MPDS

SERVICES, INCORPORATED

February 10, 1994

Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94621

Attention: Mr. Scott Seery

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

Per the request of the Project Manager, Ms. Tina R. Berry of Unocal Corporation, enclosed please find our report (MPDS-UN5367-01) dated January 27, 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.

Deanna L. Harding
Technical Assistant

/dlh

Enclosure

cc: Ms. Tina R. Berry

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

MPDS

SERVICES, INCORPORATED

MPDS-UN5367-01
January 27, 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 December 13, 1993. Prior to sampling, the wells were each purged of between 2 and 42 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.

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

2401 Stanwell Drive, Suite 400
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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, Mr. Mike Bakaldin of the San Leandro Fire Department, and to Mr. Eddy So of the Regional Water Quality Control Board, San Francisco Bay Region.

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

Sincerely,

MPDS Services, Inc.

Talin Kaloustian
Staff Engineer

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. Keith Romstad, RESNA, Novato Office

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 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			
(Monitored and Sampled on March 3, 1993)						
MW-1	31.80	26.03	NM			
MW-2	31.83	26.30	NM			
MW-3	31.81	26.11	NM			
MW-4	31.86	26.43	0			
MW-5	31.88	26.62	0			
MW-6	31.53	25.43	0			
MW-7	31.59	25.66	0			
MW-8	31.71	26.00	0			

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

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 December 13, 1993)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW-1	0.38	14:20	0.5	1.32	63.7	6.58	6.90
			1	2.63	64.6	6.50	6.71
			1.5	3.95	64.6	6.54	6.62
		14:28	2	5.26	64.8	6.47	6.59
MW-2	9.06	12:22	9	0.99	63.6	4.98	7.03
			18	1.99	64.6	5.08	6.87
			27	2.98	64.7	5.12	6.80
		12:44	36	3.97	64.9	5.13	6.79
			36.5	4.03			
MW-3	10.28	13:20	10.5	1.02	65.0	5.81	6.95
			21	2.04	65.6	5.67	6.72
			31.5	3.06	65.4	5.68	6.66
		13:48	42	4.09	65.3	5.76	6.66
MW-8	1.92	11:34	2	1.04	62.3	6.38	6.84
			4	2.08	63.0	6.41	6.67
			6	3.13	63.3	6.44	6.59
		11:42	8	4.17	63.4	6.44	6.57

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
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
9/3/93	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

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
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				
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

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
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
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

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
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				

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
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				
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				

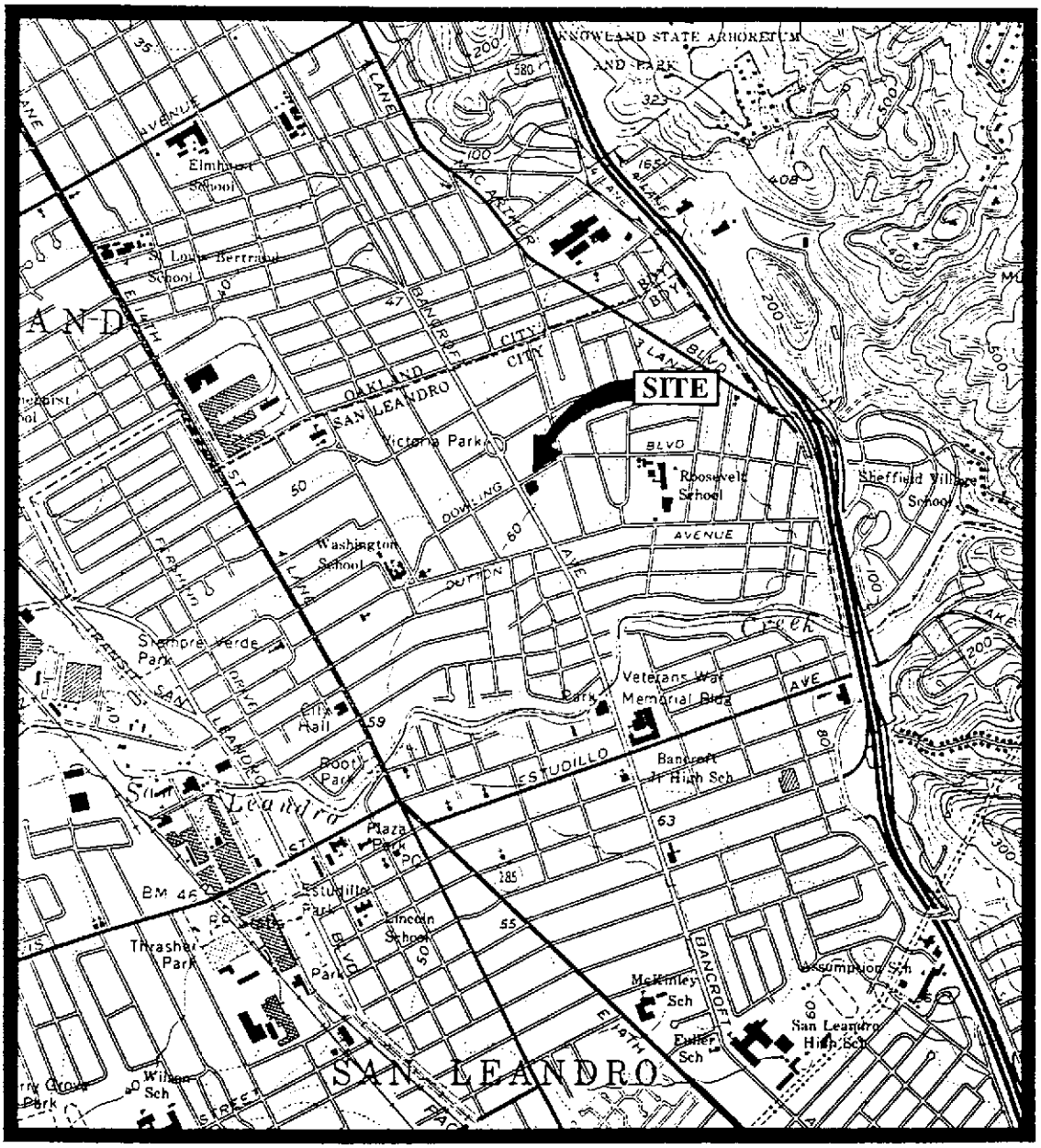
* Chromatogram contains early eluting peak.

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.

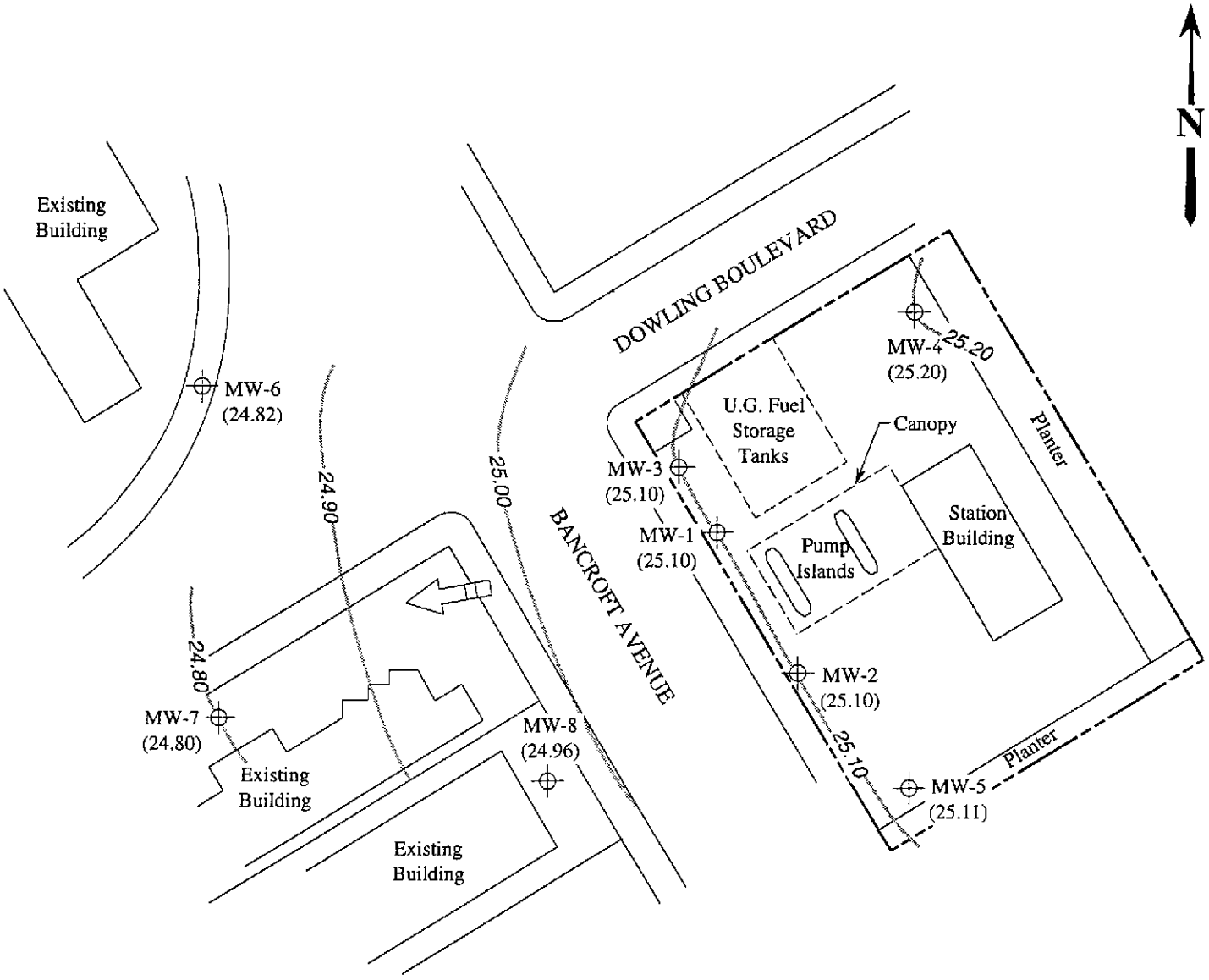


Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

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



LEGEND

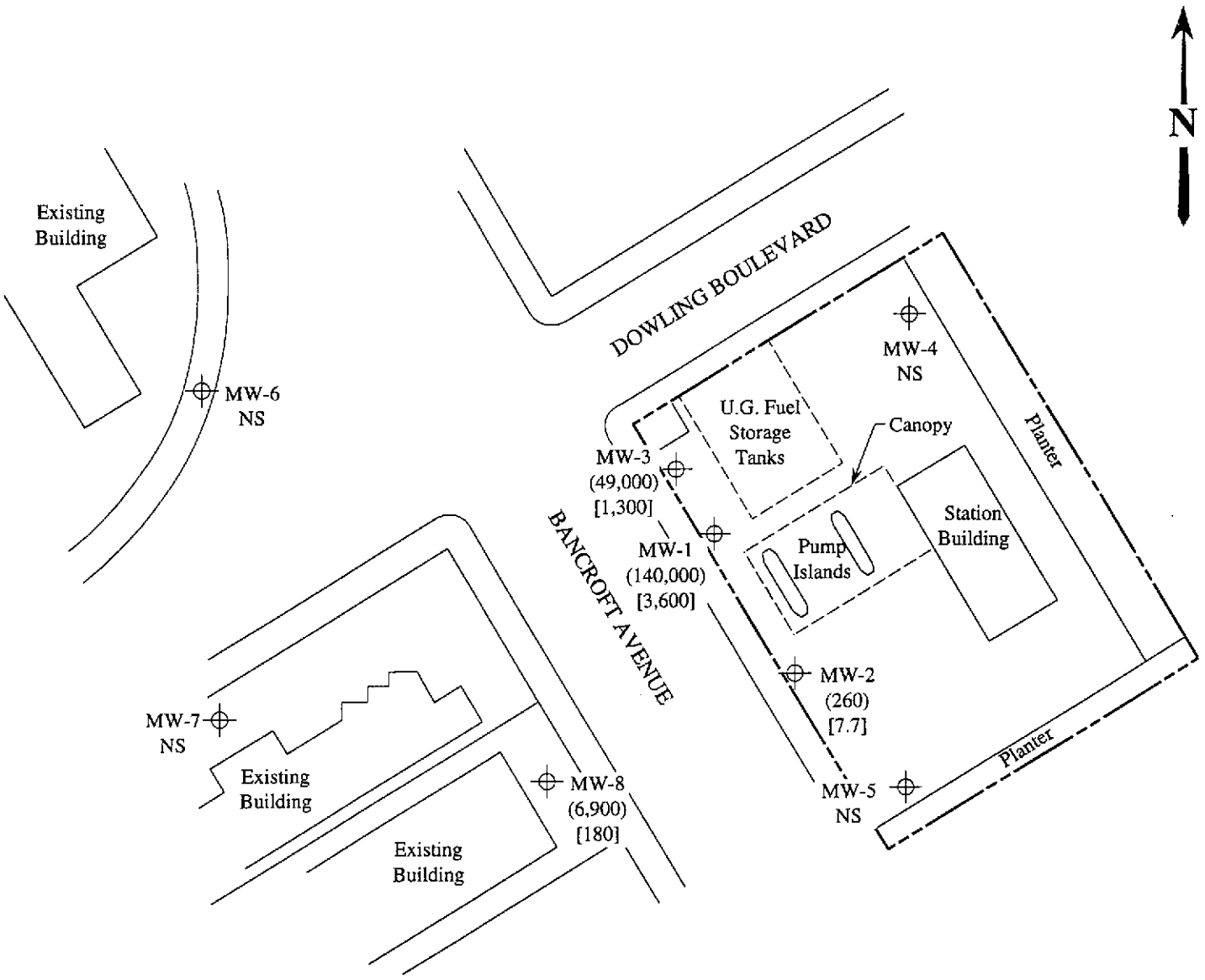
- Monitoring well
- ( ) Ground water elevation in feet above Mean Sea Level
- Direction of ground water flow
- Contours of ground water elevation

0 50 100

Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE DECEMBER 13, 1993 MONITORING EVENT

M P D S 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
- NS = Not Sampled

0 50 100

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON DECEMBER 13, 1993

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

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 5367, 500 Bancroft Ave., San Leandro	Sampled:	Dec 13, 1993
2401 Stanwell Dr., Ste. 400	Sample Matrix:	Water	Received:	Dec 13, 1993
Concord, CA 94520	Analysis Method:	EPA 5030/8015/8020	Reported:	Dec 29, 1993
Attention: Avo Avedessian	First Sample #:	312-0896		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 312-0896 MW 1	Sample I.D. 312-0897 MW 2	Sample I.D. 312-0898 MW 3	Sample I.D. 312-0899 MW 8	Sample I.D. Method Blank
Purgeable Hydrocarbons	50	140,000	260	49,000	6,900	
Benzene	0.5	3,600	7.7	1,300	180	
Toluene	0.5	37,000	0.83	360	N.D.	
Ethyl Benzene	0.5	7,100	17	2,300	240	
Total Xylenes	0.5	40,000	23	9,200	550	
Chromatogram Pattern:		Gasoline	Gasoline	Gasoline	Gasoline	

Quality Control Data

Report Limit Multiplication Factor:	400	1.0	200	20	1.0
Date Analyzed:	12/23/93	12/22/93	12/26/93	12/23/93	12/22/93
Instrument Identification:	HP-4	HP-2	HP-4	HP-4	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	95	111	92	89	114

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

SEQUOIA ANALYTICAL

Alan B. Kemp
Project Manager

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

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

Client Project ID: Unocal 5367, 500 Bancroft Ave., San Leandro
Matrix: Liquid
QC Sample Group: 3120896-899

Reported: Jan 6, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	3120897	3120897	3120897	3120897
Date Prepared:	12/22/93	12/22/93	12/22/93	12/22/93
Date Analyzed:	12/22/93	12/22/93	12/22/93	12/22/93
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	92	100	85	95
Matrix Spike Duplicate % Recovery:	101	106	100	107
Relative % Difference:	9.3	5.8	16	12
LCS Batch#:	LCS122293	LCS122293	LCS122293	LCS122293
Date Prepared:	12/22/93	12/22/93	12/22/93	12/22/93
Date Analyzed:	12/22/93	12/22/93	12/22/93	12/22/93
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	95	99	105	110
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

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

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 5367, 500 Bancroft Ave., San Leandro
2401 Stanwell Dr., Ste. 400	Matrix:	Liquid
Concord, CA 94520		
Attention: Avo Avedessian	QC Sample Group: 3120896-899	Reported: Jan 6, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	3121374	3121374	3121374	3121374
Date Prepared:	12/23/93	12/23/93	12/23/93	12/23/93
Date Analyzed:	12/23/93	12/23/93	12/23/93	12/23/93
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:	88	96	99	99
Matrix Spike Duplicate % Recovery:	91	99	100	100
Relative % Difference:	3.3	3.1	1.0	1.0
LCS Batch#:	LCS122393	LCS122393	LCS122393	LCS122393
Date Prepared:	12/23/93	12/23/93	12/23/93	12/23/93
Date Analyzed:	12/23/93	12/23/93	12/23/93	12/23/93
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	90	96	99	98
% Recovery Control Limits:	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

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

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

MPDS Services	Client Project ID:	Unocal 5367, 500 Bancroft Ave., San Leandro
2401 Stanwell Dr., Ste. 400	Matrix:	Liquid
Concord, CA 94520		
Attention: Avo Avedessian	QC Sample Group:	3120896-899

Reported: Jan 6, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	A. Tuzon	A. Tuzon	A. Tuzon	A. Tuzon
MS/MSD Batch#:	3120977	3120977	3120977	3120977
Date Prepared:	12/26/93	12/26/93	12/26/93	12/26/93
Date Analyzed:	12/26/93	12/26/93	12/26/93	12/26/93
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:	95	100	95	93
Matrix Spike Duplicate % Recovery:	90	100	90	90
Relative % Difference:	5.4	0.0	5.4	3.3
LCS Batch#:	LCS122693	LCS122693	LCS122693	LCS122693
Date Prepared:	12/26/93	12/26/93	12/26/93	12/26/93
Date Analyzed:	12/26/93	12/26/93	12/26/93	12/26/93
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	91	97	90	91
% Recovery Control Limits:	71-133	72-128	72-130	71-120

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

Alan B. Kemp
Project Manager

MPDS
Services, Inc.

CHAIN OF CUSTODY

PLER: VanKes
NESSING AGENCY:

SITE NAME & ADDRESS: Unocal #5367 / San Leandro
500 Bancroft Ave.

ANALYSES REQUESTED: TPHG + BTEX

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPHG + BTEX
MW1	12/13/93			X	X		2	Monitoring well	X
MW2	"			X	X		2	" "	X
MW3	"			X	X		2	" "	X
MW8	"			X	X		2	" "	X

REMARKS:
3120896 A-B
0897
0898
0899

Relinquished by: (Signature) W. Parker
Date/Time 12/13/93 4:05
Received by: (Signature) 12-13-93 16:05

Relinquished by: (Signature)
Date/Time 12/14 12:00
Received by: (Signature)

Relinquished by: (Signature)
Date/Time 12:14 1330
Received by: (Signature) Melissa Crenshaw

Relinquished by: (Signature)
Date/Time
Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:
1. Have all samples received for analysis been stored in 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: Analyst — Date: 12-13-93

2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: 510.602.5100 Fax: 510.687.0602