

December 5, 1994

Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, CA 94501

Attn: Mr. Scott Seery

RE: Unocal Service Station #6277

15803 E. 14th Street
San Leandro, California

Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Mr. David J. Camille, enclosed please find our report (MPDS-UN6277-04) dated November 8, 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) 277-2335.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Mr. David J. Camille

MPDS-UN6277-04 November 8, 1994

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

Attention: Mr. David J. Camille

RE: Quarterly Data Report

Unocal Service Station #6277

15803 E. 14th Street <u>San Leandro, California</u>

Dear Mr. Camille:

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

RECENT FIELD ACTIVITIES

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

Ground water samples were collected on October 6, 1994. 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. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

ANALYTICAL RESULTS

The ground water samples were analyzed at Sequoia Analytical Laboratory and were accompanied by properly executed Chain of Custody documentation. The analytical results of the ground water samples collected to date are summarized in Tables 2 and 3. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and benzene detected in the ground water samples collected this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation are attached to this report.

MPDS-UN6277-04 November 8, 1994 Page 2

LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

DISTRIBUTION

A copy of this report should be sent to Mr. Scott Seery of the Alameda County Health Care Services Agency.

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

Sincerely,

MPDS Services, Inc.

Sorfer Korker Sarkis A. Karkarian

Staff Engineer

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

Tout My

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
SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)	Product Thickness (feet)	Sheen	Water Purged (gallons)
	(Moni	tored and S	ampled on Oct	tober 6, 199	4)	
MWl	22.16	10.34	24.43	0	No	10
MW2A	22.22	11.31	25.20	0	No	9.5
MW3	22.40	9.82	23.37	0	No	9.5
MW4	22.26	9.50	22.80	0	No	9.5
MW5	22.20	7.09	20.52	0	ИО	9.5
MW6	22.25	6.59	19.23	0	No	9
	(Mo	nitored and	Sampled on J	uly 7, 1994)	ı	
MW1	22.27	10.23	24.31	O	No	10
MW2A	22.37	11.16	25.20	0	МО	10
мwз	22.55	9.67	23.17	0	No	9.5
MW4	22.38	9.38	22.12	0	ИО	9
MW5	22,33	6.96	20.53	0	No	9.5
MW6	22.42	6.42	19.22	0	No	9
	(Mon	itored and	Sampled on Ar	oril 4, 1994)	
MW1	22.23	10.27	24.30	0	No	10
MW2A	22.30	11.23	25.20	0	No	9.5
MW3	22.50	9.72	23.17	0	No	9.5
MW4	22.37	9.39	22.10	0	No	9
MW5	22.25	7.04	20.51	0	No	9.5
MW6	22.32	6.52	19.23	0	No	9
	(Moni	tored and S	ampled on Jar	nuary 6, 199	4)	
MW1	22.19	10.31	24.30	0	ИО	1.0
MW2A	22.24	11.29	25.19	0	ИО	9.5
MW3	22.41	9.81	23.15	0	No	9.5
MW4	22.33	9.43	22.10	0	NO	9
MW5	22.20	7.09	20.51	0	No	9.5
MW6	22.24	6.60	19.21	0	No	9

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation <u>(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>Date</u>	Well #	TPH as <u>Diesel</u>	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	Xylenes
10/06/94	MW1		27.0 2	119-	ND	ND	13
_,,,,,,	MW2A	- ~	71	6.4	ND	2.1	2.4
	MW3		93♦	ND	ND	ND	ИD
	MW4		78♦	ND	ИD	ND	ND
	MW5	- ~	ND	ND	ND	ND	ND
	MW6	pro tob	ND	ND	ND	ND	ND
7/07/94	MW1	~ <i>~</i>	2,100♦♦	250	ND	57	200
	MW2A		90	5.2	ND	1.5	2.2
	MW3		190♦	ND	ND	ND	ND
	MW4		150♦	ND	ND	ND	ND
	MW5		72♦	ND	ИD	ND	ИD
	MW6		ND	ND	ND	ND	ND
4/04/94	MW1	- ~	1,100	15	ND	ND	7.4
	ASWM		80	8.0	ИD	1.4	1.5
	MW3		170♦	ND	ND	ND	ND
	MW4		120	0.76	0.76	ND	0.98
	MW5		65♦	ND	ND	ND	ND
	MW6	= =	57♦	ND	ND	ND	ND
1/06/94	MW1		260	21	ND	2.5	14
	MW2A		110	2.6	ND	1.6	1.7
	MW3	- -	140♦	ND	ND	ND	ИD
	MW4		100♦	ND	ND	ND	ND
	MW5		62♦	ND	ND	ND	ND
	MW6		53♦	ND	ND	ND	ND
10/06/93	MW1		1,200♦	36	ND	ND	23
	MW2A		110♦	12	ND	7.4	1.4
	MW3		140♦	ND	ND	ND	ND
	MW4		130♦	ИD	ИD	ND	ND
	MW5		60♦	ND	ND	ND	ND
	ММӨ		ND	ИD	ND	ND	ND

TABLE 2 (Continued)
SUMMARY OF LABORATORY ANALYSES
WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	TPH as <u>Gasoline</u>	<u>Benzene</u> .	Toluene	Ethyl- benzene	Xylenes
7/01/93	MWl		510	100	0.79	5.7	52
, ,,	MW2A		74♦	0.75	ND	ND	ND
	MW3		120♦	ND	ND	ND	ND
	MW4		91.♦	ND	ND	ND	ND
	MW5		54♦	ND	ND	ND	ND
	MW6	 -	ND	ND	ND	ND	ND
4/02/93	MW1	ND	690	94	0.73	5.3	39
	MW2A	ND	120	7.2	ND	5.8	1.2
	MW3	ND	130♦	ND	ND	ND	ND
	MW4	ИD	110◆	ND	ND	ND	ND
	MW5	ND	65♦	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND	ND
1/29/93	MW1	ND	740♦♦	69	ND	3.8	43
	MW2A	ND	66♦	1.4	ND	ND	ND
	MW3	ND	130♦	0.84	ND	ND	ND
	MW4	ND	130♦	0.95	ND	ND	ND
10/20/92	MWl	ND	720	110	1.4	18	110
	MW2A	ND	96	2.8	ND	1.8	1.6
	MW3	ND	180♦	ND	ND	ND	ND
	MW4	ND	110♦	ND	ND	ND	ND
7/20/92	MW1	62*	630	100	2.8	6.3	52
	MW2A	ND	99	8.6	ND	2.4	0.95
	MW3	ND	120♦	ND	ND	ND	ND
	MW4	ND	08	ND	ND	ND	ND
4/23/92	MW1		530	100	7.9	4.6	60
	MW2A	ND	190	15	ND	15	2.0
	MW3		150♦	1.6	ND	ND	ИD
	MW4		120♦	ND	ND	ND	ND
1/13/92	MWl		450	240	4.6	8.6	73
	MW2A	ND	160	11	2.0	10	5.9
	MW3		120♦	ND	ND	ND	ND
	MW4		58♦	ND	ND	ND	ND

TABLE 2 (Continued)
SUMMARY OF LABORATORY ANALYSES

WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xvlenes</u>
Dace	11.						
9/10/91	MW1		280	38	3.1	4.1	22
	MW2A	65	180	8.7	0.93	15	13
	MW3		170	ND	ND	ND	ND
	MW4		56	ND	ND	ND	ND
6/10/91	MW1		310	1.5	ND	ND	0.31
0/10/31	MW2A	100	54	1.2	ND	ND	0.69
	MW3		160	0.65	ND	ND	ND
	MW4		64	ND	ND	ND	ND
3/15/91	MW1		110	21	ND	ND	8.4
3/23/22	MW2A	ND	160	2.5	ND	ND	51
	MW3		150	ND	ND	ND	0.45
	MW4		53	ND	ND	ND	ND
12/14/90	MW1		450	150	6.8	0.28	49
12/11/00	MW3		150	ND	ND	ND	ND
	MW4		54	ND	ND	ND	ND
9/19/90	MW1		140	ND	ND	ND	3.5
5/15/50	MW3		74	0.74	ND	ND	ND
	MW4	na ar	61	ND	ND	ND	ND
6/25/90	MW1	- -	310	10	0.89	0.37	2.1
0/25/50	MW3		190	1.5	0.68	ND	5.3
	MW4		66	ND	ND	ND	ND
3/29/90	MW1		320	12	1.6	0.31	3.5
3,23,30	MW3		85	ND	ND	ND	ND
	MW4		120	0.39	ND	ND	ND
12/12/89	MW1		340	100	13	3.4	44
12/12/43	MW2	1,700	660	220	6.6	13	36
	MW3	-,	120	6.7	0.64	0.46	1.5
	MW4		97	4.6	ND	ND	ND

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES WATER

TPH as TPH as <u>Date Well # Diesel Gasoline Benz</u>	Ethyl- sene Toluene benzene Xylenes
9/13/89 MW1 550 3:	2 17 3.4 52
MW2 ND 170 2.	0 0.38 ND 9.5
MW3 76 N	D ND ND ND
MW4 77 NI	D ND ND ND
6/06/89 MW1 590 NI	D ND ND ND
MW2 ND 77 NI	D ND ND ND
MW3 32 NI	D ND ND ND
MW4 37 NI	D 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 non-gasoline mixture.
- * Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.
- -- Indicates analysis was not performed.

ND = Non-detectable.

Results are in micrograms per liter $(\mu g/L)$, 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>Date</u>	Well #	Tetra- chloroethene	Trichloro- ethene	1,2- Dichloro- ethane	Cis-1,2- Dichloro- ethene	Total Oil & Grease (mg/L)
4/04/94	MW1*	390	38	ND	17	
1/06/94	ММЗ	960	ND	ND	ND	pro cas
4/02/93	MW5 MW6	190 71	ND ND	ND	ND ND	
1/29/93	MW1 MW2A MW3 MW4	300 140 980 950	ND 10 ND ND	ND ND ND	ND ND ND	
10/20/92	MW1 MW2A MW3 MW4	230 64 1,100 360	22 11 20 17	ND ND ND	16 ND ND ND	
7/20/92	MW1 MW2A MW3 MW4	200 35 1,400 440	7.4 7.2 25 11	ND ND ND	ND 4.8 ND ND	 ND
4/23/92	MW2A	17	5.6	ND	1.9	ND
1/13/92	MW2A**	33	ИД	ND	2.1	ИD
6/10/91	MW2A	150	10	ИD	ND	ND
3/15/91	MW2A	67	8.2	ND	2.6	ND
12/12/89	MW2	30	9.0	ND	ND	1.2
9/13/89	MW2	18	6.1	4.2	1.2	ND
6/06/89	MW2	110	4.4	2.8	ИD	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES WATER

- * All EPA method 8240 constituents were non-detectable, except for concentrations of benzene at 29 $\mu g/L$, ethylbenzene at 3.4 $\mu g/L$, total xylenes at 19 $\mu g/L$, and trans-1,2-dichloroethene at 2.4 $\mu g/L$.
- ** 1,1,2-trichloroethane was detected at a concentration of 9.9 μ g/L.

ND = Non-detectable.

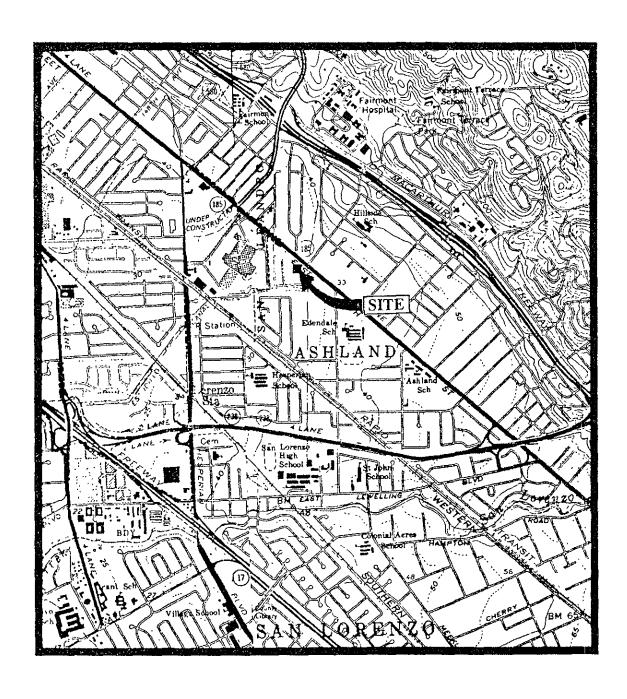
-- Indicates analysis was not performed.

mg/L = milligrams per liter.

Results are in micrograms per liter ($\mu g/L$), 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.

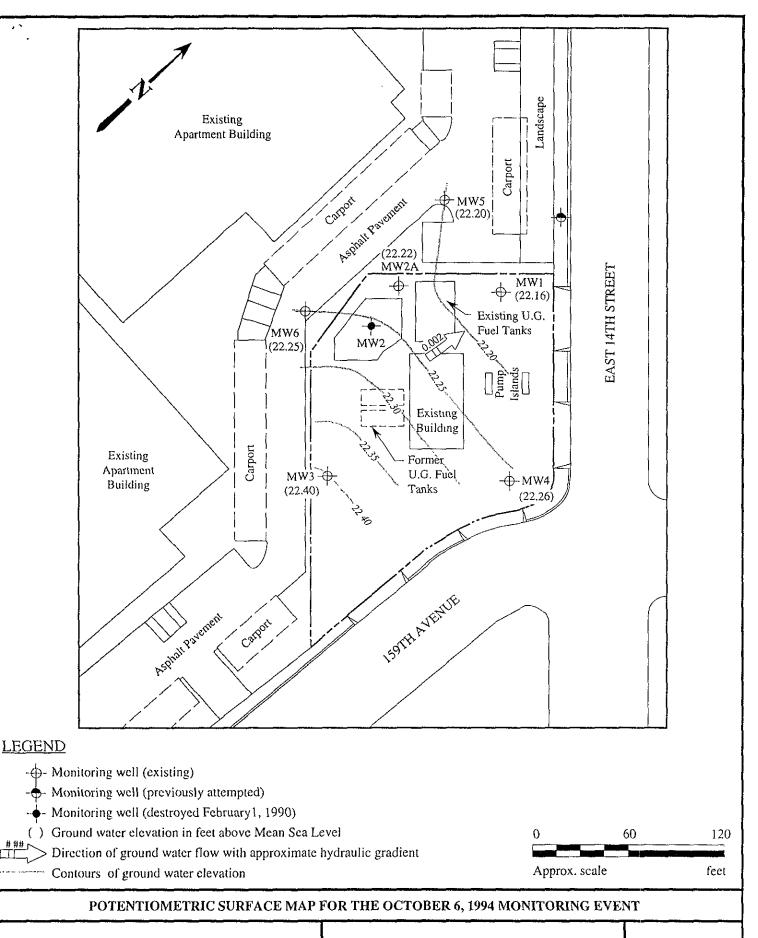


Base modified from 7.5 minute U.S.G.S. Hayward and San Leandro Quadrangles (both photorevised 1980)





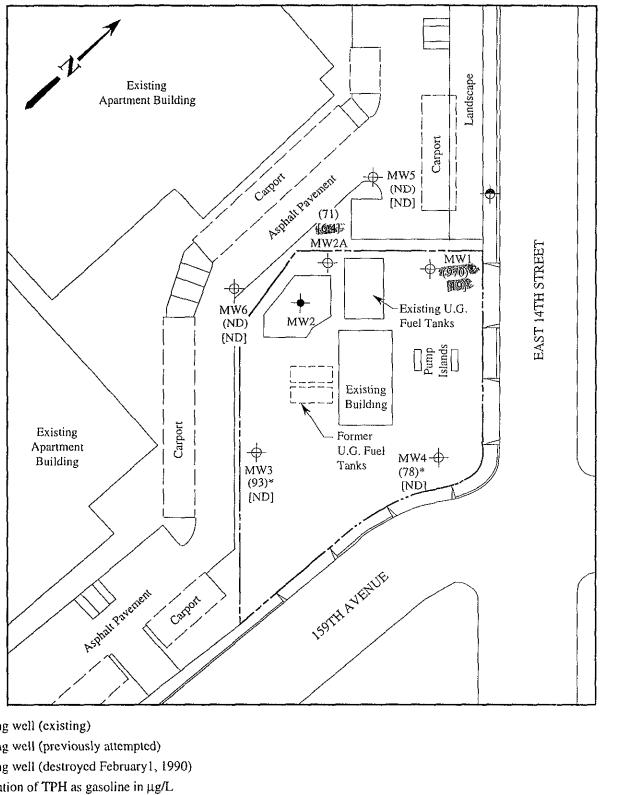
UNOCAL SERVICE STATION #6277 15803 E. 14TH STREET SAN LEANDRO, CALIFORNIA LOCATION MAP



DDS SERVICES, INCORPORATED

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

FIGURE



LEGEND

- Monitoring well (existing)

Monitoring well (previously attempted)

Monitoring well (destroyed February1, 1990)

Concentration of TPH as gasoline in µg/L

[] Concentration of benzene in µg/L

ND = Non-detectable

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



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON OCTOBER 6, 1994



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

FIGURE



680 Chesapeake Drive 1900 Bates Avenue, Suite L. Concord, CA 94520 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Sacramento, CA 95834

(415) 364-9600 (510) 686-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 400 Concord, CA 94520 Attention: Avo Avedessian Client Project ID: Matrix Descript: Analysis Method: First Sample #:

Unocal #6277, 15803 E. 14th Street, Water San Leandro

EPA 5030/8015/8020

410-0616

Sampled:

Oct 6, 1994 Oct 6, 1994

Received: Reported: Oct 20, 1994

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
410-0616	MW-1	970	19	N.D.	N.D.	13
410-0617	MW-2A	71	6.4	N.D.	2.1	2.4
410-0618	MW-3	93*	N.D.	N.D.	N.D.	N.D.
410-0619	MW-4	78*	N.D.	N.D.	N.D.	N.D.
410-0620	MW-5	N.D.	N.D.	N.D.	N.D.	N.D.
410-0621	MW-6	N.D.	N.D.	N.D.	N.D.	N.D.

^{*} Hydrocarbons detected did not appear to be gasoline.

50 0.50	0.50

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard. 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





680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834 (415) 364-9600 (510) 686-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 400 Concord, CA 94520 Attention: Avo Avedessian Client Project ID: Matrix Descript:

Unocal #6277, 15803 E. 14th Street, Water San

San Leandro

Sampled: Received: Oct 6, 1994 Oct 6, 1994

Analysis Method: First Sample #: EPA 5030/8015/8020

410-0616

Reported:

Standard Report Projective Section

Oct 20, 1994

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
410-0616	MW-1	Gasoline	10	10/18/94	HP-4	92
410-0617	MW-2A	Gasoline	1.0	10/17/94	HP-5	96
410-0618	MW-3	Discrete Peak*	1.0	10/17/94	HP-5	98
410-0619	MW-4	Discrete Peak*	1.0	10/17/94	HP-5	112
410-0620	MW-5		1.0	10/17/94	HP-5	92
410-0621	MW-6		1.0	10/17/94	HP-5	104

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager Please Note:

*Discrete Peak refers to an unidentified peak in the MTBE range.





680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834 (415) 364-9600 (510) 686-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100

MPDS Services 2401 Stanwell Dr., Ste. 400 Concord, CA 94520 Attention: Avo Avedessian Client Project ID: Unocal #6277, 15803 E. 14th Street, San Leandro

Matrix: Liquid

QC Sample Group: 4100616-621

Reported:

Oct 20, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon	
MS/MSD					
Batch#:	4100558	4100558	4100558	4100558	
Date Prepared:	10/17/94	10/17/94	10/17/94	10/17/94	
Date Analyzed:	10/17/94	10/17/94	10/17/94	10/17/94	
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	
Conc. Spiked:	20 μg/L	20 μg/L	$20\mu\mathrm{g/L}$	60 µg/L	
Matrix Spike					
% Recovery:	110	110	110	108	
Matrix Spike					
Duplicate %					
Recovery:	115	110	110	108	
Relative %					
Difference:	4.4	0.0	0.0	0.0	
	4.4			0.0	eles en

LCS Batch#:	3LCS101794	3LC\$101794	3LCS101794	3LCS101794	
Date Prepared:	10/17/94	10/17/94	10/17/94	10/17/94	
Date Analyzed: Instrument I.D.#:	10/17/94 HP-5	10/17/94 HP-5	10/17/94 HP-5	10/17/94 HP-5	
LCS %	400	444	400	400	
Recovery:	106	114	108	106	
% 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.





680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8

Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834

(415) 364-9600 (510) 686-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100

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

Matrix:

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

Liquid

QC Sample Group: 410-0616

Reported:

Oct 20, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	A. Tuzon	A, Tuzon	A. Tuzon	A. Tuzon	
MS/MSD					
Batch#:	4100600	4100600	4100600	4100600	
Dateim:	4100000	4100000	410000	4100000	
Date Prepared:	10/18/94	10/18/94	10/18/94	10/18/94	
Date Analyzed:	10/18/94	10/18/94	10/18/94	10/18/94	
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	
Conc. Spiked:	20 μg/L	20 μg/L	$20\mu\mathrm{g/L}$	60 µg/L	
Matrix Cailca					
Matrix Spike	A E	40=	440	400	
% Recovery:	85	105	110	108	
Matrix Spike					
Duplicate %					<u>.</u>
Recovery:	85	100	100	102	
1.000 10.71	00	.00	100		
Relative %					
Difference:	0.0	4.9	9.5	5.7	
		***	-		

LCS Batch#:	2LCS101894	2LC\$101894	2LCS101894	2LC\$101894	
Date Prepared:	10/18/94	10/18/94	10/18/94	10/18/94	
Date Analyzed:	10/18/94	10/18/94	10/18/94	10/18/94	
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	
LCS %					
Recovery:	81	92	95	97	
% 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.



M P D S Services, Inc.

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CHAIN OF CUSTODY

STEVE BALIAN UNOCAL SIS # 6277						277 CITY: SAN (BANDRO				TURN AROUND TIME				
ACTHECOMG AGENCY	ADDRESS: 15803 E. 14-44 STREET					GAS	PH-DIESEL		0			REGULAR		
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LDCATION	TPH-GAS BTEX	TPH-L	106	8010			REMARKS
μω_ /	10-6-94	14:15	X	X		2-V	Well	X						41006164
MW_2A	*	13.45	X	X		v	9	X						4100617
мш. 3	U	12:55	X	X		<u></u>		X		·	· - ·			4100618
Mw- 4	U	12:25	X	X		u u	Ü	X						4100619
MW_ 5	4	11:45	X	X		u	1	X						4100629
MW-6	1	11:05	X	X		2	*	X						4100621
. •														
							,							
											-			
RELINQUISHED BY: DATE/TIME RECEIVED BY: 10/0/9 STEVE BALIAN 10-6-94 16:29 Rb Kallon 1:20					ED BY:	THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES. 1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?								
STEVE BALIAN 10-6-94 16:2					. مر	ISIGNATURE)	2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED?							
SEMATURE						(SIGNATURE)	3. DED ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? NO							
ema Turej						(SIGNATURE)		4. WERE	AMPLES I		HATE CON	TAINERS AND	PROPERLY PACKAGE	:0)
SAMA TUBE!					ISIGNATURE: TITLE: DATE: RD Kelley Sample Control 10/6/						DATE: 10/6/94			