

July 17, 1995

Mr. Scott Seery Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, California 94501

RE: Unocal Service Station #3292 15008 E. 14th Street San Leandro, California

Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Mr. Edward C. Ralston, enclosed please find our report (MPDS-UN3292-07) dated June 8, 1995 for the above referenced site.

Should you have any questions regarding the reporting of data, please feel free to call our office at (510) 602-5120. Any other questions may be directed to the Project Manager at (510) 277-2311.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Mr. Edward C. Ralston



MPDS-UN3292-07 June 8, 1995

Unocal Corporation 2000 Crow Canyon Place, Suite 400 P.O. Box 5155 San Ramon, California 94583	<b>S</b>
Attention: Mr. Edward C. Ralston	
RE: Quarterly Data Report Unocal Service Station #3292 15008 E. 14th 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 Unocal monitoring wells that were monitored and sampled during this quarter are indicated in Table 1. Prior to sampling, the Unocal wells were checked for depth to water and the presence of free product or sheen. The monitoring data and the ground water elevations for the Unocal wells are summarized in Table 1. The ground water flow direction at the Unocal site during the most recent quarter is shown on the attached Figure 1.

A joint monitoring and sampling event was conducted with the consultant the che nearby former Mobil and Chevron service station sites on May 10, 1995. The monitoring data collected for the former Mobil and Chevron site's monitoring wells (provided by Alisto Engineering Group and Blaine-Tech Services, Inc.) are summarized Tables 3 and 4. The ground water flow direction at the former Mobil site during the most recent quarter is also shown on the attached Figure 1.

Ground water samples were collected from the Unocal wells on May 10, 1995. Prior to sampling, the Unocal wells were each purged of between 7 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.

MPDS-UN3292-07 June 8, 1995 Page 2

#### ANALYTICAL RESULTS

The ground water samples collected from the Unocal wells 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 from the Unocal wells are summarized in Table 2. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and benzene detected in the ground water samples collected from the Unocal wells this quarter are shown on the attached Figure 2. Copies of the laboratory analytical results and the Chain of Custody documentation for the Unocal wells are attached to this report.

### LIMITATIONS

Environmental changes, either naturally-occurring or artificiallyinduced, 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.

GEO

JOEL G. GREGER No. EG 1633 CERTIFIED **ENGINEERING GEOLOGIST** 

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

Tables 1 through 4 Attachments:

> 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)
			<u> </u>	12000/	Directi	(garrons)
	··· (35.		a	10 100E		
	(MC	nitored and	Sampled on	May 10, 1995	)	
MW1	27.86	8.51	18.96	0	No	7.5
MW2	27.96	8.38	19.10	0	No	7.5
KWM3	28.04	8.38	22.13	0	No	10
MW4	27.07	9.97	19.62	0	No	7
MW5	27.74	8.20	22.13	0	No	10
MW6	28.14	7.53	20.13	0	No	9
MW7	28.21	7.88	21.20	0	No	9.5
8WM	27.54	9.35	19.08	0	No	7
MW9	27.59	8.70	19.08	0	No	7.5
MW10	27.34	8.70	19.88	0	No	8
MW11	27.14	8.36	19.00	0	No	7.5
	(Moni	tored and Sa	umpled on Fe	bruary 3, 19	95)	
			-	-	-	
MWl	28.36	8.01	18.94	0	No	7.5
MW2	28.47	7.87	19.08	0	No	8
EWM	28.60	7.82	22.12	0	No	10
MW4	28.52	8.52	19.60	0	No	8
MW5	28.25	7.69	22.12	0	No	9.5
MW6	28.68	6.99	20.12	0	No	9
MW7	28.60	7.49	21.19	0	No	9.5
8WM	27.73	9.16	19.07	0	No	7
MW9	27.84	8.45	19.07	0	No	7.5
MW10	27.72	8.32	19.86	0	No	8
MW11	27.48	8.02	18.98	0	No	7.5

TABLE 1 (Continued)

### SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water <u>(feet)</u> ◆	Total Well Depth (feet)◆	Product Thickness (feet)	<u>Sheen</u>	Water Purged (gallons)
	(Monit	ored and Sam	mpled on Nov	ember 23, 1	994)	
MW1	25.20	11.17	18.94	0	No	5.5
MW2	25.37	10.97	19.10	0	No	6
MW3	25.44	10.98	22.13	0	No	8
MW4	25.39	11.65	19.60	0	No	5.5
MW5	25.23	10.71	22.13	0	No	8
MW6	25.46	10.21	20.13	0	No	7
MW7	25.40	10.69	21.19	0	No	7.5
8WM	24.91	11.98	19.08	0	No	5
MW9	24.98	11.31	19.08	0	No	5.5
MW10	24.94	11.10	19.85	0	No	6
MW11	24.83	10.67	18.97	0	No	6
	(Moni	tored and Sa	ampled on Au	gust 23, 19	94)	
MW1	24.39	11.98	18.93	О	No	5
MW2	24.52	11.82	19.08	0	No	5
MW3	24.54	11.88	22.12	0	No	7
MW4	24.47	12.57	19.60	0	No	5
MW5	24.37	11.57	22.12	0	No	7.5
MW6	24.70	10.97	20.11	0	No	6.5
MW7	24.66	11.43	21.18	0	No	7
8WM	24.28	12.61	19.07	0	No	4.5
MW9	24.30	11.99	19.06	0	No	5
MW10	24.23	11.81	19.85	0	No	5.5
MW11	24.11	11.39	18.97	0	No	5.5

### TABLE 1 (Continued)

### SUMMARY OF MONITORING DATA

Well #	Well Casing Elevation (feet)*
MW1	36.37
MW2	36.34
MW3	36.42
MW4	37.04
MW5	35.94
MW6	35.67
MW7	36.09
MW8	36.89
MW9	36.29
MW10	36.04
MWll	35.50

- ♦ 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), per a Benchmark located at the northwest corner of East 14th Street and 150th Avenue (elevation = 36.88 feet MSL).

TABLE 2
SUMMARY OF LABORATORY ANALYSES
WATER

<u>Date</u>	Well #	TPH as Gasoline	Benzene	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xylenes</u>
		88888 <del>1.00.00000000000000000000000000000</del>				
5/10/95	MW1	16,000	230	27	880	630
	MW2 ~	7,500	56	4.7	310	33
	MW3	1,300	ND	ND	ND	ND
	MW4	280	2.8	ND	2.7	2.4
	MW5	27,000	160	170	2,200	5,200
	MW6	470	ND	0.65	1.4	0.67
	MW7	1,300	13	1.5	170	230
	MW8	1,400	15	1.5	0.65	0.84
	MW9	1,700	0.81	2.2	1.0	1.4
	MW10	12,000	260	16	1,200	54
	MW11	4,200	120	ND	170	38
2/03/95	MW1	20,000	77	17	950	390
	MW2	9,700	5.7	ND	250	10
	MW3	780	13	ND	2.1	ND
	MW4	620	6.4	ND	9.3	ND
	MW5	56,000	140	330	3,500	13,000
	MW6	660	4.8	13	1.4	ND
	MW7	26,000	170	ND	2,300	3,700
	8WM	800	6.1	ND	ND	ND
	MW9	2,100	26	2.5	ND	ND
	MW10	17,000	310	ND	1,500	93
	MW11	4,400	110	ND	150	37
11/23/94	MW1	23,000	180	44	970	270
	MW2	15,000	61	24	440	ND
	MW3	3,200	48	ND	22	ND
	MW4	420	5.0	1.1	4.2	1.2
	MW5	46,000	230	260	3,900	14,000
	MW6	460	6.4	1.1	1.9	1.1
	MW7	10,000	220	ND	1,000	730
	MW8	1,700	34	ND	ND	3.1
	MW9	2,000	24	2.2	2.2	2.5
	MW10	16,000	260	ND	1,600	49
	MW11	5,800	250	10	120	22

TABLE 2 (Continued)

_						
<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xylenes</u>
Date	<u> </u>	Gasorine	pelivelle	TOTUCHE	<u>penzene</u>	AYTCHES
8/23/94	MW1	24,000	130	57	970	320
	MW2 -	12,000	45	10	360	20
	MW3	2,900	37	49	14	2.9
	MW4	690	9.2	1.3	7.1	1.9
	MW5	61,000	360	380	4,800	17,000
	MW6	570	8.8	2.5	3.2	2.6
	MW7	19,000	210	50	2,000	2,800
	MW8	3,200	46	18	2.0	7.2
	MW9	2,800	28	32	ND	$\mathbf{n}$
	MW10	16,000	250	41	1,800	74
	MW11	7,300	250	13	150	42
5/25/94	MW1▲	6,400	72	ND	170	67
	MW2	11,000	50	ND	400	22
	EWM	1,400	20	ND	ND	ND
	MW4	1,700	22	ND	4.5	ND
	MW5	53,000	ND	ND	4,000	14,000
	MW6	500	11	ND	ND	0.73
	MW7	14,000	200	ND	1,500	1,800
	MW8	14,000	29	ND	ND	ND
	MW9	ND	ND	ND ·	ND	ND
	MW10	14,000	240	ND	230	62
	MW11	1,400	49	ND	26	ND
2/24/94	MW1	18,000	74	30	940	480
	MW2◆	11,000	44	ND	580	32
	ММЗ	3,400	46	ND	53	11
	MW4	1,300	8.9	ND	20	ND
	MW5	57,000	140	400	4,400	16,000
	MW6◆	810	12	ND	2.6	0.77
	MW7♦	16,000	220	19	2,400	3,200
	8WM	1,200	10	2.3	ND	3.2
	MW9	2,900	35	ND	ND	ND
	MW10	15,000	330	19	2,000	83
	MW11	4,600	170	ND	140	36

TABLE 2 (Continued)

			-			<del></del>
<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xylenes</u>
**************************************	:::::: <del>:::::::::::::::::::::::::::::::</del>	o:::::::::::::::::::::::::::::::::::::		:::::::::::::::::::::::::::::::::::::::	······································	
11/23/93	MW1	18,000	210	63	900	620
	MW2 -	11,000	80	10	480	20
	MW3	2,300	34	ND	24	5.6
	MW4	720	10	ND	8.7	$\mathbf{N}$ D
	MW5	46,000	290	310	4,100	15,000
	MW6	520	ND	1.7	1.9	0.82
	MW7	19,000	310	30	2,500	2,300
	8WM	1,800	ND	3.4	ND	ND
	MW9	2,500	23	2.1	ND	ND
	MW10	18,000	300	10	2,800	110
	MW11	3,400	105	ND	120	43
8/23/93	MW1	24,000	160	110	840	810
, ,	MW2	15,000	110	ND	590	64
	MW3	2,900	25	ND	50	18
	MW4	1,200	5.0	ND	16	ND
	MW5	61,000	340	380	3,600	14,000
	MW6	1,000	9.4	2.3	5.0	2.3
•	MW7	33,000	360	ND	2,500	4,300
	MW8	280*	49	4.5	ND	ND
	MW9	3,000	29	ND	ND	ND
	MW10	20,000	230	13	3,200	140
	MW11	5,400	68	ND	230	43
5/21/93	MW1	27,000	150	200	1,200	950
	MW2	9,500	37	ND	470	62
	МWЗ	2,600	42	ND	43	<b>1</b> 5
	MW4	1,900	31	ND	20	4.5
	MW5	55,000	ND	160	3,500	12,000
	MW6	940	18	1.0	7.1	2.7
	MW7	22,000	330	37	2,100	2,900
	MW8	2,500	44	ND	ND	ND
	MW9	3,200	32	ND	8.1	ND
	MW10	23,000	250	ND	3,000	240
	MW11	7,100	64	ND	340	120
					* .	

TABLE 2 (Continued)

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<u>Date</u>	Well #	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	Ethyl- <u>benzene</u>	<u>Xylenes</u>
**************************************	::::::::::::::::::::::::::::::::::::::		1888 ( <del>1881   188</del> 8   1888   1888   1888   1888   1888   1888   1888   1888   1888   1888   1888   1888   1888	<del> </del>		
2/20/93	MW1	19,000	190	ND	880	620
	MW2 →	1,500	2.9	3.8	9.1	ND
	MW3	1,600	12	18	8.9	12
	MW4	2,400	40	2.1	33	<b>N</b> D
	MW5	17,000	75	ND	1,000	620
	MW6	2,400	43	ND	33	2.0
	MW7	1,800	37	4.6	11	7.7
	8WM	2,200	32	ND	42	5.0
	MW9	2,300	47	ND	32	ND
	MW10	17,000	74	ND	1,000	620
	MW11	18,000	76	ND	1,000	630
11/10/92	MW1	18,000	220	ND	690	830
	MW2	11,000	36	7.2	570	45
	EWM	3,400	37	ND	85	34
	MW4	690	9.1	ND	16	2.8
	MW5	57,000	800	1,800	4,400	18,000
	MW6	490	7.0	1.2	1.7	ND
	MW7	1,800	74	ND	230	350
	8WM	1,800	20	ND	ND	ND
	MW9	4,200	ND	ND	21	23
	MW10	15,000	300	42	3,500	330
	MW11	5,800	130	ND	260	42
8/20/92	MW1	18,000	230	22	640	950
	MW2	13,000	52	ND	660	70
	MW3	4,500	58	ND	65	35
	MW4	1,000	15	ND	11	3.0
	MW5	58,000	660	1,700	4,200	19,000
	MW6	280	8.4	ND	0.51	0.84
	MW7	13,000	460	54	ND	3,100
	8WM	3,500*	67	11	ND	ND
	MW9	3,800*	37	ND	ND	ND
	MW10	15,000	230	ND	1,000	350
	MW11	4,600*	62	ND	ND	54

TABLE 2 (Continued)

Data.	Well #	TPH as <u>Gasoline</u>	Pongono	Toluene	Ethyl-	<u>Xylenes</u>
<u>Date</u>	METT #	Gasottie	Benzene	nerwene	<u>benzene</u>	Ayrenes
5/19/92	MW1	29,000	650	370	1,100	1,200
	MW2™	17,000	140	87	680	170
	MW3	3,400	25	3.6	66	41
	MW4	2,000	20	3.5	42	8.3
	MW5	84,000	760	1,500	4,000	17,000
	MW6	1,300	2.0	2.1	ND	2.7
	MW7	17,000	540	90	1,200	1,900
í	MW8	5,300	28	3.3	2.6	2.1
	<b>MW</b> 9	8,100	11	ND	25	5.8
3/17/92	MWl	23,000	320	19	1,000	940
	MW2	16,000	110	$\mathbf{N}\mathbf{D}$	730	220
	MW3	5,800	66	7.5	100	58
	MW4	1,800	3.7	1.4	90	21
	MW5	81,000	850	1,600	4,800	18,000
12/18/91	MW1	17,000	160	20	1,400	1,600
	MW2	10,000	110	5.1	420	96
	MW3	5,900	54	6.4	110	64
	MW4	2,500	28	2.5	54	22
	MW5	31,000	1,600	3,100	4,800	19,000
9/19/91	MW1	26,000	130	16	1,300	1,800
	MW2	19,000	100	6.8	790	310
	MW3	7,600	ND	13	190	170
	MW4	1,800	0.83	ND	54	46
	MW5	57,000	1,600	2,700	5,200	20,000
5/04/91	MWl	31,000	74	20	920	1,500
	MW2	19,000	6.6	1.4	460	630
	MM3	9,100	2.0	ND	55	180
	MW4	6,300	ND	ND	2.8	61
	MW5	69,000	1,400	2,500	3,500	15,000

### TABLE 2 (Continued)

### SUMMARY OF LABORATORY ANALYSES WATER

- A The analytical results of the ground water sample for well MW1 was inconsistent with the previous analytical results for this well. Therefore, Sequoia Analytical Laboratory re-analyzed the sample past hold time; therefore the results may be biased low.
- \* Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- ♦ All EPA 8010 constituents were non-detectable.

ND = Non-detectable.

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

Note: Laboratory analyses data prior to November 23, 1993, were provided by Kaprealian Engineering, Inc.

TABLE 3

# SUMMARY OF MONITORING DATA FORMER MOBIL SERVICE STATION MONITORING WELLS (Provided by Alisto Engineering Group)

<u>Well #</u> .	Ground Water Elevation (feet)	Depth to Water <u>(feet)</u>	Well Casing Elevation (feet)*
	(Monitored	on May 10, 1995	)
MW1	28.02	8.33	36.35
MW2	28.19	8.42	36.61
ММЗ	28.37	8.55	36.92
MWA	DATA NOT PRO	VIDED	

<sup>\*</sup> The elevations of the top of the well casings have been surveyed relative to Mean Sea Level.

TABLE 4

# SUMMARY OF MONITORING DATA CHEVRON SERVICE STATION MONITORING WELLS (Provided by Blaine Tech Services, Inc.)

<u>Well #</u> .	Ground Water Elevation (feet)	Depth to Water <u>(feet)</u>	Well Casing Elevation (feet)*
	(Monitored	on May 10, 19	95)
MWl	27.01	8.76	35.77
MW2	26.85	8.15	35.00
MW3	26.91	9.26	36.17
MW4	27.19	8.86	36.05
MW5	27.15	8.50	35.65
MW6	26.88	10.04	36.92
MW7	27.04	8.67	35.71
MW8	PAVED OVER		35.28

<sup>\*</sup> Top of well casings elevation.

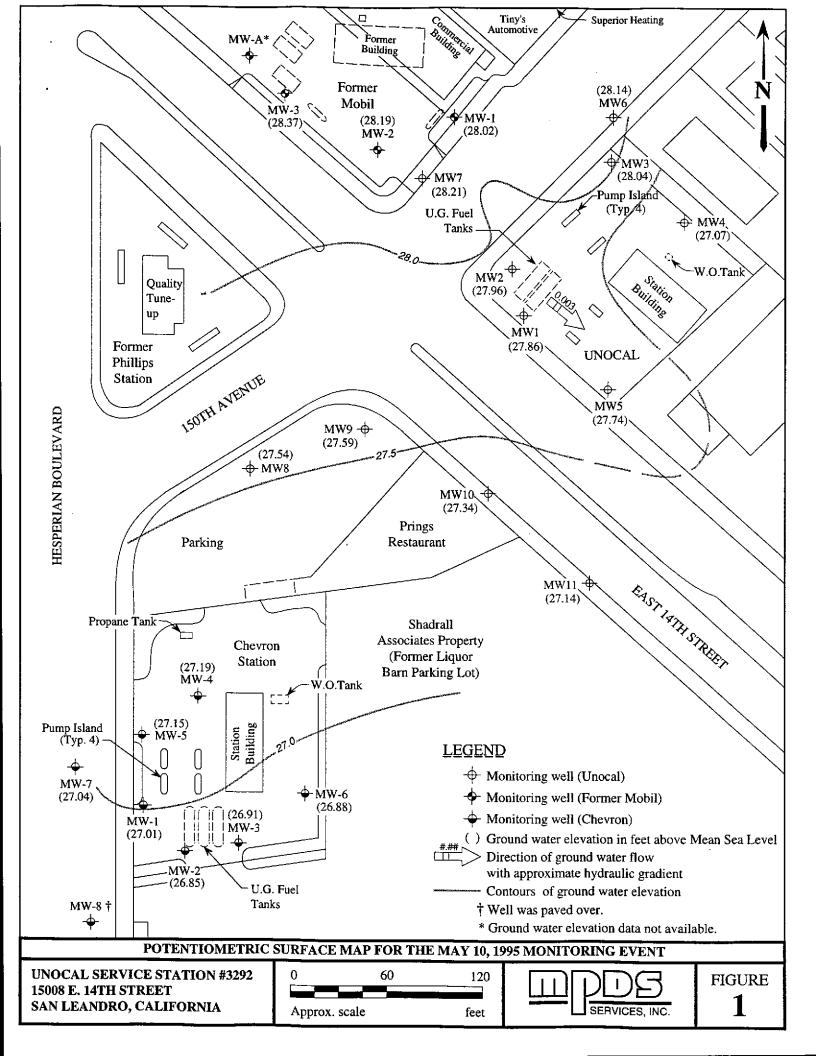


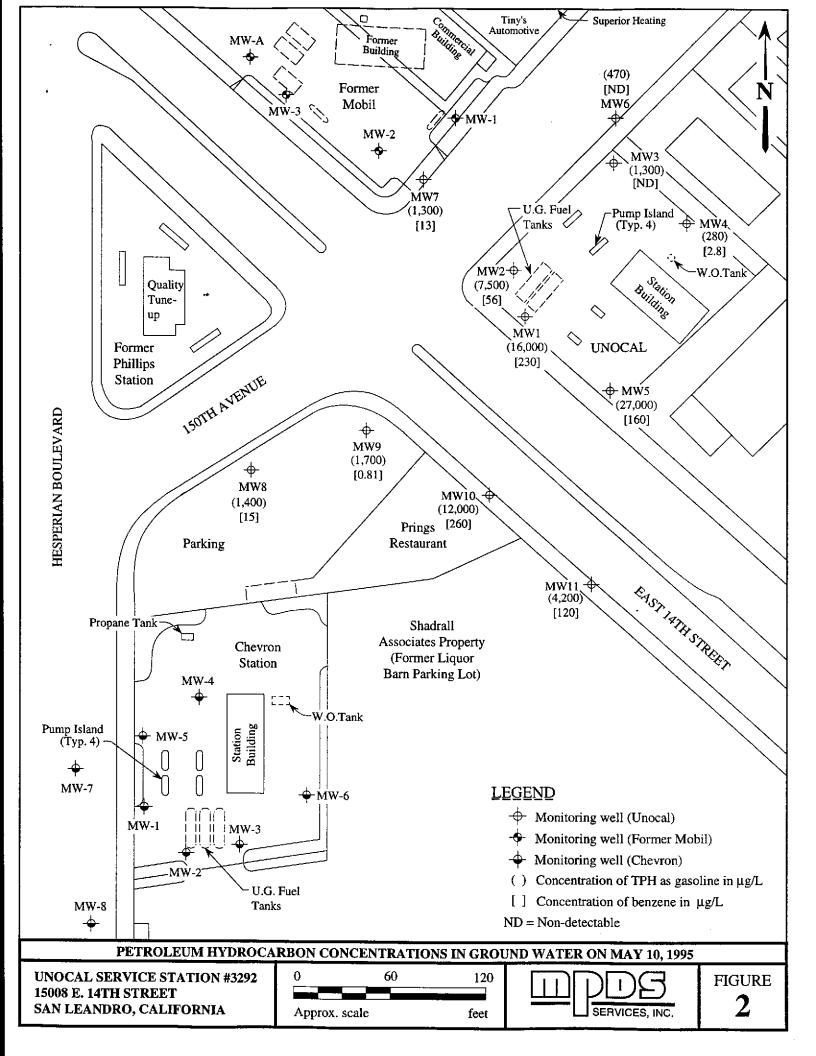
Base modified from 7.5 minute U.S.G.S. Hayward and San Leandor Quadrangles (both photorevised 1980)

O 2000 4000
Approx. scale feet



UNOCAL SERVICE STATION #3292 15008 E. 14TH STREET SAN LEANDRO, CALIFORNIA LOCATION MAP







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: Matrix Descript:

First Sample #:

): Unocal #3292, 15008 E. 14th St., San Leandro

Water

Analysis Method: EPA 5030/8015/8020

505-1056

Sampled:

May 10, 1995

Received: May 10, 1995 Reported: May 24, 1995

### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons $\mu \mathrm{g}/\mathrm{L}$	<b>Benzene</b> μg/L	Toluene μg/L	Ethyl Benzene µg/L	Total Xylenes µg/L
505-1056	MW 1	16,000	230	27	880	630
505-1057	MW 2	7,500	56	4.7	310	33
505-1058	MW 3	1,300	ND	ND	ND	ND
505-1059	MW 4	280	2.8	ND	2.7	2.4
505-1060	MW 5	27,000	160	170	2,200	5,200
505-1061	MW 6	470	ND	0.65	1.4	0.67
505-1062	MW 7	1,300	13	1.5	170	230
505-1063	MW 8	1,400	15	1.5	0.65	0.84
505-1064	MW 9	1,700	0.81	2.2	1.0	1.4
505-1065	MW 10	12,000	260	16	1,200	54

Detection Limits:	50	0.50	0.50	Λ ΕΛ	0.50	
		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, #2000**

Signature on File





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

Matrix Descript:

Client Project ID: Unocal #3292, 15008 E. 14th St., San Leandro Sampled: Water

Received:

May 10, 1995 May 10, 1995

Attention: Sarkis Karkarian 

First Sample #:

Analysis Method: EPA 5030/8015/8020 505-1056

Reported:

May 24, 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
	505-1056	MW 1	Gasoline	10	5/17/95	HP-1	94
. :	505-1057	MW 2	Gasoline	10	5/17/95	HP-1	102
	505-1058	MW 3	Gasoline	5.0	5/18/95	HP-1	84
	505-1059	MW 4	Gasoline	1.0	5/17/95	HP-1	83
	505-1060	MW 5	Gasoline	10	5/17/95	HP-1	90
	505-1061	MW 6	Gasoline	1.0	5/17/95	HP-1	98
	505-1062	MW 7	Gasoline	1.0	5/17/95	HP-1	91
	505-1063	MW 8	Gasoline	1.0	5/17/95	HP-1	88
	505-1064	MW 9	Gasoline	1.0	5/17/95	HP-1	99
	505-1065	MW 10	Gasoline	10	5/17/95	HP-1	97

**SEQUOIA ANALYTICAL, #2000** 

Signature on File





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:

ect ID: Unocal#3292, 15008 E. 14th St., San Leandro

Water

Matrix Descript: Analysis Method: EPA 5030/8015/8020

First Sample #: 505-1066 Sampled: May 10, 1995

May 10, 1995 Received: Reported: May 24, 1995

### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons $\mu \mathrm{g}/\mathrm{L}$	<b>Benzene</b> μg/L	<b>Toluene</b> μg/L	Ethyl Benzene μg/L	Total Xylenes μg/L
505-1066	MW 11	4,200	120	ND	170	38

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, #2000** 

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MPDS Services

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

); Unocal #3292, 15008 E. 14th St., San Leandro

Water

Matrix Descript: Water
Analysis Method: EPA 5030/8015/8020

First Sample #: 505-1066

Sampled: May 10, 1995

Received: May 10, 1995 Reported: May 24, 1995

### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrumen ID	Recovery, % QC Limits: 70-130
505-1066	MW 11	Gasoline	10	5/17/95	HP-1	82

**SEQUOIA ANALYTICAL, #2000** 

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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 #3292, 15008 E. 14th St., San Leandro

Matrix: Liquid

QC Sample Group: 5051056-66

Reported: May 24, 1995

### **QUALITY CONTROL DATA REPORT**

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	N. Zahedi	N. Zahedi	N. Zahedi	N. Zahedi	
MS/MSD					
Batch#:	5050314	5050314	5050314	5050314	
Date Prepared:	5/18/95	5/18/95	5/18/95	5/18/95	
Date Analyzed:	5/18/95	5/18/95	5/18/95	5/18/95	
nstrument l.D.#:	HP-1	HP-1	HP-1	HP-1	
Conc. Spiked:	10 μg/L	10 μg/L	10 μg/L	30 μg/L	
Matrix Spike					
% Recovery:	99	87	113	92	
Matrix Spike					
Duplicate %					
Recovery:	102	95	111	92	
Relative %					
Difference:	3.0	8.8	1.8	0.0	

LCS Batch#:	LCS051795	LCS051795	LCS051795	LCS051795
Date Prepared:	5/17/95	5/17/95	5/17/95	5/17/95
Date Analyzed:	5/17/95	5/17/95	5/17/95	5/17/95
Instrument I.D.#:	HP-1	HP-1	HP-1	HP-1
LCS %				
Recovery:	92	115	95	101
% Recovery				<del></del>
Control Limits:	71-133	72-128	72-130	71-120

### **SEQUOIA ANALYTICAL, #2000**

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.





### CHAIN OF CUSTODY

1/2

SAMPLER RAY MAR	ANCOSIA	AT .	UNOC S/S A	AL 7 <u>3</u>	292	CITY: SAN L	-ETNJ)	20	ANALYSES REQUESTED						TURN AROUND TIME:	
WITNESSING AGENCY	ANGOSIA		1			08 E.IV		H-GAS EX	TPH- DIESEL	G	0					Pravan
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	СОМР	NO. OF CONT.	SAMPLING LOCATION	TP	TP	TOG	8010					REMARKS
MWI	5.10.95	10:30	+	К		2	well	X		รูกรา	ሳጘፍ	AB				
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Mw.3	կ	15:10		9		Ч	l <sub>s</sub>	X		らいこう	158					
mwy	ч	//:3 <sup>©</sup>	7-	<u> </u>		<u>u</u>	W.	<b>X</b>		5051	<b>1</b> 159					
<b>ตพร์</b>	t,	15:35	<i>F</i> ~	K			<u></u>	X		たりにも	ሳይፀ					
MW6	4	11:05	1	C		Δ		x		50E1	<b>161</b>					
MWI	<u>\</u>	13:15	<i>†</i>	<		n	ч	×		5051	<sub></sub> ሁደ፡ጄ					
MW8	<u>'</u>	14.05	×.	X		u	Ŋ	Λ_		EUc.	, oe3					<u> </u>
MWG	۲	14:30	×	ſ		<u> </u>	4	~		l` :	ሳፍ4					
MWIO	}	12:35	$\nearrow$	\ \		h	้ำ	K		どした。	ነሳድ5	V				
RELINQUISH		DATE/TI	ME)		R	ECEIVED BY:		TE/TIME	THE FO	LLOWING N	AUST BE C	OMPLETED	BY THE LA	BORATORY	ACCEPT	ING SAMPLES FOR ANALYSES:
Raul	Dalango	5-10.9	3 2		E a		1 :	90 149	1. HAVE	ALL SAMPL	es receiv	ED FOR AN	ALYSIS BEI	EN STORED	ON ICE?	<u>Ves</u>
ISIGNATURE	3	5-77(-	300	(SIGNA	TURE			1300	1					ALYZED? _		·
(SIGNATURE)	7	5-11	- 1	(SIGN)	TURE)		ح <u>و</u> ن	11 14.00	3. DID AN	IY SAMPLE	s received	FOR ANA	LYSIS HAV	E HEAD SPA	ACE?	Yes lucce + may
(SIGNATURE)		3 '//		(SIGNA	TURE)	wel	<del> </del> -		i							AGED? VCS
(SIGNATURE)				(SIGNA	ATURE)				SIGNATU	JRE:	S /	)		TITLE	:	DATE: \$1.10/65

Note: All water containers to be sampled for TPHG/BTEX, 8010 & 8240 are preserved with HCL. All water containers to be sampled for Lead or Metals are preserved with HN03. All other containers are unpreserved.

### M P D S Services, Inc.

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

2/2

### CHAIN OF CUSTODY

SAMPLER RAY	SIAN	UNO(	ک <sup>AL</sup> ک	29	2 city: SAN	LEANARO		ANALYSES REQUESTED  TURN AROUND TO					TURN AROUND TIME:			
WITNESSING AGENCY	ADDRESS: 1500				08 E-1	YTH ST.	TPH-GAS BTEX TPH-DIESEL			9	;				REGULAR	
SAMPLE ID NO.	DATE	TIME	WATER	GRAB	СОМР	NO. OF CONT.	SAMPLING LOCATION	TPH BTE	TP.	TOG	8010					REMARKS
MWII	51055	12:50	~	*			well	x		505	) <b>JE</b> 6	AB				
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Pay Mas	Manay S.D.S.S. RECEIVED BY:		THE FOLLOWING MUST BE COMPLETED BY THE LABORATORY ACCEPTING SAMPLES FOR ANALYSIS  1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS BEEN STORED ON ICE?  * **LS**						AMPLES FOR ANALYSES:							
SIGNATURE)	( hi ha 3/10195				7/10195	2. WILL S.			Yes							
SIGNATURE)			5-1	/30		SIGNATURE		3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE?				CED:				
ISIGNATURE)		,	5-1	5		SIGNATURE)  (SIGNATURE)	5-11	SIGNATI		n armum	LE CON	2.				NTE:
power one)		<del>.</del>						JIGNAT	[hi	5 h		<u>7</u>	TLE:	Տ <u>գ</u>	÷	+ 1650