MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED
HAZMAT

94 AUG 23 PM 3:18

August 22, 1994

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

RE: Unocal Service Station #5367
500 Bancroft Avenue
San Leandro, California

Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Ms. Tina R. Berry, enclosed please find our report (MPDS-UN5367-03) dated July 21, 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) 277-2321.

Sincerely,

MPDS Services, Inc.

Brenda Pepito

/bp

Enclosure

cc: Ms. Tina R. Berry

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

MPDS

SERVICES, INCORPORATED

MPDS-UN5367-02
April 18, 1994

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

Attention: Ms. Tina R. Berry

RE: Quarterly Data Report
Unocal Service Station #5367
500 Bancroft Avenue
San Leandro, California

Dear Ms. Berry:

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

RECENT FIELD ACTIVITIES

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

Ground water samples were collected on March 18, 1994. Prior to sampling, the wells were each purged of between 4 and 48 gallons of water. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded and are presented in Table 2. Once the field parameters were observed to stabilize, and where possible, a minimum of approximately four casing volumes had been removed from each well, 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.

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

MPDS

SERVICES, INCORPORATED

May 3, 1994

Mr. Scott Seery
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94261

RE: Unocal Service Station #5367
500 Bancroft Avenue
San Leandro, California

Dear Mr. Seery:

Per the request of the Unocal Corporation Project Manager, Ms. Tina R. Berry, enclosed please find our report (MPDS-UN5367-02) dated April 18, 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) 277-2321.

Sincerely,

MPDS Services, Inc.

for: Deanna L. Harding
Technical Assistant

/bp

Enclosure

cc: Ms. Tina R. Berry

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

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 Table 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.

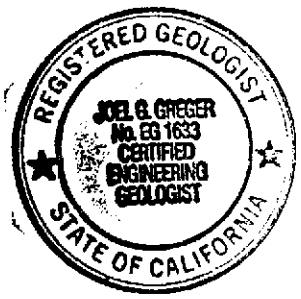
DISTRIBUTION

A copy of this report should be sent to Mr. Scott Seery of the Alameda County Health Care Services Agency, and to Mr. Mike Bakaldin of the San Leandro Fire Department.

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

Sincerely,

MPDS Services, Inc.



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

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

/dlh

Attachments: Tables 1, 2 & 3
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Warren Gross, GeoResearch

TABLE 1

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)	Total Well Depth (feet)◆
(Monitored and Sampled on March 18, 1994)						
MW-1	27.73	30.10	0	No	4	35.00
MW-2	27.79	30.34	0	No	44	47.00
MW-3	27.75	30.17	0	No	48	48.60
MW-4	27.87	30.42	0	No	47	48.20
MW-5	27.83	30.67	0	No	10	44.54
MW-6	27.50	29.46	0	No	10.5	44.72
MW-7	27.49	29.76	0	No	10	44.14
MW-8	27.59	30.12	0	No	10	44.06
(Monitored and Sampled on December 13, 1993)						
MW-1	25.10	32.73	0	No	2	35.00
MW-2	25.10	33.03	0	No	36.5	46.98
MW-3	25.10	32.82	0	No	42	48.65
MW-4*	25.20	33.09	0	--	0	48.20
MW-5*	25.11	33.39	0	--	0	44.54
MW-6*	24.82	32.14	0	--	0	44.68
MW-7*	24.80	32.45	0	--	0	44.15
MW-8	24.96	32.75	0	No	8	44.05
(Monitored and Sampled on September 3, 1993)						
MW-1	27.03	30.80	0			
MW-2	27.03	31.10	0			
MW-3	27.04	30.88	0			
MW-4	27.24	31.05	0			
MW-5	27.05	31.45	0			
MW-6	26.71	30.25	0			
MW-7	26.65	30.60	0			
MW-8	26.81	30.90	0			

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)	Total Well Depth (feet)◆
(Monitored and Sampled on June 25, 1993)						
MW-1	29.47	28.36	0			
MW-2	29.73	28.40	0			
MW-3	29.49	28.43	0			
MW-4	29.69	28.60	0			
MW-5	WELL WAS INACCESSIBLE					
MW-6	29.10	27.86	0			
MW-7	29.00	28.25	0			
MW-8	29.44	28.27	0			

Well #	Well Casing Elevation (feet)**
MW-1	57.83
MW-2	58.13
MW-3	57.92
MW-4	58.29
MW-5	58.50
MW-6	56.96
MW-7	57.25
MW-8	57.71

◆ The depth to water level and total well depth measurements were taken from the top of the well casings.

* Monitored only.

** The elevations of the top of the well casings have been surveyed relative to Mean Sea Level (MSL).

-- Sheen determination was not performed.

Note: Monitoring data prior to December 13, 1993, were provided by RESNA.

TABLE 2

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on March 18, 1994)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW-1	0.83	15:45	0	0	68.7	9.78	7.02
			1	1.20	68.1	9.59	6.77
			2	2.41	67.9	9.43	6.67
			3	3.61	68.1	9.29	6.80
		15:50	4	4.82	67.8	9.17	6.70
MW-2	10.83	13:20	0	0	66.2	7.75	7.80
			11	1.02	67.1	7.72	6.64
			22	2.03	66.4	7.67	7.12
			33	3.05	67.0	7.73	6.62
		14:00	44	4.06	66.4	7.71	6.59
MW-3	11.98	14:50	0	0	63.7	7.89	7.13
			12	1.00	67.2	8.18	6.67
			24	2.00	68.5	8.43	6.59
			36	3.01	68.5	8.61	6.57
		15:30	48	4.01	67.9	8.63	6.54
MW-4	11.56	12:05	0	0	62.5	5.77	7.61
			12	1.04	66.2	6.25	7.08
			24	2.08	65.5	6.00	6.97
			36	3.11	66.1	6.09	7.05
		12:50	47	4.07	65.9	6.07	6.96
MW-5	2.36	11:25	0	0	62.7	6.40	7.40
			2.5	1.06	63.9	6.44	7.23
			5	2.12	64.3	6.50	7.20
			7.5	3.18	64.0	6.52	7.19
		11:35	10	4.24	64.3	6.54	7.10

TABLE 2 (Continued)

RECORD OF THE TEMPERATURE, CONDUCTIVITY, AND pH VALUES
IN THE MONITORING WELLS DURING PURGING AND PRIOR TO SAMPLING

(Measured on March 18, 1994)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW-6	2.59	9:50	0	0	64.6	6.50	7.95
			2.5	0.97	65.0	6.45	7.68
			5	1.93	65.2	6.45	7.55
			7.5	2.90	65.7	6.46	7.40
		10:00	10.5	4.05	65.8	6.44	7.33
MW-7	2.44	10:30	0	0	61.6	7.03	7.40
			2.5	1.02	62.8	6.72	7.24
			5	2.05	63.4	6.90	7.10
			7.5	3.07	63.6	6.93	6.79
		10:40	10	4.10	63.4	6.93	6.80
MW-8	2.37	14:25	0	0	64.6	9.40	7.16
			2.5	1.05	65.5	9.51	6.68
			5	2.11	65.9	9.52	6.87
			7.5	3.16	65.7	9.38	6.76
		14:35	10	4.22	65.5	9.34	6.68

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
3/18/94	MW-1	99,000	3,800	37,000	6,800	36,000
	MW-2	250	6.4	0.64	28	24
	MW-3	22,000	1,200	430	2,200	9,700
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	0.93	ND	1.4
	MW-7	ND	ND	ND	ND	ND
	MW-8	6,100	85	ND	260	260
12/13/93	MW-1	140,000	3,600	37,000	7,100	40,000
	MW-2	260	7.7	0.83	17	23
	MW-3	49,000	1,300	360	2,300	9,200
	MW-4	SAMPLED SEMI-ANNUALLY				
	MW-5	SAMPLED SEMI-ANNUALLY				
	MW-6	SAMPLED SEMI-ANNUALLY				
	MW-7	SAMPLED SEMI-ANNUALLY				
	MW-8	6,900	180	ND	240	550
9/03/93	MW-1	160,000	3,900	41,000	6,800	38,000
	MW-2	1,400	31	4.3	99	53
	MW-3	82,000	2,400	3,400	4,200	21,000
	MW-4	86	14	13	1.4	7.1
	MW-5	ND	ND	1.5	ND	7.9
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	9,800	180	ND	580	700
6/25/93	MW-1	160,000	4,300	36,000	5,800	34,000
	MW-2	4,000	110	ND	320	280
	MW-3	27,000	1,200	980	1,700	6,900
	MW-4	NOT SAMPLED				
	MW-5	WELL WAS INACCESSIBLE				
	MW-6	NOT SAMPLED				
	MW-7	NOT SAMPLED				
	MW-8	8,100	160	ND	580	740

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
3/03/93	MW-1	330,000	3,800	21,000	4,200	24,000
	MW-2	4,200	62	2.9	97	120
	MW-3	96,000*	1,400	1,900	1,400	8,400
	MW-4	68	0.9	0.6	ND	1.9
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND*	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	13,000	33	ND	160	290
11/18/92	MW-1	WELL WAS DRY				
	MW-2	65	1.2	ND	2.8	1.4
	MW-3	24,000*	430	160	640	2,800
	MW-4	NOT SAMPLED				
	MW-5	NOT SAMPLED				
	MW-6	NOT SAMPLED				
	MW-7	NOT SAMPLED				
	MW-8	1,100	6.1	ND	13	5.6
10/16/92	MW-1	WELL WAS DRY				
	MW-2	--	--	--	--	--
	MW-3	--	--	--	--	--
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	300	0.96	ND	4.0	3.5
9/30/92	MW-2	820	21	ND	42	25
	MW-3	36,000	730	200	1,000	4,400
6/18/92	MW-1	680,000	9,000	40,000	7,600	44,000
	MW-2	1,200	35	1.6	56	26
	MW-3	180,000	2,200	1,700	2,300	1,100
	MW-4	ND	ND	ND	ND	ND
	MW-5	--	--	--	--	--
	MW-6	ND	ND	ND	ND	ND
	MW-7	--	--	--	--	--
	MW-8	WELL WAS INACCESSIBLE				

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
3/31/92	MW-1	330,000	8,200	33,000	6,800	36,000
	MW-2	4,200	110	3	190	250
	MW-3	100,000	1,900	1,900	2,300	9,400
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	1.1
	MW-6	ND	ND	1.3	ND	2.0
	MW-7	ND	ND	ND	ND	0.9
	MW-8	15,000	120	1.0	430	530
12/27/91	MW-2	170	3.9	ND	7.3	60
	MW-3	31,000	240	280	400	1,600
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	1,600	15	2.9	40	49
9/27/91	MW-1	WELL WAS DRY				
	MW-2	110	2.6	ND	5.6	5.1
	MW-3	4,000	160	84	180	560
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	720	13	4.3	26	26
5/06/91	MW-1	--	--	--	--	--
	MW-2	2,300	150	10	52	110
	MW-3	39,000	1,000	570	930	3,900
	MW-4	--	--	--	--	--
	MW-5	--	--	--	--	--
	MW-6	--	--	--	--	--
	MW-7	ND	ND	ND	ND	ND
	MW-8	14,000	80	ND	250	550
2/07/91	MW-2	510	40	ND	29	44

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
2/06/91	MW-1	WELL WAS DRY				
	MW-3	13,000	310	150	380	1,200
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	630	9.6	ND	35	36
11/30/90	MW-1	WELL WAS DRY				
	MW-2	400	41	ND	39	37
	MW-3	13,000	390	81	410	1,000
	MW-4	ND	ND	ND	ND	1.2
	MW-5	ND	ND	0.7	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	0.6	1.5
	MW-8	570	13	ND	45	36
8/24/90	MW-1	WELL WAS DRY				
	MW-2	330	17	ND	19	20
	MW-3	19,000	480	160	510	1,500
	MW-4	ND	ND	ND	ND	ND
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	990	13	ND	48	66
7/19/90	MW-1	WELL WAS DRY				
	MW-2	--	--	--	--	--
	MW-3	--	--	--	--	--
	MW-4	--	--	--	--	--
	MW-5	--	--	--	--	--
	MW-6	ND	ND	ND	ND	ND
	MW-7	--	--	--	--	
	MW-8	--	--	--	--	--

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
5/90	MW-2	1,000	39.0	ND	32.0	52.0
	MW-3	19,000	330	170	310	1,500
	MW-4	ND	ND	ND	0.68	1.4
	MW-5	ND	ND	ND	ND	ND
	MW-6	ND	ND	ND	ND	ND
	MW-7	24	ND	ND	0.74	1.7
	MW-8	770	6.5	ND	20	32
2/16/90	MW-1	WELL WAS DRY				
	MW-2	840	50.0	0.5	28.0	44.0
	MW-3	22,000	710	4,100	6,900	33,000
	MW-4	ND	ND	ND	ND	ND
	MW-5	67	0.51	1.6	2.9	7.5
	MW-6	ND	ND	ND	ND	ND
	MW-7	ND	ND	ND	ND	ND
	MW-8	1,900	11	ND	52	55
1/27/89	MW-1	WELL WAS DRY				
	MW-2	510	58.0	8.7	22.6	20.3
	MW-3	39,000	1,570	2,830	1,250	7,070
	MW-4	ND	ND	ND	ND	ND
10/03/88	MW-1	WELL WAS DRY				
	MW-2	1,760	47.8	7.4	20.9	81.6
	MW-3	61,000	1,060	3,380	1,520	8,720
	MW-4	ND	ND	ND	ND	ND
9/07/88	MW-1	WELL WAS DRY				
4/27/88	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
11/19/87	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
11/13/87	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
11/05/87	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
10/06/87	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
9/24/87	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
9/23/87	MW-1	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				

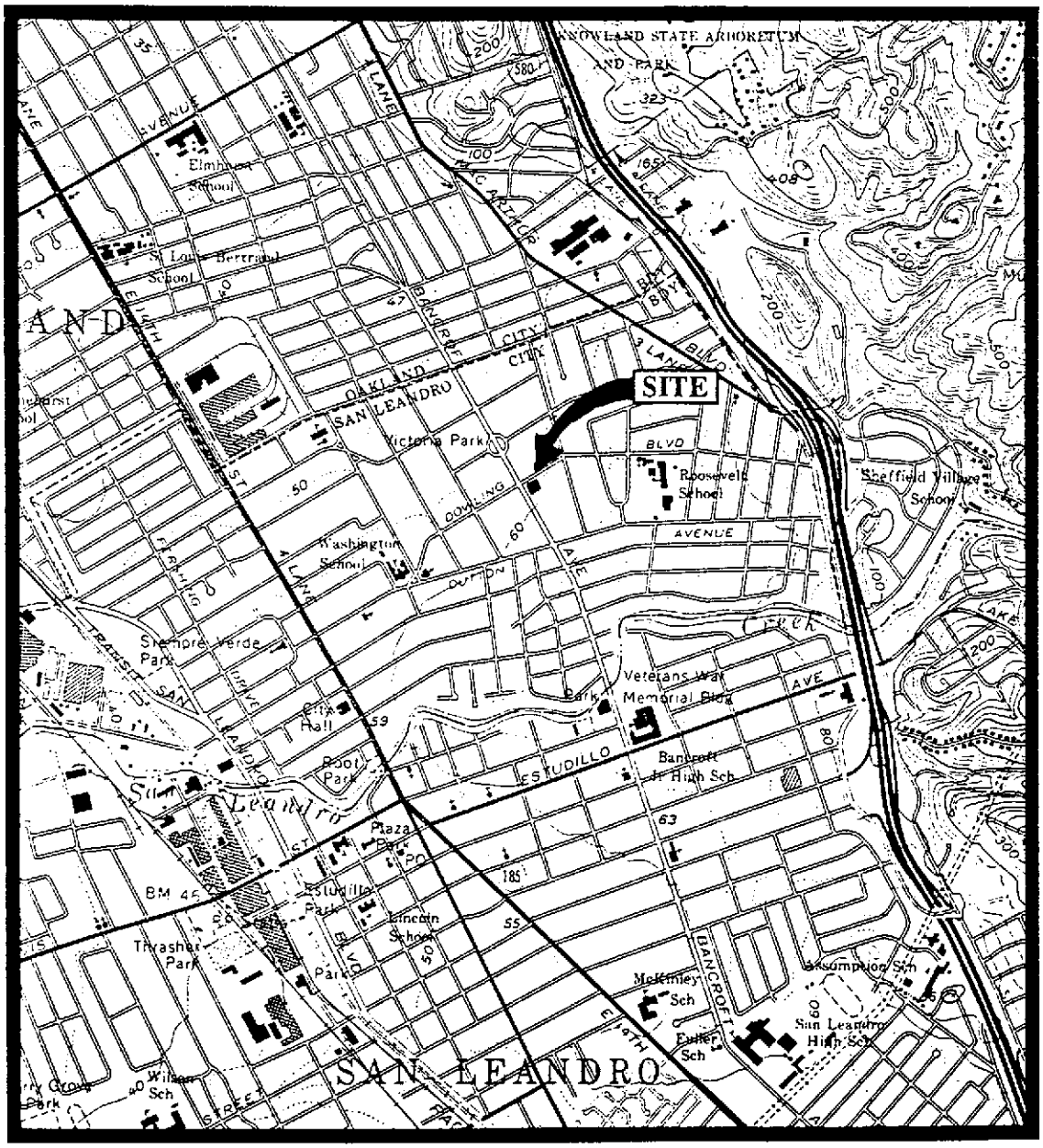
* Chromatogram contains early eluting peak.

ND = Non-detectable.

-- Indicates analysis was not performed.

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

Note: Laboratory analyses data prior to December 13, 1993, were provided by RESNA.

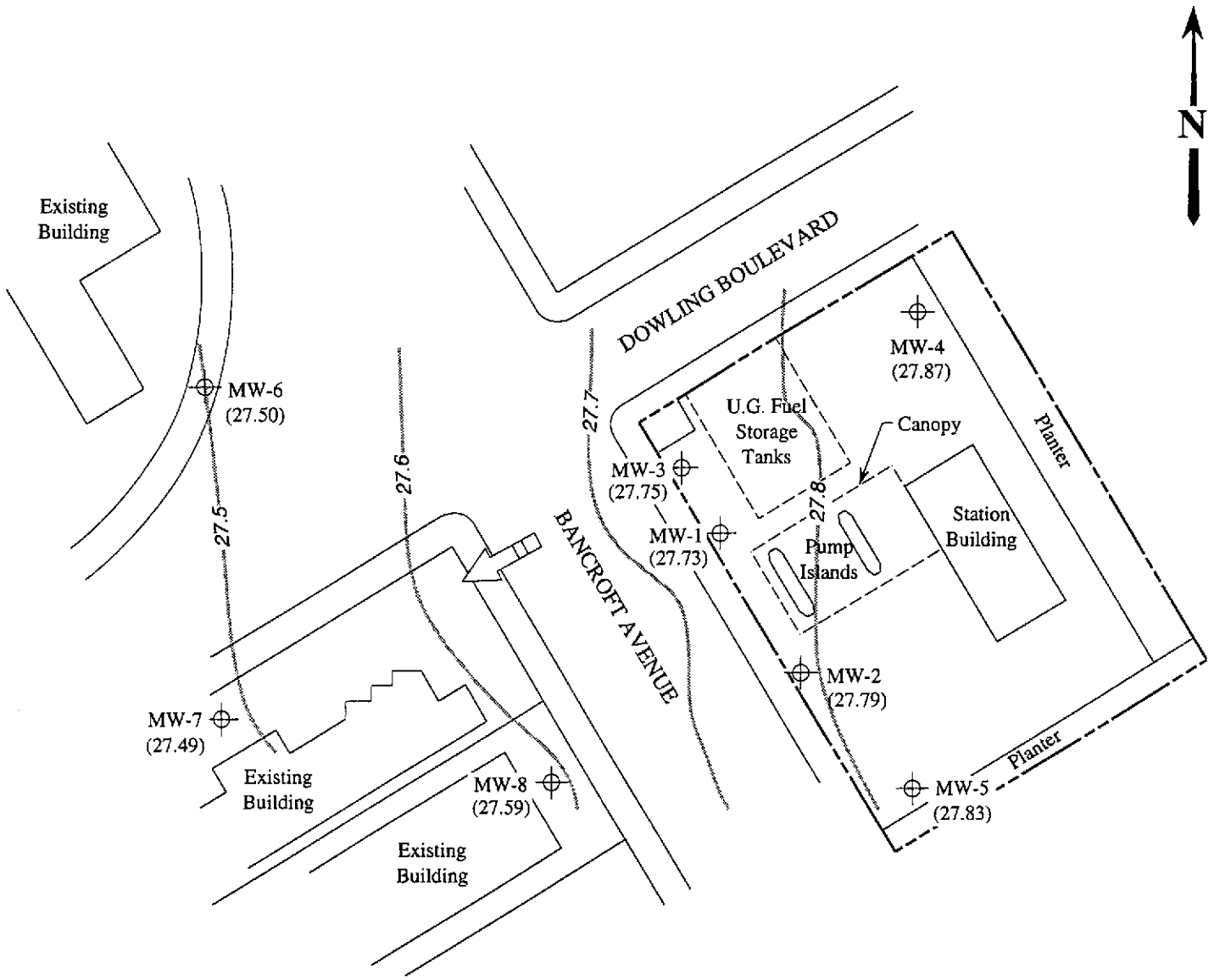


Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

MPDS SERVICES, INC.	**UNOCAL SERVICE STATION #5367** **500 BANCROFT AVENUE** **SAN LEANDRO, CALIFORNIA**	**LOCATION MAP**



LEGEND

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

0 50 100

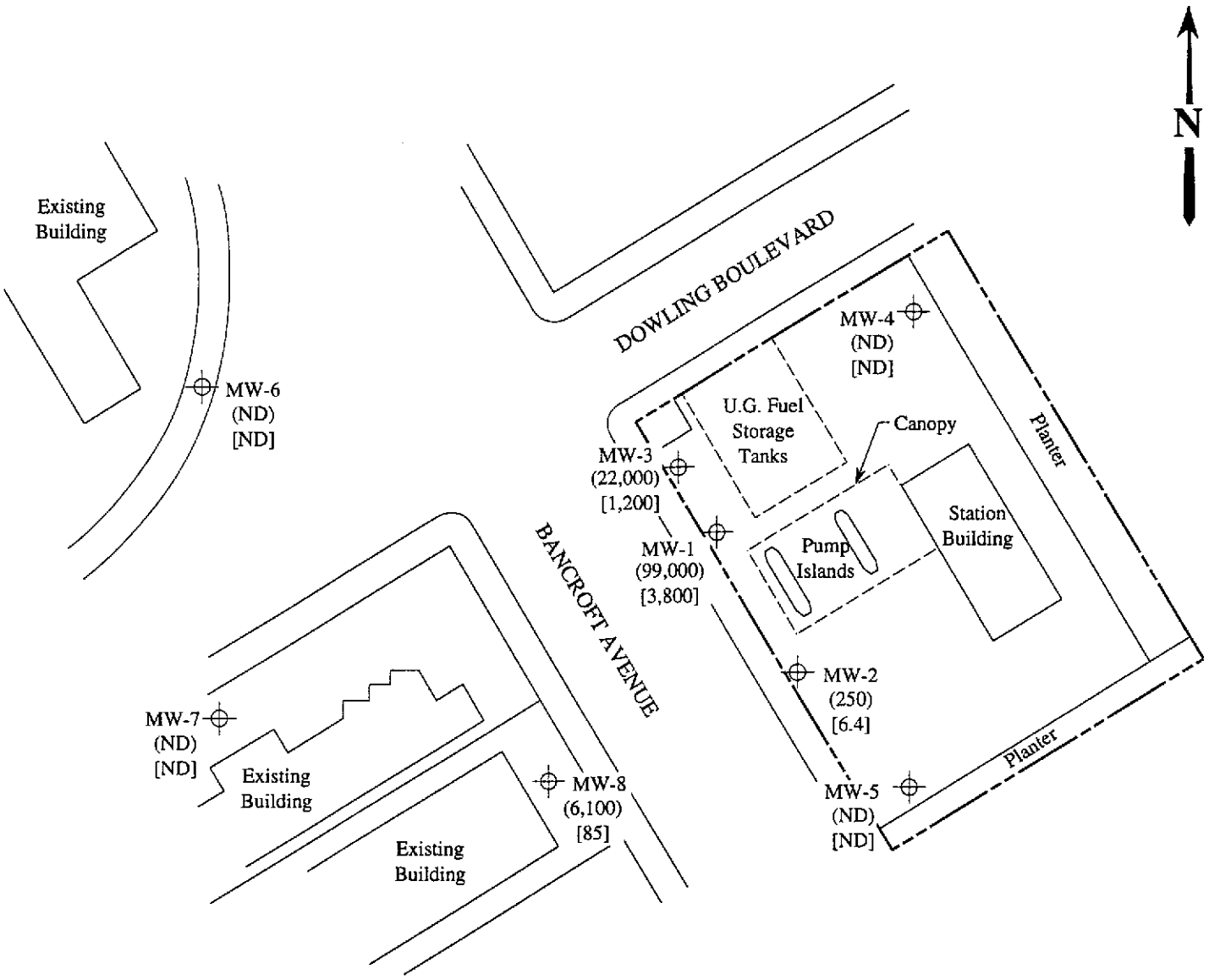
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE MARCH 18, 1994 MONITORING EVENT

MPDS
SERVICES, INC.

UNOCAL SERVICE STATION #5367
500 BANCROFT AVENUE
SAN LEANDRO, CALIFORNIA

FIGURE
1



LEGEND

- Monitoring well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- ND = Non-detectable

0 50 100

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON MARCH 18, 1994

M P D S SERVICES, INC.	**UNOCAL SERVICE STATION #5367** **500 BANCROFT AVENUE** **SAN LEANDRO, CALIFORNIA**	FIGURE **2**

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, Inc.	Client Project ID:	Unocal #5367, 500 Bancroft Ave., San Leandro	Sampled:	Mar 18, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Mar 18, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Apr 1, 1994
Attention: Avo Avedissian	First Sample #:	403-1164		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 403-1164 MW 1	Sample I.D. 403-1165 MW 2	Sample I.D. 403-1166 MW 3	Sample I.D. 403-1167 MW 4	Sample I.D. 403-1168 MW 5	Sample I.D. 403-1169 MW 6
Purgeable Hydrocarbons	50	99,000	250	22,000	N.D.	N.D.	N.D.
Benzene	0.5	3,800	6.4	1,200	N.D.	N.D.	N.D.
Toluene	0.5	37,000	0.64	430	N.D.	N.D.	0.93
Ethyl Benzene	0.5	6,800	28	2,200	N.D.	N.D.	N.D.
Total Xylenes	0.5	36,000	24	9,700	N.D.	N.D.	1.4
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	400	1.0	400	1.0	1.0	1.0
Date Analyzed:	3/28/94	3/28/94	3/28/94	3/28/94	3/29/94	3/28/94
Instrument Identification:	ML #2	ML #2	ML #2	ML #2	HP-4	ML #2
Surrogate Recovery, %: (QC Limits = 70-130%)	112	87	117	130	96	103

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

SEQUOIA ANALYTICAL, #1271

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, Inc.	Client Project ID:	Unocal #5367, 500 Bancroft Ave., San Leandro	Sampled: Mar 18, 1994
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received: Mar 18, 1994
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported: Apr 1, 1994
Attention: Avo Avedissian	First Sample #:	403-1170	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 403-1170 MW 7	Sample I.D. 403-1171 MW 8	Sample I.D. Matrix Blank
Purgeable Hydrocarbons	50	N.D.	6,100	
Benzene	0.5	N.D.	85	
Toluene	0.5	N.D.	N.D.	
Ethyl Benzene	0.5	N.D.	260	
Total Xylenes	0.5	N.D.	260	
Chromatogram Pattern:		--	Gasoline	

Quality Control Data

Report Limit Multiplication Factor:	1.0	10	1.0
Date Analyzed:	3/28/94	3/29/94	3/28/94
Instrument Identification:	ML #2	HP-4	ML #2
Surrogate Recovery, %: (QC Limits = 70-130%)	110	82	103

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

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

Sequoia Analytical

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

Client Project ID: Unocal #5367, 500 Bancroft Ave., San Leandro
Matrix: Liquid
QC Sample Group: 4031164-71

Reported: Apr 1, 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#:	4031167	4031167	4031167	4031167
Date Prepared:	3/28/94	3/28/94	3/28/94	3/28/94
Date Analyzed:	3/28/94	3/28/94	3/28/94	3/28/94
Instrument I.D.#:	ML #2	ML #2	ML #2	ML #2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	85	80	85	82
Matrix Spike Duplicate % Recovery:	95	85	85	82
Relative % Difference:	11	6.1	0.0	0.0
LCS Batch#:	LCS032894	LCS032894	LCS032894	LCS032894
Date Prepared:	3/28/94	3/28/94	3/28/94	3/28/94
Date Analyzed:	3/28/94	3/28/94	3/28/94	3/28/94
Instrument I.D.#:	ML #2	ML #2	ML #2	ML #2
LCS % Recovery:	80	80	80	80
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

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

Sequoia Analytical

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

Client Project ID: Unocal #5367, 500 Bancroft Ave., San Leandro
Matrix: Liquid
QC Sample Group: 4031164-71
Reported: Apr 1, 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#:	4031121	4031121	4031121	4031121
Date Prepared:	3/29/94	3/29/94	3/29/94	3/29/94
Date Analyzed:	3/29/94	3/29/94	3/29/94	3/29/94
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	95
Relative % Difference:	5.1	5.1	5.1	3.1
LCS Batch#:	2LCS032994	2LCS032994	2LCS032994	2LCS032994
Date Prepared:	3/29/94	3/29/94	3/29/94	3/29/94
Date Analyzed:	3/29/94	3/29/94	3/29/94	3/29/94
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	90	90	93	92
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL, #1271

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 # 5367 CITY: SAN LEANDRO
ADDRESS: 500 BANCROFT AVE

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
MW1	3.18		x	x		2	Well	x								403 1164 A B
MW2	"		x	x		2	"	x								1165
MW3	"		x	x		2	"	x								1166
MW4	"		x	x		2	"	x								1167
MW5	"		x	x		2	"	x								1168
MW6	"		x	x		2	"	x								1169
MW7	"		x	x		2	"	x								1170
MW8	"		x	x		2	"	x								1171

ANALYSES REQUESTED

TURN AROUND TIME: REGULAR

REMARKS

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE) Ray	3-18-94	(SIGNATURE) 3/18/94 17 15
(SIGNATURE)	3-21 7:13 15	(SIGNATURE)
(SIGNATURE)	3-21 2:45	(SIGNATURE) 5°C Melissa Chevere
(SIGNATURE)		(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: TITLE: DATE: 3/18/94