

MPDS-UN6277-06 April 28, 1995

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 San Leandro, California

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 April 4, 1995. 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-UN6277-06 April 28, 1995 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.

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 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)		Water Purged (gallons)
	(Mor	itored and a	Sampled on Ap	ril 4, 199	5)	
MWl	22.52	9.98	24.88	0	No	10
MW2A	22.59	10.94	25.35	0	No	10
мwз	22.78	9.44	23.45	0	No	10
MW4	22.34	9.42	22.50	0	No	9
MW5	22.54	6.75	20.94	0	No	9.5
MW6	22.61	6.23	19.61	0	No	9
	(Moni	tored and Sa	ampled on Jan	uary 5, 19	95)	
MW1	23.02	9.48	24.88	0	No	10.5
MW1A	23.16	10.37	25.35	0	No	10.5
MW3	23.16	8.88	23.43	0	No	10.5
MW4	22.94	8.82	22.52	0	No	9.5
MW5	22.94	6.38	20.95	0	No No	10
MW6	22.99	5.85	19.60	0	No	9.5
MIMO	22.99	5.05	19.00	U	140	9.5
	(Moni	tored and Sa	ampled on Oct	ober 6, 19	94)	
MW1	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	No	9.5
MW6	22.25	6.59	19.23	0	No	9
	(Mo	nitored and	Sampled on Ju	uly 7, 199	4)	
MW1	22.27	10.23	24.31	0	No	10
MW2A	22.37	11.16	25,20	0	No	10
MW3	22.55	9.67	23,17	0	No	9.5
MW4	22.38	9.38	22.12	0	No	9
MW5	22.33	6.96	20.53	0	ИО	9.5
MW6	22.42	6.42	19.22	0	No	9

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)*
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

Date	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	Toluene	Ethyl- <u>benzene</u>	Xylenes
4/04/95	MW1	410♦	19	ND	ND	ND
	MW2A	67♦	1.0	ND	ND	ND
	МWЗ	100♦	0.62	ND	ND	ND
	MW4	82♦	ND	ND	ND	ND
	MW5	ND	ND	ND 091	ND	$_{ m ND}$ /, /
	MW6	ND	ND	ND	ND	ND
1/05/95	MW1	780	30	ND	ND	9.1
	MW2A	140♦	1.4	ND	ND	ND
	MW3	140♦	ND	ND	ND	ND
	MW4	150♦	ND	ND	ND	ND
	MW5	ND	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND
10/06/94	MW1	970	19	ND	ND	13
	MW2A	71	6.4	ND	2.1	2.4
	MW3	93♦	ND	ND	ND	ND
	MW4	78♦	ND	\mathbf{N} D	ND	ND
	MW5	ND	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND
7/07/94	MW1	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	ND	ND	ND
	MW6	ND	ND	ND	ND	ND
4/04/94	MW1	1,100	15	ND	ND	7.4
	MW2A	80	8.0	ND	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

TABLE 2 (Continued)

SUMMARY OF LABORATORY ANALYSES WATER

<u>Date</u>	Well #	TPH as <u>Gasoline</u>	Benzene	<u>Toluene</u>	Ethyl- benzene	Xylenes
1/06/94	MW1	260	21	ND	2.5	14
	MW2A	110	2.6	ND	1.6	1.7
	MW3	140♦	ND	ND	ND	ND`
	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♦	ND	ND	ND	ND
	MW5	60♦	ND	ND	ND	ND
	MW6	ND	ND	ND	ND	ND
7/01/93	MW1	510	100	0.79	5.7	52
	MW2A	74♦	0.75	ND	ND	ND
	EWM	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	690	94	0.73	5.3	39
	MW2A	120	7.2	ND	5.8	1.2
	MW3	130♦	ND	ND	ND	ND
	MW4	110♦	ND	ND	ND	ND
	MW5	65♦	ND	\mathbf{N} D	ND	ND
	MW6	ND	ND	ND	ND	ND
1/29/93	MW1	740♦♦	69	ND	3.8	43
	MW2A	66♦	1.4	ND	ND	ND
	МWЗ	130♦	0.84	ND	ND	ND
	MW4	130♦	0.95	ND	ND	ND
10/20/92	MW1	720	110	1.4	18	110
	MW2A	96	2.8	ND	1.8	1.6
	KWM3	180♦	ND	ND	ND	ND
	MW4	110♦	ND	ND	ND	ND

TABLE 2 (Continued)
SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	Toluene	Ethyl- benzene	Xylenes
7/20/92	MW1	630	100	2.8	6.3	52
	MW2A	99	8.6	ND	2.4	0.95
	MW3	120♦	ND	ND	ND	ND
	MW4	80♦	ND	ND	ND	ND
4/23/92	MW1	530	100	7.9	4.6	60
	MW2A	190	15	ND	15	2.0
	MW3	150♦	1.6	ND	ND	ND
	MW4	120♦	ND	ND	ND	ND
1/13/92	MW1	450	240	4.6	8.6	73
	MW2A	160	11	2.0	10	5.9
	EWM	1.20♦	ND	ND	ND	ND
	MW4	58♦	ND	ND	ND	ND
9/10/91	MW1	280	38	3.1	4.1	22
	MW2A	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
	MW2A	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
	MW2A	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
	MW3	150	ND	ND	ND	ND
	MW4	54	ND	ND	ND	ND
9/19/90	MW1	140	ND	ND	ND	3.5
	MW3	74	0.74	ND	ND	ND
	MW4	61	ND	ND	ND	ND

TABLE 2 (Continued)
SUMMARY OF LABORATORY ANALYSES
WATER

<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	Toluene	Ethyl- benzene	Xylenes
6/25/90	MW1	310	10	0.89	0.37	2.1
, ,	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
	MW3	85	ND	ND	ND	ND
	MW4	120	0.39	ND	\mathbf{N} D	ND
12/12/89	MW1	340	100	13	3.4	44
	MW2	660	220	6.6	13	36
	мwз	120	6.7	0.64	0.46	1.5
	MW4	97	4.6	ND	ND	ND
9/13/89	MW1	550	32	17	3.4	52
,	MW2	170	2.0	0.38	ND	9.5
	MW3	76	ND	ND	ND	ND
	MW4	77	ND	ND	ND	ND
6/06/89	MW1	590	ND	ND	ND	ND
•	MW2	77	ND	ND	ND	ND
	ким	32	ND	ND	ND	ND
	MW4	37	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 non-gasoline mixture.

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 #	TPH as <u>Diesel</u>	Tetra- chloroethene	Trichloro- ethene	1,2- Dichloro- ethane	Cis-1,2- Dichloro- ethene	Total Oil & Grease (mg/L)
1/05/95	MW3		1,100	18	ND	6.2	
4/04/94	MW1*		390	38	ND	17	
1/06/94	мwз		960	ND	ND	ИD	
4/02/93	MW1 MW2 MW3 MW4 MW5 MW6	ND ND ND ND ND	 190 71	 ND ND	 ND ND	 ND ND	
1/29/93	MW1 MW2A MW3 MW4	ND ND ND	300 140 980 950	ND 10 ND ND	ND ND ND ND	ND ND ND ND	
10/20/92	MW1 MW2A MW3 MW4	ND ND ND	230 64 1,100 360	22 11 20 17	ND ND ND	16 ND ND	
7/20/92	MW1 MW2A MW3 MW4	62♦ ND ND ND	200 35 1,400 440	7.4 7.2 25 11	ND ND ND	ND 4.8 ND ND	 ND
4/23/92	MW2A	ND	17	5.6	ND	1.9	ND
1/13/92	MW2A**	ND	33	ND	ND	2.1	ND
9/10/93	MW2A	65	- -				
6/10/91	MW2A	100	150	10	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES WATER

<u>Date</u>	Well #	TPH as <u>Diesel</u>	Tetra- chloroethene	Trichloro- ethene	1,2- Dichloro- ethane	Cis-1,2- Dichloro- ethene	Total Oil & Grease (mg/L)
3/15/91	MW2A	ND	67	8.2	ND	2.6	ND
12/12/89	MW2	1,700	30	9.0	ND	ND	1.2
9/13/89	MW2	ND	18	6.1	4.2	1.2	ND
6/06/89	MW2	ND	110	4.4	2.8	ND	ND

- * 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.
- Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear be a diesel.

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.

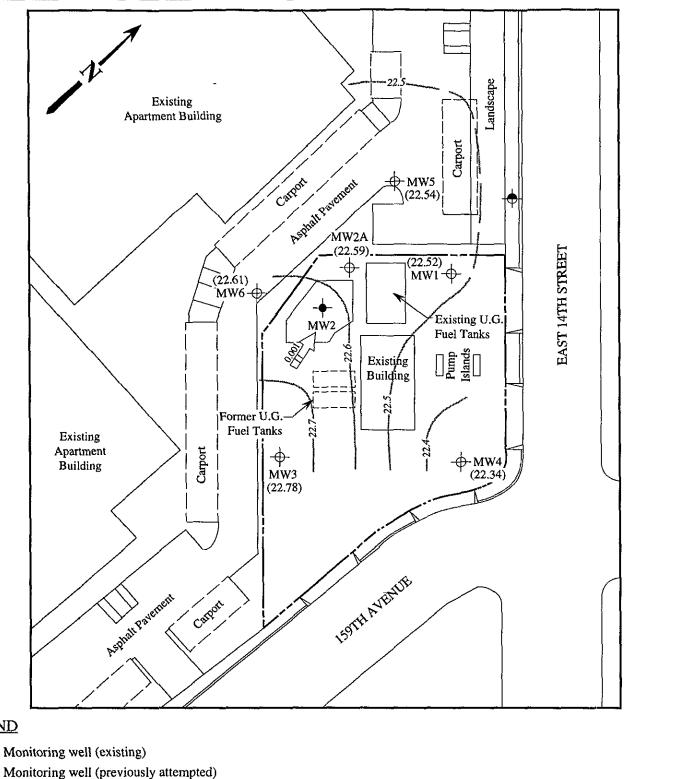


Base modified from 7.5 minute U.S.G.S. Hayward and San Leandro Quadrangles (both photorevised 1980)

O 2000 4000
Approx. scale feet



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

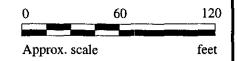


LEGEND

- Monitoring well (existing)
- Monitoring well (destroyed February1, 1990)
- Ground water elevation in feet above Mean Sea Level

Direction of ground water flow with approximate hydraulic gradient

Contours of ground water elevation

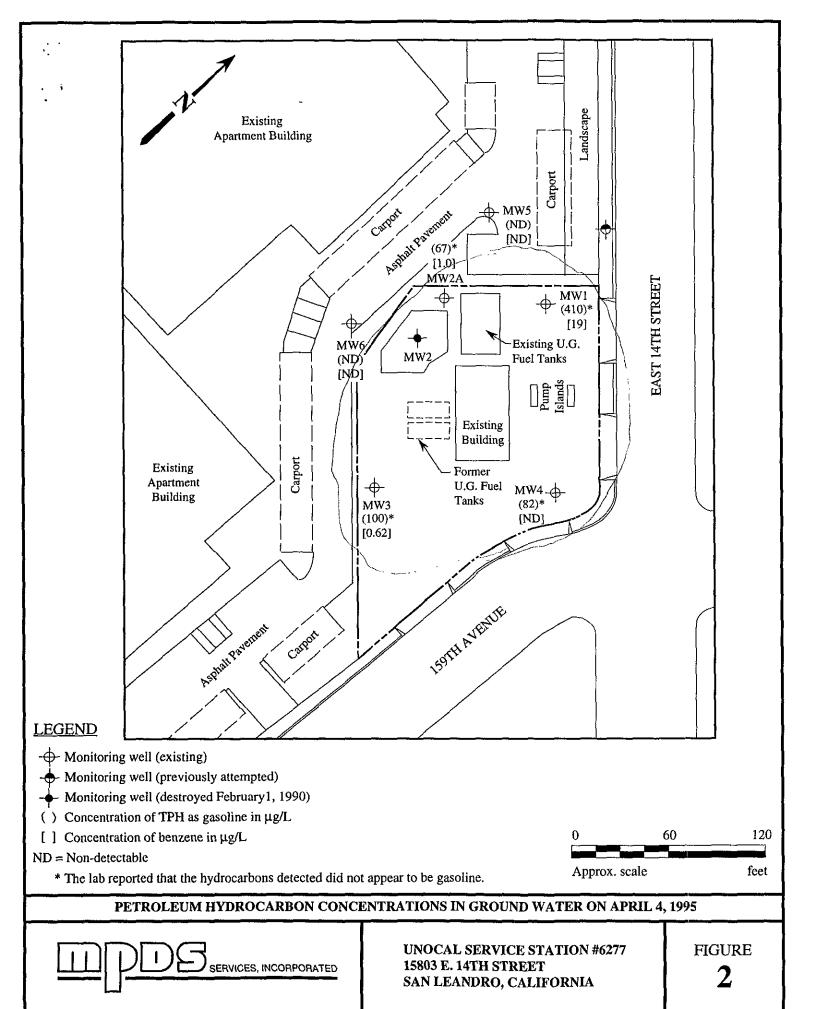


POTENTIOMETRIC SURFACE MAP FOR THE APRIL 4, 1995 MONITORING EVENT



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

FIGURE





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

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

Client Project ID: Unocal #6277, 15803 E. 14th, Sampled: Apr 4, 1995 Matrix Descript:

Water

Analysis Method: EPA 5030/8015/8020

First Sample #: 504-0203 San Leandro

Received: Apr 4, 1995 Reported: Apr 18, 1995

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
504-0203	MW-1	410*	19	ND	ND	ND
504-0204	MW-2A	67*	1.0	ND	ND	ND
504-0205	MW-3	100*	0.62	ND	ND	ND
504-0206	MW-4	82*	ND	ND	ND	ND
504-0207	MW-5	ND	ND	ND	ND	ND
504-0208	MW-6	ND	ND	ND	ND	ND

Hydrocarbons detected did not appear to be gasoline.

Disk and an I dentify a	 		0.50	0.50	7 50		
Detection Limits:		50	0.50	V.0U	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**





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

্রান্ত্র _{বিশ্ব} হয় বিশ্ববিদ্যালয় করি করি করি করি করি করি সাধ্য MPDS Services 2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Client Project ID: Matrix Descript: Analysis Method:

Unocal #6277, 15803 E. 14th, Water

San Leandro

h, Sampled: Received:

Apr 4, 1995 Apr 4, 1995

Attention: Sarkis Karkarlan First Sample #:

EPA 5030/8015/8020 504-0203

Reported:

Apr 18, 1995

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
504-0203	MW-1	Discrete Peaks*	4.0	4/17/95	HP-4	91
504-0204	MW-2A	Discrete Peaks*	1.0	4/16/95	HP-4	97
504-0205	MW-3	Discrete Peaks*	1.0	4/16/95	HP-5	84
504-0206	MW-4	Discrete Peaks*	1.0	4/16/95	HP-5	80
504-0207	MW-5		1.0	4/16/95	HP-5	82
504-0208	MW-6		1.0	4/16/95	HP-5	78

SEQUOIA ANALYTICAL, #1271

Please Note:

Signature on File

Alan B. Kemp Project Manager *Discrete peaks refers to unidentified peaks in the EPA 8010 and MTBE ranges.





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MPDS Services

2401 Stanwell Dr., Ste. 300

Concord, CA 94520 Attention: Sarkis Karkarian Client Project ID: Unocal #6277, 15803 E. 14th, San Leandro

Matrix: Liquid

Attention: Sarkis Karkarian QC Sample Group: 5040203-208 Reported: Apr 19, 1995

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#:	5040568	5040568	5040568	5040568	
Date Prepared:	4/17/95	4/17/95	4/17/95	4/17/95	
Date Analyzed:	4/17/95	4/17/95	4/17/95	4/17/95	
nstrument 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:	85	90	95	93	
Matrix Spike					
Duplicate %					
Recovery:	90	90	95	97	
Relative %					
Difference:	5.7	0.0	0.0	4.2	

LCS Batch#:	2LCS041795	2LCS041795	2LCS041795	2LCS041795		
Date Prepared: Date Analyzed:	4/17/95 4/17/95	4/17/95 4/17/95	4/17/95 4/17/95	4/17/95 4/17/95		
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4		
LCS % Recovery:	80	84	87	91		
% 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.

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

narahkean ilaka katal mitaksak in MPDS Services 2401 Stanwell Dr., Ste. 300

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

Matrix:

Liquid

Concord, CA 94520 Attention: Sarkls Karkarian

QC Sample Group: 5040203-208 Bar yayan ayan ayan baran bara da madamini darin dalam da karan da karan baran baran baran baran baran baran b

Reported:

Apr 19, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
8.0 - A1c - a1c	-	FD1 0000	Fp	FD# 0000	
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	A. Tuzon	A. Tuzon	A, Tuzon	A. Tuzon	
MS/MSD					
Batch#:	5040204	5040204	5040204	5040204	
Date Prepared:	4/16/95	4/16/95	4/16/95	4/16/95	
Date Analyzed:	4/16/95	4/16/95	4/16/95	4/16/95	
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	100	100	98	
Matrix Spike					
Duplicate %					
Recovery:	95	95	95	97	
Hecovery.	90	30	93	31	
Relative %					
Difference:	5.1	5.1	5.1	1.0	

LCS Batch#:	2LCS041695	2LCS041695	2LCS041695	2LCS041695
Date Prepared:	4/16/95	4/16/95	4/16/95	4/16/95
Date Analyzed:	4/16/95	4/16/95	4/16/95	4/16/95
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS %				
Recovery:	95	95	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.





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FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

MPDS Services

§ 2401 Stanwell Dr., Ste. 300

ligang germanang begggeggar kan og Euderbera ang geographysis

Concord, CA 94520 Attention: Sarkis Karkarian

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

Matrix:

QC Sample Group: 5040203-208

Reported:

Apr 19, 1995

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#:	5040208	5040208	5040208	5040208
Date Prepared:	4/16/95	4/16/95	4/16/95	4/16/95
Date Analyzed:	4/16/95	4/16/95	4/16/95	4/16/95
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:	75	75	75	77
Matrix Spike Duplicate %				
Recovery:	85	85	85	87
Relative %				
Difference:	13	13	13	12

LCS Batch#:	3LCS041695	3LCS041695	3LCS041695	3LCS041695
Date Prepared:	4/16/95	4/16/95	4/16/95	4/16/95
Date Analyzed:	4/16/95	4/16/95	4/16/95	4/16/95
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS %				
Recovery:	98	100	100	101
% 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.

2401 Stanwell Drive, Suite 400, Concord, CA 94520 Tel: (510) 602-5120 Fax: (510) 689-1918

CHAIN OF CUSTODY

SAMPLER				UNOCAL S/S # 6277 CITY: San Leandlo					ANALYSES REQUESTED							TURN AROUND TIME:
(JOE) HOVSIA AJEMIAN WITHESSING AGENCY			ADDRESS: 15803 E. 1441			TPH-GAS BTEX	FPH-DIESEL	ß	8010					Regular		
SAMPLE ID NO	DATE	TIME	WATCH	GHAE	СОМР	NO OF CONT	SAMPLING LOCATION	1P! BTE	TPH	T0G	80					REMARKS
mw_l	4-4-95	1:05	v′	/		2 (v o A)	wells	v	-	504	มรบ ัว	A-B				VOA > Bieservel
MW_2X	()	12; 40 Aim		/		1/	4	/		504	1204					hisseract
mw-3	"	11:05 Acm	ر ا			•,	r	1		504	1205					
nw-4	"	11:48	/	/		1,	7	/		504	სას6					
mw-5	"	10:05	1	/		4	-	1		504	いつりつ					
mw-6	//	9:15 A.M	~	/		-/	7			504	usu8	₹;				
							,									
]
	<u></u>]			THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSES:								
RELINQUISHED BY:		DA	ATE/TIN 2-1	RECEIVED BY:		1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?										
ISIGNATUREI Soe Courses 4-4-		<u>`</u>		(SIGNATURE) 414 05		2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED?										
ISIGNATUREI ()			40	ICICNIA TÉRRES /		3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACER.										
ISIGNATURE) / /		45 5		(SIGNATURE)			4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED?									
SIGNATURE						(SIGNATURE)	SIGNATURE: DATE:									