

May 27, 1997

Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, CA 94502

Attention: Mr. Scott Seery

RE: Unocal Service Station #5367

500 Bancroft Avenue San Leandro, California

Dear Mr. Seery:

Per the request of the Tosco Marketing Company Project Manager, Ms. Tina R. Berry, enclosed please find our data report (MPDS-UN5367-12) dated April 29, 1997, 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.

Jarrel F. Crider

/dr

**Enclosure** 

cc: Ms. Tina R. Berry



October 20, 1997 Project 311-127.1A #758

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

Re: Unocal Station 5367

Quarterly Summary Report
Third Quarter 1997

Dear Mr. Hiett:

As directed by Ms. Tina Berry of Tosco Marketing Company, 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.

Project Geologist

Enclosure

cc: Ms. Tina Berry, Tosco Marketing Company
Ms. Amy Leech, Alameda County Health Care Services

## Quarterly Summary Report Third Quarter 1997

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 (SVE) and groundwater extraction remediation system was constructed. During the first quarter of 1996, remedial system start up and operation were performed. During the third quarter 1996, Unocal submit revisions to the groundwater monitoring program requesting a sampling reduction from quarterly to semiannually. During February and March 1997, the SVE system was operated in pulsed mode to increase petroleum hydrocarbon vapor recovery. However, influent concentrations remained at non-detectable levels. Therefore, the SVE and dewatering system was shut down on March 13, 1997.

#### RECENT QUARTER ACTIVITIES

Semiannual groundwater monitoring was performed.

### NEXT QUARTER ACTIVITIES

No activities are planned.

### CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.

Dissolved groundwater delineated? Yes.

Free product delineated? Not applicable.

Total amount of groundwater contaminant recovered? Approximately 108 pounds.

Soil remediation in progress? No. System shut down in March 1997

Start? March 1996.

Completion date? March 1997.

Dissolved/free product remediation in progress? No. System shut down in March 1997 Start? March 1996.

Completion? March 1997.

CONSULTANT: Pacific Environmental Group, Inc.,

3111271A/3Q97QSR



MPDS-UN5367-12 April 29, 1997

Tosco Marketing Company Environmental Compliance Department 2000 Crow Canyon Place, Suite 400 San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Semi-Annual 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 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 are indicated in Table 1. Oxygen Release Compound (ORC) filter socks were present in monitoring well MW-8. 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 semi-annual period is shown on the attached Figure 1.

Ground water samples were collected on March 31, 1997. Prior to sampling, the wells were each purged of between 6 and 48 gallons of water. In addition, dissolved oxygen concentrations were measured and are presented in Table 3. During purging operations, the field parameters pH, temperature, and electrical conductivity were recorded on the purging/sampling data sheets which are attached to this report. Once the field parameters were observed to stabilize, and where possible, a minimum of approximately three 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 Tosco 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 Table 2. The concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline and benzene detected in the ground water samples collected this semi-

MPDS-UN5367-12 April 29, 1997 Page 2

annual period 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

Hagop Kevork, P.E. Senior Staff Engineer

License No. C55734

Exp. Date December 31, 2000

Attachments: Tables 1, 2 & 3

Location Map Figures 1 & 2

Laboratory Analyses

Chain of Custody documentation Purging/Sampling Data Sheets

cc: Mr. Joe Muzzio, Pacific Environmental Group, Inc.

Table 1
Summary of Monitoring Data

	Ground Water	Depth to	Total Well	Product		Water
Well#	Elevation (feet)	Water (feet)+	Depth (feet)+	Thickness (feet)	Sheen	Purged (gallons)
			d Sampled on Mai			
MW-1	33.65	24.18	35.15	0	No	6
MW-2	33.93	24.20	46.90	0	No	45
MW-3	34.06	23.86	48.22	0	No	48
MW-4	33.57	24.72	48.50	0	No	46.5
MW-5	33.70	24.80	44.40	0	No	10
MW-6	33.24	23.72	44.60	0	No	11
MW-7	33.23	24.02	43.97	0	No	10.5
MW-8	33.36	24.35	43.90	0	No	10
MW-9	32.99	23,48	44.65	0	No	11
MW-10	32.89	26.05	42.68	0	No	9
		(Monitored and	Sampled on Septer	mber 21, 1996)		
MW-1	28.39	29,44	35.15	0	No	3
MW-2*	28.66	29.47	46.89	0		0
MW-3	28.77	29.15	48.23	0		§
MW-4	28.41	29.88	48.51	0	No	36
MW-5	28.55	29.95	44.42	0	No	7.5
MW-6	28.24	28.72	44.61	0	No	9
MW-7	28.18	29.07	43.98	0	No	8
MW-8	28.37	29.34	43.91	0	No	8
MW-9	28.42	28.05	44.65	0	No	9
MW-10	28.17	30.77	42.70	0	No	6
		(Monitored an	d Sampled on Ma	rch 27, 1996)		
MW-1	35.54	22.29	35.18	0	No	9
MW-2*	35.83	22.30	46.90	Ö		0
MW-3*	35.93	21.99	48.25	ő		0
MW-4	35.58	22.71	48.52	ő	No	67.5
MW-5	35.75	22.75	44.40	ő	No	15
MW-6	35.37	21.59	44.53	ő	No	16
MW-7	35.31	21.94	43.80	ő	No	15
MW-8	35.51	22.20	43.92	ő	No	15
MW-9	35.56	20.91	44.52	ő	No	16.5
MW-10	35.32	23.62	42.60	ŏ	No	13
14117 10	J. J. L.	23.02	42.00	U	110	1.5

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 Decer	nber 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

	Well Casing	
	Elevation	
Well#	(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	

- The depth to water level and total well depth measurements were taken from the top of the well casings.
- § Well is connected to remediation system. Sampled from valve on well head.
- Monitored only.
- \*\* The elevations of the top of the well casings have been surveyed relative to Mean Sea Level.
- -- Sheen determination was not performed.

**Table 2**Summary of Laboratory Analyses
Water

		TPH as			Ethyl-		
Well	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
MW-1	3/31/97	82,000	240	8,700	3,800	23,000	ND
	9/21/96	110,000	270	3,500	5,900	16,000	260
	3/27/96	120,000	920	17,000	7,100	41,000	180
	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	
	9/3/93	160,000	3,900	41,000	6,800	38,000	
	6/25/93	160,000	4,300	36,000	5,800	34,000	
	3/3/93	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					
	5/6/91						
	2/6/91	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					
	10/3/88	WELL WAS DRY					
	9/7/88	WELL WAS DRY					
	4/27/88	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
•	11/19/87	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
	11/13/87	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
	11/5/87	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
	10/6/87	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
	9/24/87	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
	9/23/87	NOT SAMPLED D	UE TO THE PR	ESENCE OF FR	EE PRODUCT		
MW-2	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	NOT SAMPLED (C	CONNECTED T	O REMEDIATIO	N SYSTEM)		
	3/27/96	NOT SAMPLED (C	CONNECTED T	O REMEDIATIO	N SYSTEM)		
	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	

Table 2
Summary of Laboratory Analyses
Water

		TPH as			Ethyl-		
Well	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
MW-2	3/27/95**	ND	ND	0.55	1.2	2.5	
(Cont.)	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	
	9/3/93	1,400	31	4.3	99	53	
	6/25/93	4,000	110	ND	320	280	
	3/3/93	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	<b>4</b> 2	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	
	5/6/91	2,300	150	10	52	110	
	2/7/91	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	0.5	28	44	
	1/27/89	510	58	8.7	22.6	20.3	
	10/3/88	1,760	47.8	7.4	20.9	81.6	
	May-90	1,000	39	ND	32	52	
MW-3	3/31/9 <b>7</b>	17,000	58	110	530	1,500	ND
141 14 -D	9/21/96	34,000	140	ND	2,200	6,600	1,800
	3/27/96	NOT SAMPLED (				0,000	1,000
	12/29/95	55,000	700	ND	4,900	16,000	††
	9/28/95	17,000	730	30	4,000	8,800	7
	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	
	9/3/93	82,000	2,400	3,400	4,200	21,000	
	6/25/93	27,000	1,200	980	1,700	6,900	
	3/3/93	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	***

Table 2
Summary of Laboratory Analyses
Water

		TPH as			Ethyl-		
Well	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
MW-3	6/18/92	180,000	2,200	1,700	2,300	1,100	
(Cont.)	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	
	5/6/91	39,000	1,000	570	930	3,900	
	2/6/91	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	<b>71</b> Q	4,100	6,900	33,000	
	1/27/89	39,000	1,570	2,830	1,250	7,070	
	10/3/88	61,000	1,060	3,380	1,520	8,720	
	May-90	19,000	330	170	310	1,500	<del></del>
MW-4	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	ND	ND	ND	ND	ND	ND
	3/27/96	ND	ND	0.70	ND	0.79	ND
	12/29/95	SAMPLED SEMI-A	NNUALLY				
	9/28/95	ND	ND	ND	ND	ND	†
	6/26/95	SAMPLED SEMI-A	NNUALLY				
	3/27/95	ND	ND	0.79	0.5	3.1	
	12/19/94	SAMPLED SEMI-A	NNUALLY				
	9/21/94	ND	ND	0.78	ND	0.81	
	3/18/94	ND	ND	ND	ND	ND	
	12/13/93	SAMPLED SEMI-					
	9/3/93	86	14	13	1.4	7.1	
	6/25/93	NOT SAMPLED					
	3/3/93	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	
	5/6/91						
	2/6/91	ND	ND	ND	ND	ND	
	11/30/90	ND	ND	ND	ND	1.2	
	8/24/90	ND	ND	ND	ND	ND	
	7/19/90					<del>-</del> -	
	May-90	ND	ND	ND	0.68	1.4	
	2/16/90	ND	ND	ND	ND	ND	
	1/27/89	ND	ND	ND	ND	ND	
	10/3/88	ND	ND	ND	ND	ND	***

Table 2
Summary of Laboratory Analyses
Water

		TPH as	Water		Ethyl-		
Well	Date	Gasoline	Benzene	Toluene	Benzene	Xylenes	MTBE
***************************************					DOM:	.1.7.2	
MW-5	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	ND	ND	ND	ND	ND	ND
	3/27/96	ND	ND	1.7	ND	2.4	ND
	12/29/95	SAMPLED SEMI-A	NNUALLY				
	9/28/95	ND	ND	ND	ND	ND	
	6/26/95	SAMPLED SEMI-A	NNUALLY				
	3/27/95	ND	ND	0.66	ND	2.9	
	12/19/94	SAMPLED SEMI-A	NNUALLY				
	9/21/94	ND	ND	0.98	ND	1.6	
	3/18/94	ND	ND	ND	ND	ND	
	12/13/93	SAMPLED SEMI-A	NNUALLY				
	9/3/93	ND	ND	1.5	ND	7.9	
	6/25/93	WELL WAS INACC	CESSIBLE				
	3/3/93	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	
	5/6/91						<del></del>
	2/6/91	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	 		<b>~</b> ~	<del></del>		
	2/16/90	67	0.51	1.6	2.9	7.5	
	May-90	ND	ND	ND	ND	ND	
MW-6	3/31/97	73	0.67	0.82	NID	NID	ND
141 44 -0	9/21/96	ND	ND	ND	ND ND	ND ND	ND ND
	3/27/96	50	ND ND	0.92			
	12/29/95	SAMPLED SEMI-A		0.92	ND	0.96	ND
	9/28/95	ND	ND	ND	ND	ND	
	6/26/95	SAMPLED SEMI-A		ND	ND	ND	<del></del>
	3/27/95	56	ND	0.65	ND	3.3	
	12/19/94	SAMPLED SEMI-A		0.03	ND	5.5	
	9/21/94	ND	ND	ND	ND	ND	
	3/18/94	ND	ND	0.93	ND	1.4	
	12/13/93	SAMPLED SEMI-A		0.75		1.1	
	9/3/93	ND	ND	ND	ND	ND	
	6/25/93	NOT SAMPLED	<u></u> -	- · <del>-</del>		~ 1.22	
	3/3/93	ND*	ND	ND	ND	ND	
	11/18/92	NOT SAMPLED			_	•	

Table 2
Summary of Laboratory Analyses
Water

Well	Date	TPH as Gasoline	Benzene	Toluene	Ethyi- Benzene	Xylenes	MTBE
MW-6	10/16/92	ND	ND	ND	ND	ND	
(Cont.)	6/18/92	ND	ND	ND	ND	ND	
, ,	3/31/92	ND	ND	1.3	ND	2	
	12/27/91	ND	ND	ND	ND	ND	
	9/27/91	ND	ND	ND	ND	ND	
	5/6/91						
	2/6/91	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	
	May-90	ND	ND	ND	ND	ND	
MW-7	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	ND	ND	ND	ND	ND	ND
	3/27/96	ND	ND	1.1	ND	1.7	ND
	12/29/95	SAMPLED SEMI-A			- 1		
	9/28/95	ND	ND	ND	ND	ND	†
	6/26/95	SAMPLED SEMI-A					'
	3/27/95	ND	ND	0.54	ND	1.9	
	12/19/94	SAMPLED SEMI-A					
	9/21/94	ND	0.5	ND	ND	0.89	
	3/18/94	ND	ND	ND	ND	ND	
	12/13/93	SAMPLED SEMI-A	NNUALLY				
	9/3/93	ND	ND	ND	ND	ND	
	6/25/93	NOT SAMPLED					
	3/3/93	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	
	5/6/91	ND	ND	ND	ND	ND	
	2/6/91	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		<del></del>				
	2/16/90	ND	ND	ND	ND	ND	
	May-90	24	ND	ND	0.74	1.7	

Table 2
Summary of Laboratory Analyses
Water

			watt	.1			aranda aranga arang
Well	Date	TPH as Gasoline	Benzene	Toluene	Ethyl- Benzene	Xylenes	MTBE
7.617.0	0./01.10=						\
MW-8	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	3,800	27	ND	46	45	ND
	3/27/96	970	29	0.77	82	85	ND
	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	
	9/3/93	9,800	180	ND	580	700	
	6/25/93	8,100	160	ND	580	740	
	3/3/93	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 INAC		1.0	420	520	
	3/31/92	15,000	120	1.0	430	530	
	12/27/91	1,600	15	2.9	40	49 26	
	9/27/91	720	13	4.3	26	26	
	5/6/91	14,000	80	ND	250	550	
	2/6/91	630	9.6	ND	35 45	36	
	11/30/90	570	13	ND	45	36	
	8/24/90	990	13	ND	48	66	
	7/19/90 2/16/90	1.000					
		1,900	11	ND	52	55 22	
	May-90	770	6.5	ND	20	32	
MW-9	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	ND	ND	ND	ND	ND	ND
	3/27/96	ND	ND	0.68	ND	0.51	ND
	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	3/31/97	ND	ND	ND	ND	ND	ND
	9/21/96	ND	ND	ND	ND	ND	ND
	3/27/96	ND	ND	0.68	ND	0.69	ND
	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	

# Table 2 Summary of Laboratory Analyses Water

- † 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  $40 \mu g/L$  in the ground water sample collected from this well.
- \* Chromatogram contains early eluting peak.
- \*\* On March 27, 1995, total dissolved solid concentrations were as follows: MW-2 at 410 mg/L; MW3 at 450 mg/L; MW8 at 490 mg/L.

ND = Non-detectable.

-- Indicates analysis was not performed.

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

- Note The detection limit for results reported as ND by Sequoia Analytical Laboratory is equal to the stated detection limit times the dilution factor indicated on the laboratory analytical sheets.
  - Prior to August 1, 1995, the total purgeable petroleum hydrocarbon (TPH as gasoline)
     quantification range used by Sequoia Analytical Laboratory was C4 C12. Since August 1,
     1995, the quantification range used by Sequoia Analytical Laboratory is C6 C12.
  - Laboratory analyses data prior to December 13, 1993, were provided by RESNA.

MW-8

MW-9

MW-10

Table 3
Summary of Monitoring Data
Dissolved Oxygen Concentration Measurements

Well#	Date	Dissolved ( (mg/L	,,,
		Before Purging	After Purging
			<u></u>
MW-1	3/31/97	1.47	1.49
MW-2		2.18	2.12
MW-3		1.95	2.06
MW-4		2.66	2.63
MW-5		2.98	3.11
MW-6		3.21	3,11
MW-7		2.29	2.16
MW-8		2.81	2.91
MW-9		3.36	3.27
MW-10		4.48	4.83
MW-1	9/21/96		1.01
MW-2		<del></del>	
MW-3			
MW-4		<del></del>	2.82
MW-5			4.12
MW-6			3.74
MW-7			1.19
MW-8			2.16
MW-9			4.13
MW-10			5.38
MW-1	3/27/96	1.48	1.02
MW-2			
MW-3			
MW-4		4.32	3.91
MW-5		4.03	4.71
MW-6		5.94	4.96
MW-7		6.63	5.23

11.73

5.62

4.38

9.76

5.23

4.57

Table 3
Summary of Monitoring Data
Dissolved Oxygen Concentration Measurements

Dissolved Oxygen	
Well # Date (mg/L)	

	Before Purging	After Purging
12/29/95		1.74
	<del></del>	8.71
		6.97
	<b></b> ,	2.03
		5.32
		<b>5</b> .11
9/28/95	••	1.22
		3.00
	ana an	1.63
	<del></del>	6.29
		1.96
		4.19
		2.04
		1.85
		5.76
6/26/95		1.60
	<del></del>	4.55
		1.55
		<b>~</b> -
		3.86
		4.61
3/27/95*		1.5
		1.7
		0.90
	<u></u>	4.90
		5.20
		7.4
		8.4
	<del></del>	2.2
		7.8
		12/29/95

#### Table 3

## Summary of Monitoring Data Dissolved Oxygen Concentration Measurements

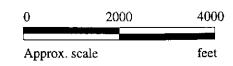
- \* On March 3, 1995, the measurements were taken at Sequoia Analytical Laboratory.
- -- Indicates measurement was not taken.

mg/L = milligrams per liter.

Note: In the field, measurements were taken using a LaMotte DO4000 dissolved oxygen meter.

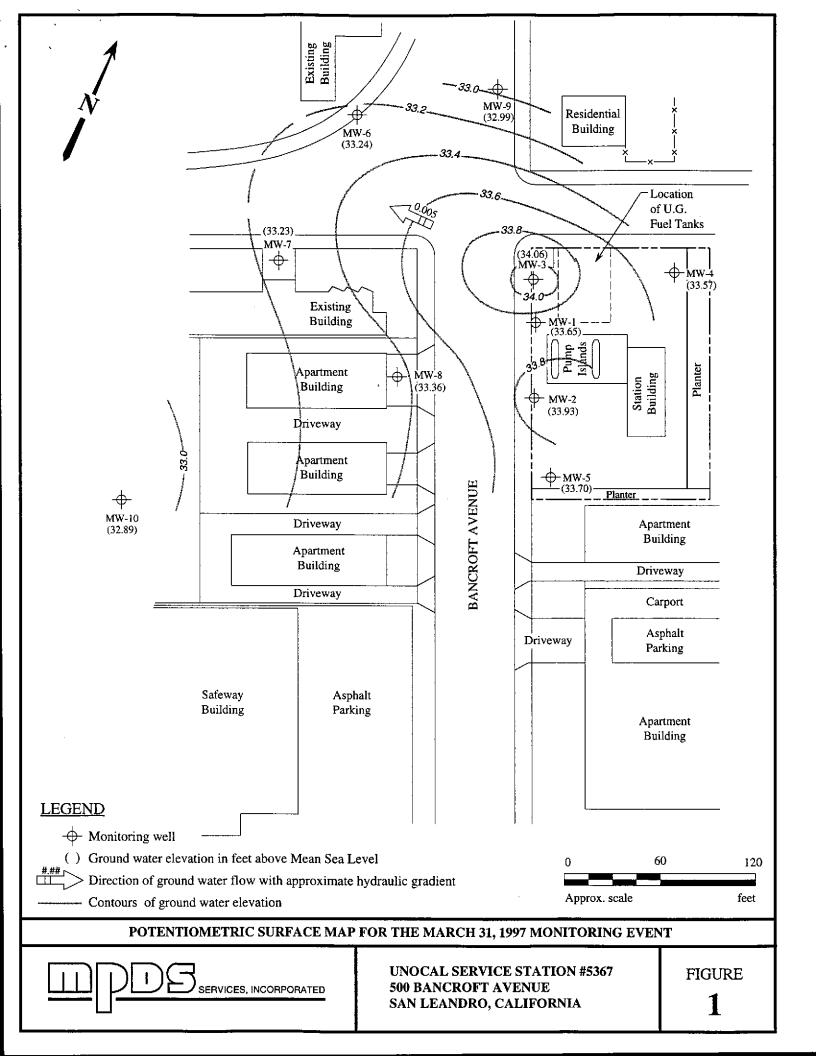


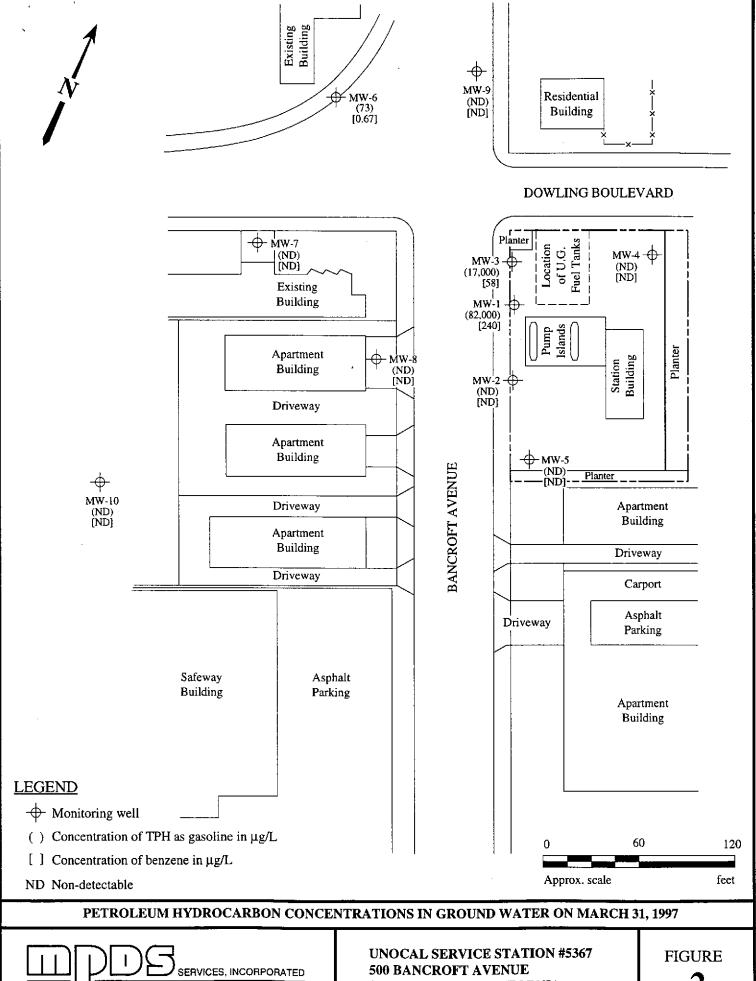
Base modified from 7.5 minute U.S.G.S. San Leandro Quadrangle (photorevised 1980)





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





SAN LEANDRO, CALIFORNIA



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: Jarrel Crider

Matrix Descript:

Client Project ID: Unocal #5367, 500 Bancroft, San Leandro Sampled:

Water

Analysis Method: EPA 5030/8015 Mod./8020

First Sample #: 704-0058 Mar 31, 1997

Received: Mar 31, 1997 Reported: Apr 14, 1997

#### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Purgeable Hydrocarbons μg/L	<b>Benzene</b> μg/L	<b>Toluene</b> μg/L	Ethyl Benzene μg/L	Total Xylenes μg/L
704-0058	MW-1	82,000	240	8,700	3,800	23,000
704-0059	MW-2	ND	ND	ND	ND	NĎ
704-0060	MW-3	17,000	58	110	530	1,500
704-0061	MW-4	ND	ND	ND	ND	ND
704-0062	MW-5	ND	ND	ND	ND	ND
704-0063	MW-6	73	0.67	0.82	ND	ND
704-0064	MW-7	ND	ND	ND	ND	ND
704-0065	MW-8	ND	ND	ND	ND	ND
704-0066	MW-9	ND	ND	ND	ND	ND
704-0067	MW-10	ND	ND	ND	ND	ND

Detection Limits:	50	0.50	0.50	0.50	0.50	
Detection Emilion		5.55	0.00	0.00	0.00	

Total Purgeable Petroleum Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as ND were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager





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

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

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

MPDS Services 2401 Stanwell Dr., Ste. 300

Concord, CA 94520 Attention: Jarrel Crider

Client Project ID: Matrix Descript:

Unocal #5367, 500 Bancroft, San Leandro Sampled:

Water

EPA 5030/8015 Mod./8020

Analysis Method: First Sample #: 704-0058 

Received:

Reported:

Mar 31, 1997

Mar 31, 1997 Apr 14, 1997

#### TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Sample Number	Sample Description	Chromatogram Pattern	DL Mult. Factor	Date Analyzed	Instrumen ID	t Surrogate Recovery, % QC Limits: 70-130
704-0058	MW-1	Gasoline	200	4/7/97	HP-4	93
704-0059	MW-2		1.0	4/7/97	HP-4	103
704-0060	MW-3	Gasoline	100	4/7/97	HP-5	108
704-0061	MW-4		1.0	4/7/97	HP-4	103
704-0062	MW-5		1.0	4/7/97	HP-4	102
704-0063	MW-6	Gasoline	1.0	4/7/97	HP-5	111.
704-0064	MW-7		1.0	4/7/97	HP-5	114
704-0065	MW-8		1.0	4/7/97	HP-5	112
704-0066	MW-9		1.0	4/7/97	HP-5	110
704-0067	MW-10		1.0	4/7/97	HP-5	112

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager





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

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

MPDS Services

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

Client Project ID: Sample Descript:

Unocal #5367, 500 Bancroft, San Leandro

Water

Analysis for: First Sample #: MTBE (Modified EPA 8020)

704-0058

Received:

Sampled:

Mar 31, 1997 Mar 31, 1997

Analyzed: Reported:

Apr 7, 1997 Apr 14, 1997

#### LABORATORY ANALYSIS FOR:

#### MTBE (Modified EPA 8020)

			_
Sample Number	Sample Description	Detection Limit $\mu {\rm g/L}$	Sample Result $\mu \mathrm{g}/\mathrm{L}$
704-0058	MW-1	500	N.D.
704-0059	MW-2	5.0	N.D.
704-0060	MW-3	250	N.D.
704-0061	MW-4	5.0	N.D.
704-0062	MW-5	5.0	N.D.
704-0063	MW-6	5.0	N.D.
704-0064	MW-7	5.0	N.D.
704-0065	MW-8	5.0	N.D.
704-0066	MW-9	5.0	N.D.
704-0067	MW-10	5.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp Project Manager





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

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

MPDS Services

2401 Stanwell Dr., Ste. 300 Concord, CA 94520

Attention: Jarrel Crider

Client Project ID:

Unocal #5367, 500 Bancroft, San Leandro

Matrix: Liquid

QC Sample Group: 7040058-067

Reported:

Apr 14, 1997

#### QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	K. Niil	K. Nill	K. Nill	K. Nill	
MS/MSD					
Batch#:	7040059	7040059	7040059	7040059	
Date Prepared:	4/7/97	4/7/97	4/7/97	4/7/97	
Date Analyzed:	4/7/97	4/7/97	4/7/97	4/7/97	
nstrument I.D.#:	HP-4	HP-4	HP-4	HP-4	
Conc. Spiked;	$20\mu\mathrm{g/L}$	$20\mu\mathrm{g/L}$	20 μg/L	60 μg/L	
Matrix Spike					
% Recovery:	80	90	85	88	
Matrix Spike					
Duplicate %					
Recovery:	80	85	85	88	
Relative %					
Difference:	0.0	5.7	0.0	0.0	

LCS Batch#:	4LCS040797	4LCS040797	4LCS040797	4LCS040797
Date Prepared:	4/7/97	4/7/97	4/7/97	4/7/97
Date Analyzed:	4/7/97	4/7/97	4/7/97	4/7/97
Instrument i.D.#:	HP-4	HP-4	HP-4	HP-4
LCS %				
Recovery:	85	90	90	93
% Recovery				
Control Limits:	60-140	60-140	60-140	60-140

#### Please Note:

#### **SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp Project Manager

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





Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 (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: Jarrel Crider

Client Project ID: Unocal #5367, 500 Bancroft, San Leandro

Matrix: Liquid

QC Sample Group: 7040058-067

Reported:

Apr 14, 1997

#### QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl	Xylenes	
			Benzene		
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	
MS/MSD					
Batch#:	7032181	7032181	7032181	7032181	
Date Prepared:	4/7/97	4/7/97	4/7/97	4/7/97	
Date Analyzed:	4/7/97	4/7/97	4/7/97	4/7/97	
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5	
Conc. Spiked:	20 μg/L	20 μg/L	$20\mu\mathrm{g/L}$	60 μg/L	
Matrix Spike					
% Recovery:	90	85	90	90	
Matrix Spike					•
Duplicate %					
Recovery:	90	90	95	90	
Relative %					
Difference:	0.0	5.7	5.4	0.0	

LCS Batch#:	5LCS040797	5LCS040797	5LCS040797	5LCS040797
Date Prepared: Date Analyzed: Instrument I.D.#:	4/7/97 4/7/97 HP-5	4/7/97 4/7/97 HP-5	4/7/97 4/7/97 HP-5	4/7/97 4/7/97 HP-5
LCS % Recovery:	95	90	100	95
% Recovery Control Limits:	60-140	60-140	60-140	60-140

#### **SEQUOIA ANALYTICAL, #1271**

Signature on File

Alan B. Kemp Project Manager Please Note:

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

M P D S Services, Inc. 2401 Stanwall Dilva, Sulta 400, Concord, CA 94520 Tal: (610) 602-5120 Fax: (610) 689-1910

CHAIN OF CUSTODY

9704024

1 10101 002 0			UNOC				IN OF C	, 031		ANA	LYSES I	EQUEST	ED		*	TURN AROUND TIME:
(JOE) HO	VSIA AJEMI/	ΛN <sub>.</sub>	S/S	# <u>_</u> S		CITY; <u>\$а</u> и		78.4	<u>[]</u>							_
WITHESSING AGENCY			ADDIII	ADDRESS: 500 Buncroft.			TPH-GAS BTEX4M786	TPH-GAS BTEX4M79 TPH-DIESEL TOG				·			Regular NEMARKS	
SAMPLE ID 803.	DATE	LUAT	WAILD	CHAII	CONI	no, or cont,	SAMPLING LUCATION	HTT BTB	H.d.)-	10G	80		1 .			: HEMYHV2
Mw-	3-31-97	4:25		_	***************************************	2 Ve A	weils	/		7040	058	<u> </u>	2		· ·	MTBE: SPPL
naw -2		2:12						-		7040	<u>)059</u>			 		, ,
MW. 3	,	3:45 Fim	_						! <u>-</u>	7040	<u> </u>			· 		
vuw. 4	,	9:55 Am		_						7040	<u>061</u>			<u>.                                    </u>	ļ	
NW.5	,	10,35° H.m						-	<del></del>	7040		{			-	1
.nw-6		1:25 F. w			 					7040	<u> 1063</u>	<u> </u>		<u> </u>	<del> </del>	1
mw.7	,	11:23 A.m		_				-			064		<u> </u>		-	_
nw-8	/	2:50	_	_			<u> </u>		 	·\	065		<u> </u>	<del> </del>	-	-
inw. of	,	12:05		_	· 			-			066	11	-	<del> </del>	<del>                                     </del>	
MW.10	/	12:43 P.M	_	_				-		7040	06.7	- <u> -</u>  -	<del> </del>			-
		منب بر سمونی وی روز				****		200 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 -	IE FOLLO	WING MUS	LUE COMP	ELED DA .	INE LABOR	A YNOTA	CCEPTING	SAMPLES FOR ANALYSES:
RELINQUISHED BY: DATE/TIME		yίε	NECEIVED BY:		1. HAVE ALL SAMPLES RECEIVED FOR ANALYSIS DEEN STORED ON ICE?											
				8:0	}. <b>^</b> ^	ISIGNATUNEI	3-31-97	2. WILL	MAI'LES	NEMAIN RE	INGLIVATE	D UNIIL A	HALYZEDI			
ISIGNATURE)	Cours		3-7	31-9	7	xXalbas ISIGNATURLI				LS NECEIV	NA HOT U	ALYSIS HA	VE HEAD	SPACE?	· ·	
D. T. Commercial Control Control	reas _		4-1	1-47		SICIN JUJE		1. WEITE	SAMPLES	IN APPROF	INATE COL	I ASSERS .	AND PROP	INLY PAC	KAGEDI	
ISIGNATURE)	7/1	1	4-	/ 3	·	istinki vitti		SIGNAI		-O.		ana	11LE:	<u> </u>	<u> </u>	DATE: 3-31-97
J. J			<del></del>			l		JUN 10	CALL.	lera	<u> </u>	CVIC	escept 1			<del></del>

Tel: (510) 602-5120 Fax: (510) 689-1918

SAMPLING LOCATION: # 5367 - S. Legadro	DATE & TIME SAMPLED 3.31.97 4:25 P.M.
500 Bancroft	FIELD TECHNICIAN
PURGE METHOD Bail	DATE(S) PURGED 3-31-97
WELL NUMBER	
WATER LEVEL-INITIAL 24.18	SAMPLING METHOD _ Sail
WATER LEVEL-FINAL 25.02	CONTAINERS 2
WELL DEPTH	PRESERVATIVES
WELL CASING VOLUME	tCASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([\mu mhos/cm]x100\mathcal{O} (± 10% of TOTAL	pH (± 0.2)
4:00	0	67.7	1.86	7-34
	2	68.5	1.90	7.42
	4-	68.0	1.84	7.18
4:12	G	67.9	1+81	7.09
1.				

_			_
t	Correction Factors:	Well Diameter	<u>Factor</u>
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87

Tel: (510) 602-5120 Fax: (510) 689-1918

SAMPLING LOCATION: #5367_ S. Cendro	DATE & 3. 31-97 2:12 P.M.
500 Buncroft.	FIELD TECHNICIAN Joe
PURGE METHOD Pump	DATE(S) PURGED 3-31-97
WELL NUMBER	-
WATER LEVEL-INITIAL 29.20	SAMPLING METHOD _ Bail
WATER LEVEL-FINAL 24.67	CONTAINERS
WELL DEPTH 46.90	PRESERVATIVES
WELL CASING VOLUME	tCASING DIAMETER 4

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([   mhos/cm]x100  the contraction of total	pH (± 0.2)
1:38	Ð	70. —	1.84	3.15
	15	69.8	1.82	7-61
	30	69.6	1.81	7.42
2:00	45	70.1	1.89	7.38
	·			
,				

t	Correction Factors:	Well Diameter	Factor
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87

Tel: (510) 602-5120 Fax: (510) 689-1918

SAMPLING LOCATION: #5367- S. Leandro	DATE & 3-3-1-97 3:45 PM
500 Baucroft	FIELD TECHNICIAN Joc
PURGE METHOD Pump	DATE(S) PURGED 3 - 31-97
WELL NUMBER WW - 3	
WATER LEVEL-INITIAL 23.86	SAMPLING METHOD
WATER LEVEL-FINAL 24.11	CONTAINERS 2
WELL DEPTH 48.22 *	PRESERVATIVES
WELL CASING VOLUME	tCASING DIAMETER 4"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100[/) (± 10% of TOTAL	pH (± 0.2)
3:12	0	69.0	1.96	7.67
	16	68.4	2.05	7.29
	32	69.7	2.09	7.22
3:35	48	70.0	2.05	7.31

t	Correction Factors:	Well Diameter	<u>Factor</u>
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87

### MPDS Services Inc.

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

SAMPLING LOCATION: #5367_ S. Lennels _	DATE & TIME SAMPLED 3-31-97 9:55 P.M.
500 Bancroft.	
PURGE METHOD Pung	DATE(S) PURGED 3-31-47
WELL NUMBER	
WATER LEVEL-INITIAL 24.72	SAMPLING METHOD Bail
WATER LEVEL-FINAL 25-36	CONTAINERS
WELL DEPTH	PRESERVATIVES
WELL CASING VOLUME 15.46	tCASING DIAMETER 4

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([  mhos/cm]x100  (± 10% of TOTAL	pH (± 0.2)
9:15	O	68.9	2.44	7.65
	15	70.2	2.19	7.38
	3 (	70.5	2.72-	7.30
9:42	46	70.6	2.21	7.39

t	Correction Factors:	Well Diameter	Factor
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87

#### MPDS Services Inc.

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

SAMPLING LOCATION: #5367- S. Leandro	DATE & A.M. TIME SAMPLED 3- 31- 97 10:35 P.M.
500 Bancroft	FIELD TECHNICIAN TOC
PURGE METHOD Pump	
WELL NUMBER _ M W- S	_
WATER LEVEL-INITIAL 24.80	SAMPLING METHOD _ &ai
WATER LEVEL-FINAL 24.96	CONTAINERS 2
WELL DEPTH 44.40 .	PRESERVATIVES
WELL CASING VOLUME 3.33	tCASING DIAMETER _2 "

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([\mu mhos/cm]x100\mathbb{O} (± 10% of TOTAL	pH (± 0.2)
10:15	O	69.0	2.57	7.70
	3.5	70.0	2,52	7.52
	7	70.1	2.54	7.50
10:25	10	70.2	2.51	7.43

†	Correction Factors:	Well Diameter 2" 3" 4" 4.5" 6"	Factor 0.17 0.37 0.65 0.82 1.46
		8"	2.6
		12"	5.87

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SAMPLING LOCATION: 5367- F. Leand	DATE & A.M.  TIME SAMPLED 3_31-97 1.25 P.M.
500 Boursoft	FIELD TECHNICIAN 50 @
·	DATE(S) PURGED 3-31.97
WELL NUMBER <u>ww-6</u>	
WATER LEVEL-INITIAL 23.72	SAMPLING METHOD Bail
WATER LEVEL-FINAL 24.30	CONTAINERS
WELL DEPTH 44.60	
,	tCASING DIAMETER _ プ (

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([\mu mhos/cm]x100{\mathcal{D}}) (± 10% of TOTAL	pH (± 0.2)
1:00	ð	69.5	2.87	7.51
	3	71.0	2.90	7-32
	6,5	71.4	2.92	7.30
1:10	(1	71.2	2.96	7,26

Correction	Factors:			Factor 0.17
		3"		0.37
		4"	ı	0.65
		4.	5"	0.82
		6"	1	1.46
		8"	ı	2.6
		12	2"	5.87
	Correction	Correction Factors:	2" 3" 4" 4. 6" 8'	2" 3" 4" 4.5" 6"

#### MPDS Services Inc.

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

SAMPLING LOCATION: #5367 - S. Leundro	DATE & TIME SAMPLED 3-31-97 11:23 P.M.
500 Boncraft.	FIELD TECHNICIAN So
PURGE METHOD Pump	DATE(S) PURGED
WELL NUMBER	
WATER LEVEL-INITIAL 24.02	SAMPLING METHOD Bail
WATER LEVEL-FINAL 24.12	CONTAINERS
WELL DEPTH 4 3. 4 7	PRESERVATIVES
WELL CASING VOLUME 3. 39	tCASING DIAMETER 2 "

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100() (± 10% of TOTAL	pH (± 0.2)
11:00	ð	70.0	3-67	7-61
	3.5	70.8	3.60	7.55
	7	71.0	3.56	7.45
11:12	10.5	71.0	3.54	7.41

t	Correction Factors:	Well Diameter	<u>Factor</u>
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87

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SAMPLING LOCATION: #5367- S. Leandro	DATE & A.M. TIME SAMPLED 3-31-97 2:50 R.M.
_500 Boxcoft	FIELD TECHNICIAN Joe
PURGE METHOD Pump	DATE(S) PURGED 3-31-97
WELL NUMBER S	
WATER LEVEL-INITIAL 2 4.35	SAMPLING METHOD
WATER LEVEL-FINAL 25.16	CONTAINERS 2
WELL DEPTH 43 90	PRESERVATIVES
WELL CASING VOLUME 3.32	tCASING DIAMETER 2 "

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([   mhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
- 2:30	ల	69.8	3.90	7.77
	3. <	70.8	3.95	7.37
	7	70.0	4.05	7. 30
2:40	10	70.9	3.99	7.20

†	Correction Factors:	Well Diameter	Factor
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87

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SAMPLING LOCATION: #5367 - S. (eaulio	DATE & TIME SAMPLED 3-38-97 12:05 P.M.
500 Buneroft	FIELD TECHNICIAN Joe
PURGE METHOD Pung	DATE(S) PURGED 3-31-47
WELL NUMBER _ MW- 9	
WATER LEVEL-INITIAL 23.48	SAMPLING METHOD Sail
WATER LEVEL-FINAL 24.37	CONTAINERS
WELL DEPTH 44.65	PRESERVATIVES
WELL CASING VOLUME	tCASING DIAMETER 7

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100ੴ (± 10% of TOTAL	pH (± 0.2)
11:45	Ĵ	71.0	3.25	7.49
	3.5	71.2	3.06	7.40
	7	71.5	2.98	7.22
11:55	](	71.1	3.04	7.10
			_	

t	Correction Factors:	Well Diameter	<u>Factor</u>
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
	•	6"	1.46
		8"	2.6
		12"	5.87

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SAMPLING LOCATION: #5367- S. Leundro	DATE & A.M TIME SAMPLED 3.31-97 12:43 P.M.
500 Bancroft.	FIELD TECHNICIAN 50
PURGE METHOD Pung	DATE(S) PURGED 3-31-47
WELL NUMBER	
WATER LEVEL-INITIAL 26.05	SAMPLING METHOD
WATER LEVEL-FINAL 26.95	CONTAINERS
WELL DEPTH 42.68	PRESERVATIVES
WELL CASING VOLUME 2.83	tCASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([\mu mhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
12:20	0	70.0	2.95	7.68
	3	71.0	7.40	7.58
	6	72.0	2.76	7.37
12:30	9	71.8	274	7.44
,				

Correction	Factors:	Well Diameter	<u>Factor</u>
		2"	0.17
		3"	0.37
		4"	0.65
		4.5"	0.82
		6"	1.46
		8"	2.6
		12"	5.87
	Correction	Correction Factors:	2" 3" 4" 4.5" 6" 8"