MW 2	Discrete Peak*	20	9/15/94	HP-5	121
409-0551	MW 4	Discrete Peak*	4.0	9/19/94	HP-2	107
409-0552	MW 7	–	1.0	9/15/94	HP-5	109

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note.
*^Discrete peak refers to an unidentified peak in the MTBE range.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #2512, 1300 Davis St., San Leandro	Sampled:	Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 4	Received:	Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Sep 19, 1994
Attention: Avo Avedessian	Lab Number:	409-0551	Reported:	Sep 27, 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	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	4.8
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	1.8
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	0.60
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 of File

Alan B. Kemp
Project Manager

Sequoia Analytical
680 Chesapeake Drive, Redwood City, CA 9406 (415) 364-9600 FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520 (510) 686-9600 FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #2512, 1300 Davis St., San Leandro	Sampled: Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 2	Received: Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed: Sep 19, 1994
Attention: Avo Avedessian	Lab Number:	409-0550	Reported: Sep 27, 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	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	N.D.
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 of File

Alan B. Kemp
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #2512, 1300 Davis St., San Leandro	Sampled:	Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 1	Received:	Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Sep 19, 1994
Attention: Avo Avedessian	Lab Number:	409-0549	Reported:	Sep 27, 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	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	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, #1271

Signature of File

Alan B. Kemp
Project Manager

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MPDS Services	Client Project ID:	*Unocal #2512, 1300 Davis St., San Leandro*	Sampled: Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received: Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 3510/8015	Reported: Sep 27, 1994
Attention: Avo Avedessian	First Sample #:	409-0551	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 409-0551 MW 4
Extractable Hydrocarbons	50	N.D.
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	9/14/94
Date Analyzed:	9/19/94
Instrument Identification:	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, #1271

Signature of File

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Project Manager

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

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro
Matrix: Liquid
QC Sample Group: 409-0549

Reported: Oct 3, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
MS/MSD Batch#:	4090459	4090459	4090459	4090459
Date Prepared:	9/14/94	9/14/94	9/14/94	9/14/94
Date Analyzed:	9/14/94	9/14/94	9/14/94	9/14/94
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:	115	120	125	122
Matrix Spike Duplicate % Recovery:	100	105	110	108
Relative % Difference:	14	13	13	12
LCS Batch#:	3LCS091594	3LCS091594	3LCS091594	3LCS091594
Date Prepared:	9/15/94	9/15/94	9/15/94	9/15/94
Date Analyzed:	9/15/94	9/15/94	9/15/94	9/15/94
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	101	101	108	105
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Signature of File

Alan B. Kemp
Project Manager

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

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #2512, 1300 Davis St., San Leandro	Sampled:	Sep 8, 1994
2401 Stanwell Dr., Ste. 400	Sample Descript:	Water, MW 7	Received:	Sep 8, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8010	Analyzed:	Sep 19, 1994
Attention: Avo Avedessian	Lab Number:	409-0552	Reported:	Sep 27, 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	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	0.76
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 of File

Alan B. Kemp
Project Manager

Sequoia Analytical

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

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro
Matrix: Liquid
QC Sample Group: 4090549-552

Reported: Oct 3, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 Mod
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon	K.V.S.
MS/MSD Batch#:	4091008	4091008	4091008	4091008	BLK091494
Date Prepared:	9/19/94	9/19/94	9/19/94	9/19/94	9/14/94
Date Analyzed:	9/19/94	9/19/94	9/19/94	9/19/94	9/19/94
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	300 µg/L
Matrix Spike % Recovery:	100	105	110	112	80
Matrix Spike Duplicate % Recovery:	100	105	115	113	75
Relative % Difference:	0.0	0.0	4.4	0.89	6.5
LCS Batch#:	1LCS091994	1LCS091994	1LCS091994	1LCS091994	BLK091494
Date Prepared:	9/19/94	9/19/94	9/19/94	9/19/94	9/14/94
Date Analyzed:	9/19/94	9/19/94	9/19/94	9/19/94	9/19/94
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2	HP-3A
LCS % Recovery:	100	103	112	112	80
% Recovery Control Limits:	71-133	72-128	72-130	71-120	28-122

SEQUOIA ANALYTICAL, #1271

Signature of File

Alan B. Kemp
Project Manager

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

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

Client Project ID: Unocal #2512, 1300 Davis St., San Leandro
Matrix: Liquid
QC Sample Group: 4090549-552

Reported: Oct 3, 1994

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#:	4091000	4091000	4091000
Date Prepared:	9/20/94	9/20/94	9/20/94
Date Analyzed:	9/20/94	9/20/94	9/20/94
Instrument I.D.#:	HP5890/1	HP5890/1	HP5890/1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L
Matrix Spike % Recovery:	127	115	104
Matrix Spike Duplicate % Recovery:	125	111	113
Relative % Difference:	1.6	3.5	8.3
LCS Batch#:	LCS091994	LCS091994	LCS091994
Date Prepared:	9/20/94	9/20/94	9/20/94
Date Analyzed:	9/20/94	9/20/94	9/20/94
Instrument I.D.#:	HP5890/1	HP5890/1	HP5890/1
LCS % Recovery:	129	118	105
% Recovery Control Limits:	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

Signature of 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

CHAIN OF CUSTODY

SAMPLER: RAY MARANGOSIAN

WITNESSING AGENCY:

UNOCAL S/S # 2512 CITY: SAN LEANDRO

ADDRESS: 1300 DAVIS ST.

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	9-8-94	9:00	x	x		4	Well	x			x					4090549 AD
MW2	"	11:00	x	x		4	"	x			x					4090550
MW4	"	10:30	x	x		5	"	x	x		x					4090551 AE
MW7	"	9:50	x	x		4	"	x			x					4090552 AD

RELINQUISHED BY (SIGNATURE)	DATE/TIME	RECEIVED BY (SIGNATURE)
Ray Marangosian 9-8-94	14:30	[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: [signature] TITLE: Analyst DATE: 9/8/94