PACIFIC
ENVIRONMENTAL
GROUP, INC.

July 19, 1996
Project 310-127.5A

Mr. Richard Hiett
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Re: Unocal Corporation
Quarterly Summary Report
Second Quarter 1996

Dear Mr. Hiett:

As directed by Ms. Tina Berry of Unocal Corporation, Pacific Environmental Group, Inc. is forwarding the quarterly summary report for the following location:

Service Station	Location
5367	500 Bancroft Avenue, San Leandro

Should you have questions or comments, please do not hesitate to contact our office at (408) 441-7500.

Sincerely,

Pacific Environmental Group, Inc.

Joseph Muzzio
Project Geologist

Enclosure

cc: Ms. Tina Berry, Unocal Corporation
Ms. Amy Leech, Alameda County Health Care Services

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539

Quarterly Summary Report
Second Quarter 1996

Unocal Service Station 5367
500 Bancroft Avenue
San Leandro, California

City/County ID #: None
County: Alameda

BACKGROUND

The site is an active Unocal service station. In 1987, limited soil excavation was performed at the site during the replacement of underground storage tanks, product lines and product dispensers. One groundwater monitoring well was installed following these activities. Between 1988 and 1994, eight monitoring wells were installed, aquifer testing was performed and a remedial action plan was prepared. In 1995, one additional monitoring well was installed, and a soil vapor extraction and groundwater extraction remediation system was constructed. During the first quarter of 1996, remedial system start up and operation were performed.

RECENT QUARTER ACTIVITIES

Groundwater monitoring was performed. Monthly monitoring of the soil vapor and groundwater extraction and treatment system was performed and appropriate compliance documentation was submitted.

NEXT QUARTER ACTIVITIES

Unocal will submit proposed revisions to the current groundwater monitoring program. Operation and maintenance of the remedial system will continue.

CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.
Dissolved groundwater delineated? Yes.
Free product delineated? Not applicable.
Amount of groundwater contaminant recovered this quarter? Approximately 60 pounds.
Soil remediation in progress? Yes.
Start? March 1996.
Anticipated completion date? Unknown.
Dissolved/free product remediation in progress? Yes.
Start? March 1996.
Anticipated completion? Unknown.

CONSULTANT: Pacific Environmental Group, Inc.

Unocal Corporation
Diversified Businesses
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583
Telephone (510) 867-0760
Facsimile (510) 277-2309

UNOCAL 76

July 16, 1996

ACHCSA - DEH
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502
Attn: Ms. Amy Leech

West Region
Environmental Remediation Services

SOS

SUBJECT:
Unocal SS# 5367 and SS# 5760
San Leandro and San Lorenzo, CA

Dear Ms. Leech:

Attached please find copies of my consultant's letters recommending revisions to the groundwater monitoring and sampling frequencies for the subject sites. Unocal wishes to implement the revised schedules immediately and requests concurrence from your office to do so. Please contact me at your earliest convenience if you do not agree with the proposed schedules.

Thank you. I look forward to hearing from you. Please call me at 510-277-2321 if you would like to discuss this matter.

Sincerely,

Tina Berry

Tina Berry
Project Manager

attachment

c: File, SS#5367
File, SS#5760

PACIFIC
ENVIRONMENTAL
GROUP, INC.

June 14, 1996
Project 310-127.5A

Ms. Tina Berry
Unocal Corporation
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

Re: Revised Groundwater Monitoring Program
Unocal Service Station 5367
500 Bancroft Avenue at Dowling Boulevard
San Leandro, California

Dear Ms. Berry:

This letter has been prepared on behalf of Unocal Corporation (Unocal), to present revisions to the groundwater monitoring and sampling program for the Unocal site referenced above. Historical groundwater monitoring and sampling data were most recently presented in an MPDS Services, Inc. (MPDS) *Quarterly Data Report,* dated January 29, 1996.

As requested by Unocal, Pacific Environmental Group Inc. (PACIFIC) has evaluated the current groundwater monitoring program to determine whether a reduction in the monitoring and sampling frequency of site wells may be appropriate at the site. Based on this evaluation, PACIFIC recommends the following revisions to the groundwater monitoring and sampling schedule:

- All existing groundwater monitoring wells, MW-1 through MW-10, will be monitored on a semiannual basis to determine groundwater elevation and separate-phase hydrocarbon thickness. Semiannual groundwater monitoring will be performed in March and September.
- All existing groundwater monitoring wells will be sampled for laboratory analysis on a semiannual basis. Groundwater samples will be analyzed for the presence of total purgeable petroleum hydrocarbons calculated as gasoline, and benzene, toluene, ethylbenzene, and xylenes. Semiannual groundwater sampling will be performed in March and September.

- Reports documenting the monitoring and sampling activities will be presented semi-annually.

Rationale for the modifications to the groundwater monitoring and sampling program are as follows.

- Quarterly groundwater monitoring and sampling have been performed at the site since October 1988. Sufficient data have been collected to develop trends in groundwater quality and flow direction.
- Based on historical groundwater analytical data for perimeter wells MW-4, MW-5, MW-6, MW-7, MW-9, and MW-10, the dissolved hydrocarbon plume beneath the site appears to be stable. Semiannual groundwater monitoring and sampling should be sufficient to provide ongoing documentation of plume stability.
- Active soil and groundwater remediation are in progress at the site. It is anticipated that the hydrocarbon plume will decrease in size and increase in stability as a result of the ongoing operation of the remedial system.

The modifications to the groundwater monitoring and sampling schedule for the site will be implemented immediately. The next semiannual groundwater monitoring and sampling event will be performed in September 1996.

Copies of this letter should be distributed to: Mr. Richard Heitt of the Regional Water Quality Control Board: Ms. Any Leech of the Alameda County Health Care Services: and Mr. Nubar Srabian of MPDS Sercices, Inc. If you have any questions regarding the contents of this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.

Joseph Muzzio
Project Geologist
C.E.G. 1672

3101275A/1996MRP

MONITORING
PURGING
DISPOSING
SAMPLING
mpds SERVICES, INCORPORATED

MPDS-UN5367-09
January 29, 1996

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 29, 1995. Prior to sampling, the wells were each purged of between 3.5 and 47.5 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. Equipment blank, Trip blank and Field blank samples (denoted as ES1, ES2 and ES3 respectively) were also collected for quality assurance and control. 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 3 and 4. 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.

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

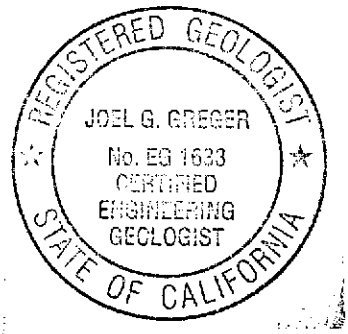
A copy of this report should be sent to Mr. Scott Seery of the Alameda County Health Care Services Agency, and to Mr. Mike Bakaldin of the San Leandro Fire Department.

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

Sincerely,

MPDS Services, Inc.

Haig (Gary) Tejirian
Senior Staff Geologist



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

License No. EG 1633
Exp. Date 8/31/96

/jfc

Attachments: Tables 1 through 4
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation

cc: Mr. Frank Poss, PSI

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)
(Monitored and Sampled on December 29, 1995)						
MW-1	27.43	30.40	35.15	0	No	3.5
MW-2	27.88	30.25	46.70	0	No	43
MW-3	28.01	29.91	48.07	0	No	47.5
MW-4*	27.33	30.96	48.50	0	--	0
MW-5*	27.63	30.87	44.52	0	--	0
MW-6*	27.34	29.62	44.56	0	--	0
MW-7*	27.34	29.91	43.70	0	--	0
MW-8	27.46	30.25	43.90	0	No	9.5
MW-9	27.45	29.02	44.63	0	No	11
MW-10	27.39	31.55	42.60	0	No	8
(Monitored and Sampled on October 24, 1995)						
MW-1*	27.84	29.99	★	0	--	0
MW-2*	27.57	30.56	★	0	--	0
MW-3*	27.58	30.34	★	0	--	0
MW-4*	27.50	30.79	★	0	--	0
MW-5*	27.52	30.98	★	0	--	0
MW-6*	27.23	29.73	★	0	--	0
MW-7*	27.20	30.05	★	0	--	0
MW-8*	27.31	30.40	★	0	--	0
MW-9*	27.26	29.21	★	0	--	0
MW-10	27.18	31.76	44.15	0	No	8.5
(Monitored and Sampled on September 28, 1995)						
MW-1	28.28	29.55	35.05	0	No	4
MW-2	28.36	29.77	47.00	0	No	45
MW-3	28.35	29.57	48.60	0	No	50
MW-4	28.24	30.05	48.55	0	No	49
MW-5	28.35	30.15	44.50	0	No	10
MW-6	28.04	28.92	44.70	0	No	11
MW-7	27.96	29.29	43.85	0	No	10
MW-8	28.13	29.58	43.95	0	No	10
MW-9	28.24	28.23	44.75	0	No	11.5

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

Well #	Ground Water Elevation (feet)	Depth to Water (feet)◆	Total Well Depth (feet)◆	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on July 28, 1995)						
MW-1*	30.86	26.97	34.98	0	--	0
MW-2*	30.87	27.26	46.95	0	--	0
MW-3*	30.86	27.06	48.55	0	--	0
MW-4*	30.76	27.53	48.50	0	--	0
MW-5*	30.87	27.63	44.40	0	--	0
MW-6*	30.48	26.48	44.60	0	--	0
MW-7*	30.41	26.84	43.65	0	--	0
MW-8*	30.61	27.10	43.91	0	--	0
MW-9*	30.70	25.77	44.66	0	--	0
MW-10	33.41	25.53	44.20	0	No	13
(Monitored and Sampled on June 26, 1995)						
MW-1	32.14	25.69	35.01	0	No	6.5
MW-2	32.15	25.98	46.97	0	No	56
MW-3	32.14	25.78	48.50	0	No	56
MW-4*	32.03	26.26	48.50	0	--	0
MW-5*	32.15	26.35	44.45	0	--	0
MW-6*	31.76	25.20	44.65	0	--	0
MW-7*	31.70	25.55	43.94	0	--	0
MW-8	32.88	24.83	43.96	0	No	14
MW-9	31.97	24.50	44.75	0	No	14

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
MW-9	56.47
MW-10	58.94

TABLE 1 (Continued)

SUMMARY OF MONITORING DATA

◆ 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.

★ Total well depth was not measured.

-- Sheen determination was not performed.

TABLE 2

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

(Measured December 29, 1996)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temper-ature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW-1	0.81	12:50	0	0	73.9	6.64	6.45
			1	1.23	75.3	6.63	6.50
			1.5	1.85	76.1	6.81	6.46
			2.5	3.09	75.8	6.61	6.39
		13:05	3.5	4.32	75.7	6.65	6.41
MW-2	10.69	10:20	0	0	72.6	5.27	6.62
			11	1.03	74.9	5.28	6.63
			21.5	2.01	75.8	5.36	6.63
			32	2.99	76.0	5.19	6.63
		10:40	43	4.02	76.1	5.39	6.63
MW-3	11.80	12:00	0	0	72.4	5.92	6.60
			12	1.02	75.2	5.84	6.54
			24	2.03	76.1	6.20	6.51
			36	3.05	76.4	6.16	6.49
		12:20	47.5	4.03	76.6	6.25	6.46
MW-8	2.32	11:15	0	0	72.5	8.80	7.21
			2.5	1.08	73.8	7.90	6.80
			4.5	1.94	74.5	7.40	6.67
			7	3.02	74.9	7.00	6.63
		11:25	9.5	4.09	75.2	7.10	6.61
MW-9	2.65	8:40	0	0	68.4	3.75	6.61
			2.5	0.94	71.3	3.78	6.64
			5.5	2.08	72.4	3.88	6.64
			8	3.02	73.1	3.87	6.65
		8:50	11	4.15	73.6	3.82	6.64

TABLE 2 (Continued)

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

(Measured on December 29, 1996)

Well #	Gallons per Casing Volume	Time	Gallons Purged	Casing Volumes Purged	Temperature (°F)	Conductivity ([μmhos/cm] x100)	pH
MW-10	1.88	9:35	0	0	69.6	4.48	6.61
			2	1.06	71.3	5.67	6.43
			4	2.13	71.7	5.50	6.42
			6	3.19	72.1	5.47	6.41
		9:45	8	4.26	72.2	5.45	6.41

TABLE 3

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-1	12/29/95	110,000	990	22,000	8,300	47,000
	9/28/95	100,000	810	21,000	6,500	37,000
	6/26/95	130,000	1,000	23,000	5,600	33,000
	3/27/95	88,000	1,500	20,000	4,200	25,000
	12/19/94	200,000	2,400	28,000	6,600	37,000
	9/21/94	110,000	2,500	23,000	4,500	25,000
	6/23/94	150,000	2,500	33,000	6,400	37,000
	3/18/94	99,000	3,800	37,000	6,800	36,000
	12/13/93	140,000	3,600	37,000	7,100	40,000
	9/03/93	160,000	3,900	41,000	6,800	38,000
	6/25/93	160,000	4,300	36,000	5,800	34,000
	3/03/93	330,000	3,800	21,000	4,200	24,000
	11/18/92	WELL WAS DRY				
	10/16/92	WELL WAS DRY				
	6/18/92	680,000	9,000	40,000	7,600	44,000
	3/31/92	330,000	8,200	33,000	6,800	36,000
	9/27/91	WELL WAS DRY				
	5/06/91	--	--	--	--	--
	2/06/91	WELL WAS DRY				
	11/30/90	WELL WAS DRY				
	8/24/90	WELL WAS DRY				
	7/19/90	WELL WAS DRY				
	2/16/90	WELL WAS DRY				
	1/27/89	WELL WAS DRY				
	10/03/88	WELL WAS DRY				
	9/07/88	WELL WAS DRY				
	4/27/88	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	11/19/87	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	11/13/87	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	11/05/87	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	10/06/87	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	9/24/87	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				
	9/23/87	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-2	12/29/95	860	4.3	1.0	27	50
	9/28/95	730	2.9	ND	41	29
	6/26/95	ND	ND	0.93	0.88	3.4
	3/27/95	ND	ND	0.55	1.2	2.5
	12/19/94	190	1.9	ND	15	6.8
	9/21/94	ND	ND	ND	ND	ND
	6/23/94	420	3.9	0.66	23	11
	3/18/94	250	6.4	0.64	28	24
	12/13/93	260	7.7	0.83	17	23
	9/03/93	1,400	31	4.3	99	53
	6/25/93	4,000	110	ND	320	280
	3/03/93	4,200	62	2.9	97	120
	11/18/92	65	1.2	ND	2.8	1.4
	10/16/92	--	--	--	--	--
	9/30/92	820	21	ND	42	25
	6/18/92	1,200	35	1.6	56	26
	12/27/91	170	3.9	ND	7.3	60
	9/27/91	110	2.6	ND	5.6	5.1
	5/06/91	2,300	150	10	52	110
	2/07/91	510	40	ND	29	44
	11/30/90	400	41	ND	39	37
	8/24/90	330	17	ND	19	20
	7/19/90	--	--	--	--	--
	2/16/90	840	50.0	0.5	28.0	44.0
	1/27/89	510	58.0	8.7	22.6	20.3
	10/03/88	1,760	47.8	7.4	20.9	81.6
	5/90	1,000	39.0	ND	32.0	52.0
MW-3	12/29/95▼▼	55,000	700	ND	4,900	16,000
	9/28/95▼	17,000	730	30	4,000	8,800
	6/26/95	14,000	300	ND	1,300	3,900
	3/27/95	33,000	410	66	1,600	6,500
	12/19/94	100,000	1,200	2,900	4,200	23,000
	9/21/94	24,000	890	110	2,200	8,800
	6/23/94	37,000	1,300	670	3,100	14,000
	3/18/94	22,000	1,200	430	2,200	9,700
	12/13/93	49,000	1,300	360	2,300	9,200
	9/03/93	82,000	2,400	3,400	4,200	21,000

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-3	6/25/93	27,000	1,200	980	1,700	6,900
(Cont.)	3/03/93	96,000*	1,400	1,900	1,400	8,400
	11/18/92	24,000*	430	160	640	2,800
	10/16/92	--	--	--	--	--
	9/30/92	36,000	730	200	1,000	4,400
	6/18/92	180,000	2,200	1,700	2,300	1,100
	3/31/92	100,000	1,900	1,900	2,300	9,400
	12/27/91	31,000	240	280	400	1,600
	9/27/91	4,000	160	84	180	560
	5/06/91	39,000	1,000	570	930	3,900
	2/06/91	13,000	310	150	380	1,200
	11/30/90	13,000	390	81	410	1,000
	8/24/90	19,000	480	160	510	1,500
	7/19/90	--	--	--	--	--
	2/16/90	22,000	710	4,100	6,900	33,000
	1/27/89	39,000	1,570	2,830	1,250	7,070
	10/03/88	61,000	1,060	3,380	1,520	8,720
	5/90	19,000	330	170	310	1,500
MW-4	12/29/95	SAMPLED SEMI-ANNUALLY				
	9/28/95▼	ND	ND	ND	ND	ND
	6/26/95	SAMPLED SEMI-ANNUALLY				
	3/27/95	ND	ND	0.79	0.51	3.1
	12/19/94	SAMPLED SEMI-ANNUALLY				
	9/21/94	ND	ND	0.78	ND	0.81
	3/18/94	ND	ND	ND	ND	ND
	12/13/93	SAMPLED SEMI-ANNUALLY				
	9/03/93	86	14	13	1.4	7.1
	6/25/93	NOT SAMPLED				
	3/03/93	68	0.9	0.6	ND	1.9
	11/18/92	NOT SAMPLED				
	10/16/92	ND	ND	ND	ND	ND
	6/18/92	ND	ND	ND	ND	ND
	3/31/92	ND	ND	ND	ND	ND
	12/27/91	ND	ND	ND	ND	ND
	9/27/91	ND	ND	ND	ND	ND
	5/06/91	--	--	--	--	--
	2/06/91	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-4	11/30/90	ND	ND	ND	ND	1.2
(Cont.)	8/24/90	ND	ND	ND	ND	ND
	7/19/90	--	--	--	--	--
	5/90	ND	ND	ND	0.68	1.4
	2/16/90	ND	ND	ND	ND	ND
	1/27/89	ND	ND	ND	ND	ND
	10/03/88	ND	ND	ND	ND	ND
MW-5	12/29/95	SAMPLED SEMI-ANNUALLY				
	9/28/95	ND	ND	ND	ND	ND
	6/26/95	SAMPLED SEMI-ANNUALLY				
	3/27/95	ND	ND	0.66	ND	2.9
	12/19/94	SAMPLED SEMI-ANNUALLY				
	9/21/94	ND	ND	0.98	ND	1.6
	3/18/94	ND	ND	ND	ND	ND
	12/13/93	SAMPLED SEMI-ANNUALLY				
	9/03/93	ND	ND	1.5	ND	7.9
	6/25/93	WELL WAS INACCESSIBLE				
	3/03/93	ND	ND	ND	ND	ND
	11/18/92	NOT SAMPLED				
	10/16/92	ND	ND	ND	ND	ND
	6/18/92	--	--	--	--	--
	3/31/92	ND	ND	ND	ND	1.1
	12/27/91	ND	ND	ND	ND	ND
	9/27/91	ND	ND	ND	ND	ND
	5/06/91	--	--	--	--	--
	2/06/91	ND	ND	ND	ND	ND
	11/30/90	ND	ND	0.7	ND	ND
	8/24/90	ND	ND	ND	ND	ND
	7/19/90	--	--	--	--	--
	2/16/90	67	0.51	1.6	2.9	7.5
	5/90	ND	ND	ND	ND	ND
MW-6	12/29/95	SAMPLED SEMI-ANNUALLY				
	9/28/95	ND	ND	ND	ND	ND
	6/26/95	SAMPLED SEMI-ANNUALLY				
	3/27/95	56	ND	0.65	ND	3.3
	12/19/94	SAMPLED SEMI-ANNUALLY				

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-6	9/21/94	ND	ND	ND	ND	ND
(Cont.)	3/18/94	ND	ND	0.93	ND	1.4
	12/13/93	SAMPLED SEMI-ANNUALLY				
	9/03/93	ND	ND	ND	ND	ND
	6/25/93	NOT SAMPLED				
	3/03/93	ND*	ND	ND	ND	ND
	11/18/92	NOT SAMPLED				
	10/16/92	ND	ND	ND	ND	ND
	6/18/92	ND	ND	ND	ND	ND
	3/31/92	ND	ND	1.3	ND	2.0
	12/27/91	ND	ND	ND	ND	ND
	9/27/91	ND	ND	ND	ND	ND
	5/06/91	--	--	--	--	--
	2/06/91	ND	ND	ND	ND	ND
	11/30/90	ND	ND	ND	ND	ND
	8/24/90	ND	ND	ND	ND	ND
	7/19/90	ND	ND	ND	ND	ND
	2/16/90	ND	ND	ND	ND	ND
	5/90	ND	ND	ND	ND	ND
MW-7	12/29/95	SAMPLED SEMI-ANNUALLY				
	9/28/95▼	ND	ND	ND	ND	ND
	6/26/95	SAMPLED SEMI-ANNUALLY				
	3/27/95	ND	ND	0.54	ND	1.9
	12/19/94	SAMPLED SEMI-ANNUALLY				
	9/21/94	ND	0.50	ND	ND	0.89
	3/18/94	ND	ND	ND	ND	ND
	12/13/93	SAMPLED SEMI-ANNUALLY				
	9/03/93	ND	ND	ND	ND	ND
	6/25/93	NOT SAMPLED				
	3/03/93	ND	ND	ND	ND	ND
	11/18/92	NOT SAMPLED				
	10/16/92	ND	ND	ND	ND	ND
	6/18/92	--	--	--	--	--
	3/31/92	ND	ND	ND	ND	0.9
	12/27/91	ND	ND	ND	ND	ND
	9/27/91	ND	ND	ND	ND	ND

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-7	5/06/91	ND	ND	ND	ND	ND
(Cont.)	2/06/91	ND	ND	ND	ND	ND
	11/30/90	ND	ND	ND	0.6	1.5
	8/24/90	ND	ND	ND	ND	ND
	7/19/90	--	--	--	--	
	2/16/90	ND	ND	ND	ND	ND
	5/90	24	ND	ND	0.74	1.7
MW-8	12/29/95▼▼	7,500	260	ND	580	870
	9/28/95▼	10,000	250	ND	760	910
	6/26/95	11,000	320	ND	680	2,000
	3/27/95	9,200	240	ND	200	1,400
	12/19/94	6,200	91	ND	230	210
	9/21/94	6,900	190	ND	460	510
	6/23/94	12,000	210	ND	610	860
	3/18/94	6,100	85	ND	260	260
	12/13/93	6,900	180	ND	240	550
	9/03/93	9,800	180	ND	580	700
	6/25/93	8,100	160	ND	580	740
	3/03/93	13,000	33	ND	160	290
	11/18/92	1,100	6.1	ND	13	5.6
	10/16/92	300	0.96	ND	4.0	3.5
	6/18/92	WELL WAS INACCESSIBLE				
	3/31/92	15,000	120	1.0	430	530
	12/27/91	1,600	15	2.9	40	49
	9/27/91	720	13	4.3	26	26
	5/06/91	14,000	80	ND	250	550
	2/06/91	630	9.6	ND	35	36
	11/30/90	570	13	ND	45	36
	8/24/90	990	13	ND	48	66
	7/19/90	--	--	--	--	--
	2/16/90	1,900	11	ND	52	55
	5/90	770	6.5	ND	20	32

TABLE 3 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

Well #	Date	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-9	12/29/95	ND	ND	0.58	ND	0.52
	9/28/95	ND	ND	ND	ND	ND
	6/26/95	ND	ND	ND	ND	3.9
	3/27/95	ND	ND	0.61	ND	2.8
	12/19/94	ND	ND	1.6	1.5	8.4
MW-10	12/29/95	ND	ND	0.65	ND	1.1
	10/24/95	ND	ND	ND	ND	ND
	7/28/95	ND	ND	ND	ND	ND

▼ Sequoia Analytical Laboratory has potentially identified the presence of MTBE at reportable levels in the ground water sample collected from this well.

▼▼ Sequoia Analytical Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 µg/L in the ground water sample collected from this well.

* 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.

TABLE 4

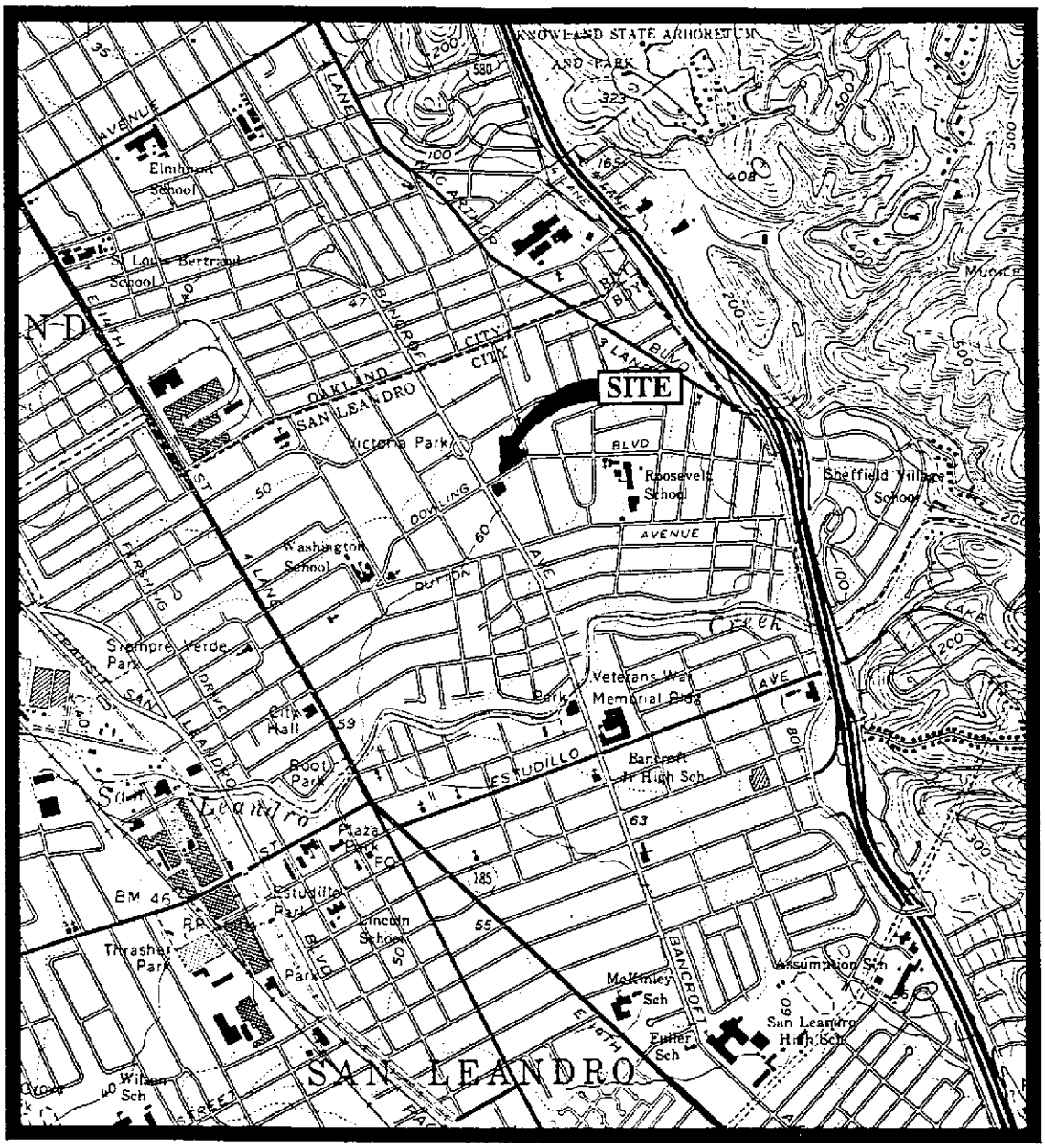
SUMMARY OF LABORATORY ANALYSES
WATER

Date	Well #	Dissolved Oxygen (mg/L)	Total Dissolved Solids (mg/L)
12/29/95*	MW-1	1.74	--
	MW-2	8.71	--
	MW-3	6.97	--
	MW-4	SAMPLED SEMI-ANNUALLY	
	MW-5	SAMPLED SEMI-ANNUALLY	
	MW-6	SAMPLED SEMI-ANNUALLY	
	MW-7	SAMPLED SEMI-ANNUALLY	
	MW-8	2.03	--
	MW-9	5.32	--
	MW-10	5.11	--
9/28/95	MW-1	1.22	--
	MW-2	3.00	--
	MW-3	1.63	--
	MW-4	6.29	--
	MW-5	1.96	--
	MW-6	4.19	--
	MW-7	2.04	--
	MW-8	1.85	--
	MW-9	5.76	--
6/26/95	MW-1	1.60	--
	MW-2	4.55	--
	MW-3	1.55	--
	MW-4	--	--
	MW-5	--	--
	MW-6	--	--
	MW-7	--	--
	MW-8	3.86	--
	MW-9	4.61	--
3/27/95	MW-1	1.5	--
	MW-2	1.7	410
	MW-3	0.90	450
	MW-4	4.90	--
	MW-5	5.20	--
	MW-6	7.4	--
	MW-7	8.4	--
	MW-8	2.2	490
	MW-9	7.8	--

* Field data.

-- Indicates analysis was not performed.

mg/L = milligrams per liter.

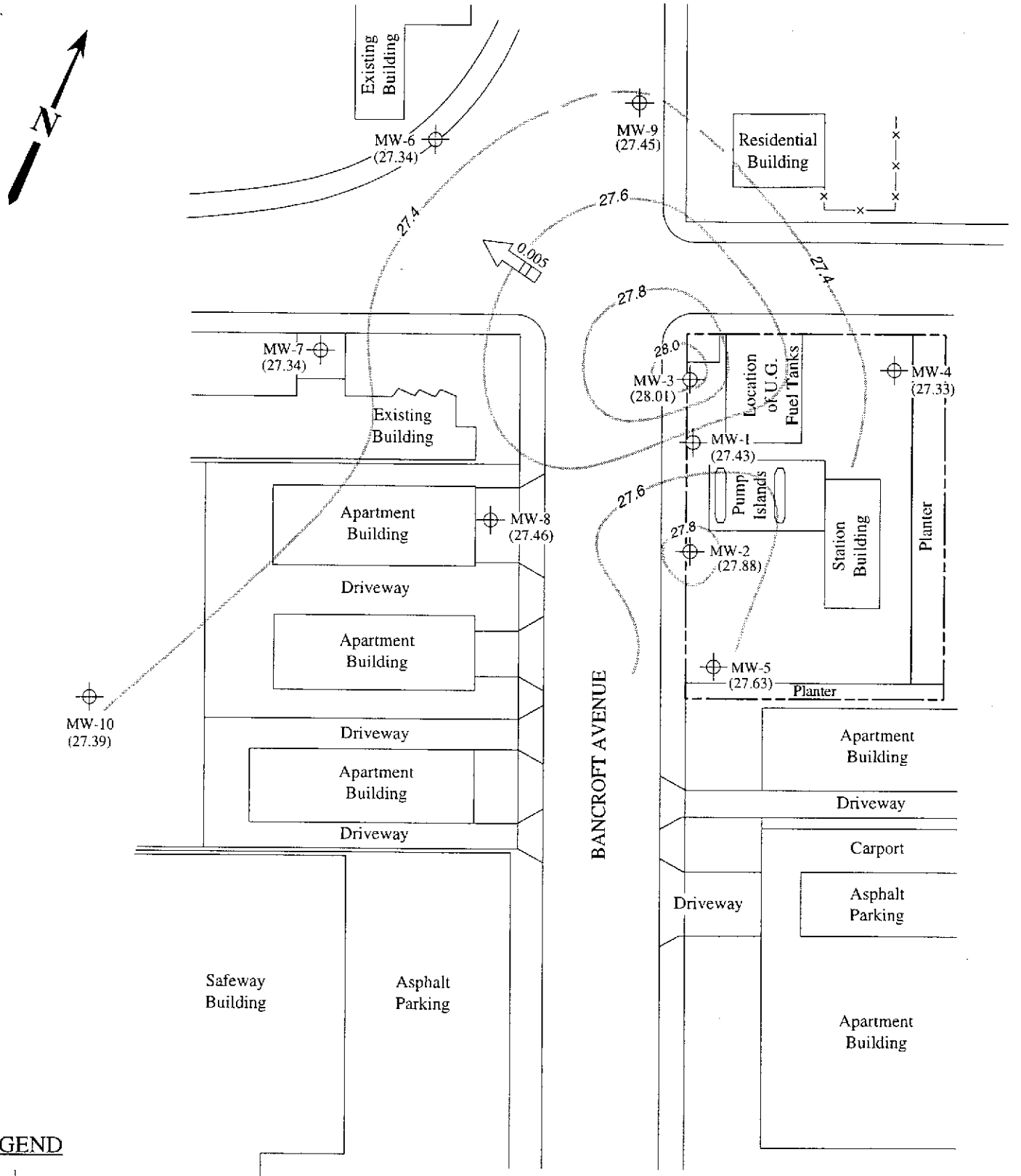


Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle
(photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**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 with approximate hydraulic gradient
- Contours of ground water elevation

0 60 120

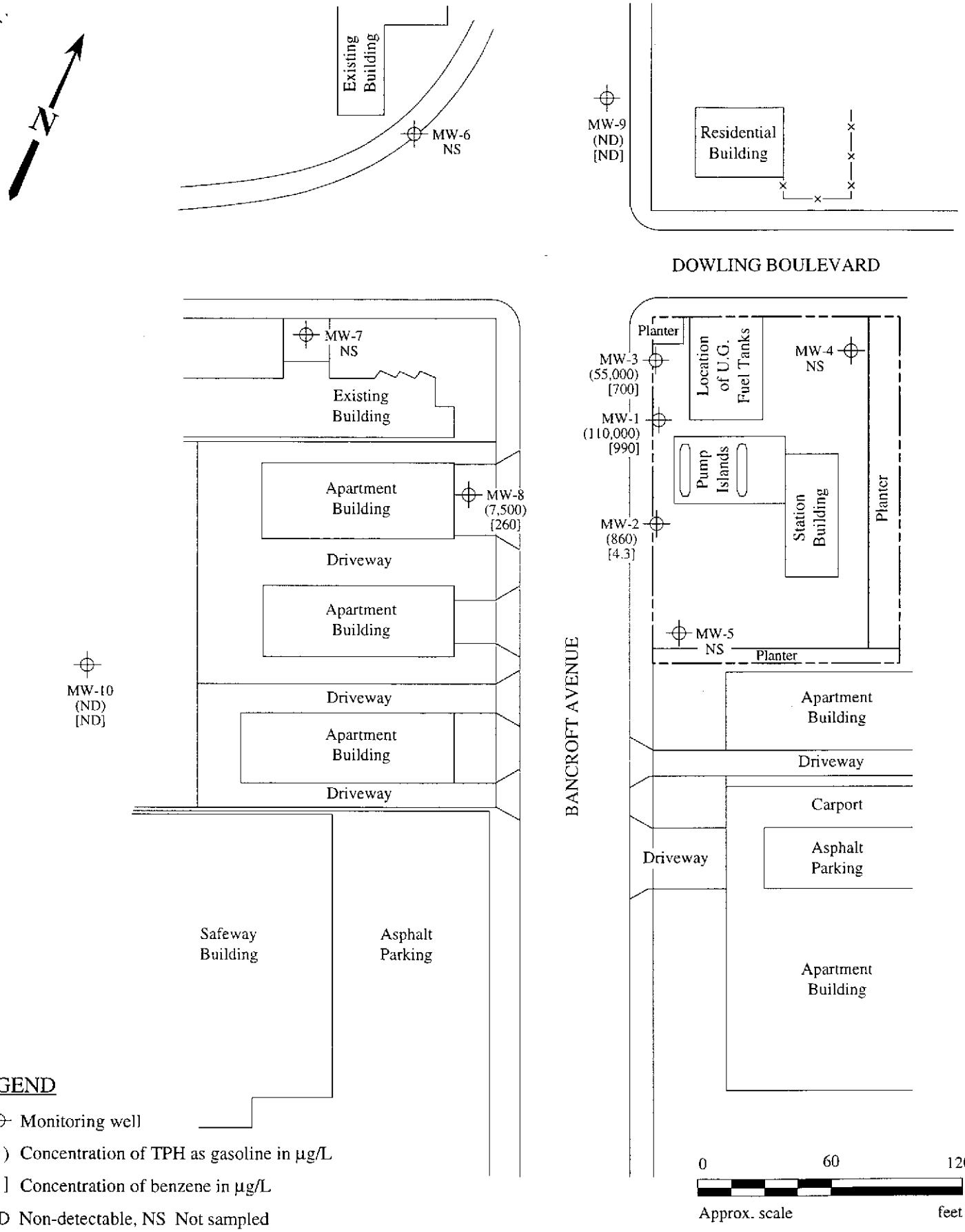
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE DECEMBER 29, 1995 MONITORING EVENT

mpds SERVICES, INCORPORATED

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

FIGURE
1



PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON DECEMBER 29, 1995

mpds SERVICES, INCORPORATED

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
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

MPDS Services	Client Project ID:	Unocal #5367, 500 Bancroft Ave., San Leandro	Sampled: Dec 29, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Dec 29, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jan 18, 1996
Attention: Jarrel Crider	First Sample #:	512-2619	

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
512-2619	MW-1	110,000	990	22,000	8,300	47,000
512-2620	MW-2	860	4.3	1.0	27	50
512-2621	MW-3	55,000	700	ND	4,900	16,000
512-2622	MW-8	7,500	260	ND	580	870
512-2623	MW-9	ND	ND	0.58	ND	0.52
512-2624	MW-10	ND	ND	0.65	ND	1.1
512-2625	ES-1	ND	ND	ND	ND	ND
512-2626	ES-2	ND	ND	ND	ND	ND
512-2627	ES-3	ND	ND	ND	ND	ND
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, #1271

Signature on File

Alan B. Kemp
Project Manager

5122619.MPD <1>

Sequoia Analytical

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MPDS Services	Client Project ID:	Unocal #5367, 500 Bancroft Ave., San Leandro	Sampled: Dec 29, 1995
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Dec 29, 1995
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Jan 18, 1996
Attention: Jarrel Crider	First Sample #:	512-2619	

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
512-2619	MW-1	Gasoline	400	1/13/96	HP-2	106
512-2620	MW-2	Gasoline	1.0	1/12/96	HP-2	97
512-2621	MW-3	Gasoline	200	1/13/96	HP-2	106
512-2622	MW-8	Gasoline	20	1/13/96	HP-2	108
512-2623	MW-9	--	1.0	1/13/96	HP-9	104
512-2624	MW-10	--	1.0	1/12/96	HP-2	98
512-2625	ES-1	--	1.0	1/13/96	HP-9	106
512-2626	ES-2	--	1.0	1/13/96	HP-9	98
512-2627	ES-3	--	1.0	1/13/96	HP-9	99

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Sequoia Analytical

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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5367, 500 Bancroft Ave., San Leandro
Matrix: Liquid
QC Sample Group: 5122619-624
Reported: Jan 18, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	M. Creusere	M. Creusere	M. Creusere	M. Creusere
MS/MSD Batch#:	6010009	6010009	6010009	6010009
Date Prepared:	1/12/96	1/12/96	1/12/96	1/12/96
Date Analyzed:	1/12/96	1/12/96	1/12/96	1/12/96
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:	120	115	120	118
Matrix Spike Duplicate % Recovery:	120	115	115	117
Relative % Difference:	0.0	0.0	4.3	1.4
LCS Batch#:	1LCS011296	1LCS011296	1LCS011296	1LCS011296
Date Prepared:	1/12/96	1/12/96	1/12/96	1/12/96
Date Analyzed:	1/12/96	1/12/96	1/12/96	1/12/96
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
LCS % Recovery:	124	119	122	122
% 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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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5367, 500 Bancroft Ave., San Leandro
Matrix: Liquid
QC Sample Group: 5122619-624
Reported: Jan 18, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	N. Beaman	N. Beaman	N. Beaman	N. Beaman
MS/MSD Batch#:	5122126	5122126	5122126	5122126
Date Prepared:	1/13/96	1/13/96	1/13/96	1/13/96
Date Analyzed:	1/13/96	1/13/96	1/13/96	1/13/96
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:	115	110	115	112
Matrix Spike Duplicate % Recovery:	120	115	120	117
Relative % Difference:	4.3	4.4	4.3	4.4
LCS Batch#:	1LCS011396	1LCS011396	1LCS011396	1LCS011396
Date Prepared:	1/13/96	1/13/96	1/13/96	1/13/96
Date Analyzed:	1/13/96	1/13/96	1/13/96	1/13/96
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	105	100	105	105
% 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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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord, CA 94520
Attention: Jarrel Crider

Client Project ID: Unocal #5367, 500 Bancroft Ave., San Leandro
Matrix: Liquid
QC Sample Group: 5122619-624
Reported: Jan 18, 1996

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	5122623	5122623	5122623	5122623
Date Prepared:	1/13/96	1/13/96	1/13/96	1/13/96
Date Analyzed:	1/13/96	1/13/96	1/13/96	1/13/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	90	90	85	88
Matrix Spike Duplicate % Recovery:	105	100	100	102
Relative % Difference:	15	11	16	14
LCS Batch#:	4LCS011396	4LCS011396	4LCS011396	4LCS011396
Date Prepared:	1/13/96	1/13/96	1/13/96	1/13/96
Date Analyzed:	1/13/96	1/13/96	1/13/96	1/13/96
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
LCS % Recovery:	110	107	104	110
% 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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MPDS Services
2401 Stanwell Dr., Ste. 300
Concord CA 94520
Attention: Jarrel Crider

Date: 1/19/96

Sequoia Analytical has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 µg/L in the following site(s):

Client Project I.D. - **Unocal #5367- San Leandro**

Sequoia Work Order # - **9512610**

Sample Number:	Sample Description:
5122621	MW-3
5122622	MW-8

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Project Manager

MPDS SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

9512610

SAMPLER: NICHOLAS PERROW

WITNESSING AGENCY:

UNOCAL S/S # 5367 CITY: SAN LEANDRO

ADDRESS: 500 BANCROFT AVE

ANALYSES REQUESTED

TURN AROUND TIME: REG.

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010					REMARKS
MW-1	12/29/95	1:10	✓	✓		2 VOAS	WELL	✓		5122619	A,B					
MW-2	"	11:00	✓	✓		"	"	✓		5122620						
MW-3	"	12:35	✓	✓		"	"	✓		5122621						
MW-8	"	11:40	✓	✓		"	"	✓		5122622						
MW-9	"	9:15	✓	✓		"	"	✓		5122623						
MW-10	"	10:00	✓	✓		"	"	✓		5122624						

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
(SIGNATURE)	12/29/95 14:10	(SIGNATURE)	12/29 14:10
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(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? Y
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? Y
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? N
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? Y

SIGNATURE: TITLE: DATE: 12/29

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 HNO3. All other containers are unpreserved.

mpds SERVICES, INCORPORATED
2401 Stanwell Drive, Suite 400
Concord, California 94520
Tel: (510) 602-5100, Fax: (510) 689-1918

CHAIN OF CUSTODY

9512610

SAMPLER	UNOCAL S/S #	CITY:	ANALYSES REQUESTED	TURN AROUND TIME:
NICHOLAS PERROW	5367	SAN LEANDRO		REG.
WITNESSING AGENCY	ADDRESS: 500 BANCROFT AVE			REMARKS

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-GAS BTEX	TPH-DIESEL	TOG	8010				
ES-1	12/29/95		✓			1 VOA		✓		5122625					
ES-2	"		✓			1 VOA		✓		5122626					
ES-3	"		✓			1 VOA		✓		5122627					

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	DATE/TIME
(SIGNATURE)	12/29/95 14:10	(SIGNATURE)	12/29 14:10
(SIGNATURE)		(SIGNATURE)	
(SIGNATURE)		(SIGNATURE)	
(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? _____
2. WILL SAMPLES REMAIN REFRIGERATED UNTIL ANALYZED? _____
3. DID ANY SAMPLES RECEIVED FOR ANALYSIS HAVE HEAD SPACE? _____
4. WERE SAMPLES IN APPROPRIATE CONTAINERS AND PROPERLY PACKAGED? _____

SIGNATURE: TITLE: DATE:

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.