MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

Draft

April 9, 1997

ENVIRONMENTAL PROTECTION
APR 11 PM 3:54

Ms. Cynthia Chapman
Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94501

RE: Unocal Service Station #3135
845 - 66th Avenue
Oakland, California 94621

Dear Ms. Chapman:

Per the request of the Tosco Marketing Company Project Professional, Ms. Tina R. Berry, enclosed please find our data report (MPDS-UN3135-10) dated February 25, 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 Professional at (510) 277-2321.

Sincerely,

MPDS Services, Inc.

Jarrel F. Crider

/jfc

Enclosure

cc: Ms. Tina R. Berry

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

MONITORING
PURGING
DISPOSING
SAMPLING
MPDS SERVICES, INCORPORATED

MPDS-UN3135-10
February 25, 1997

76 Products Company
2000 Crow Canyon Place, Suite 400
P.O. Box 5155
San Ramon, California 94583

Attention: Ms. Tina R. Berry

RE: Annual Data Report
Unocal Service Station #3135
845 - 66th Avenue
Oakland, 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. 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 monitoring and sampling event is shown on the attached Figure 1.

Ground water samples were collected on February 4, 1997. Prior to sampling, the wells were each purged of between 6.5 and 9.5 gallons of water. 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, which were then sealed with Teflon-lined screw caps, labeled, and stored in a cooler, on ice, until delivery to a state-certified laboratory. MPDS Services, Inc. transported the purged ground water to the Unocal Refinery located in Rodeo, California, for treatment and discharge to San Pablo Bay under NPDES permit.

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 during this monitoring and sampling event is 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

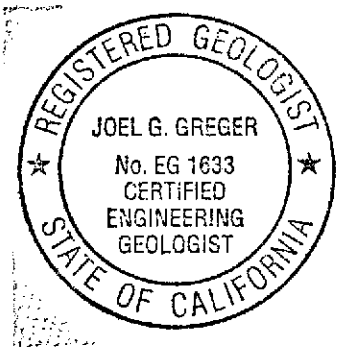
A copy of this report should be sent to Ms. Cynthia Chapman of the Alameda County Health Care Services Agency.

If you have any questions regarding this report, please do not hesitate to call Mr. Joel G. Greger 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 8/31/98

/aab

Attachments: Tables 1 & 2
Location Map
Figures 1 & 2
Laboratory Analyses
Chain of Custody documentation
Purging/Sampling Data Sheets

cc: Mr. Mark W. Boyd, Kaprealian Engineering, Inc.

Table 1

Summary of Monitoring Data

Well #	Ground Water Elevation (feet)	Depth to Water (feet)♦	Total Well Depth (feet)♦	Product Thickness (feet)	Sheen	Water Purged (gallons)
(Monitored and Sampled on February 4, 1997)						
MW1	-3.49	8.48	22.65	0	No	7.5
MW2	-3.53	7.10	22.50	0	No	8
MW3	-3.31	6.43	21.72	0	No	8
MW4	-3.72	8.65	25.15	0	No	9
MW5	-3.55	7.82	25.95	0	No	9.5
MW6	-3.58	7.61	25.74	0	No	9.5
MW7	-3.22	7.64	19.85	0	No	6.5
MW8	-3.64	8.07	23.10	0	No	8
MW9	-3.52	8.12	23.10	0	No	8
MW10	-3.90	6.59	23.08	0	No	9
(Monitored and Sampled on February 1, 1996)						
MW1	-1.23	6.22	22.70	0	No	11.5
MW2	-1.00	4.57	22.54	0	No	12.5
MW3	-1.17	4.29	21.66	0	No	12
MW4	0.29	4.64	25.17	0	No	14
MW5	-1.18	5.45	26.09	0	No	14.5
MW6	-1.06	5.09	25.81	0	No	14.5
MW7	-1.35	5.77	19.87	0	No	10
MW8	-1.09	5.52	23.54	0	No	12.5
MW9	-0.54	5.14	23.10	0	No	12.5
MW10	-1.62	4.31	23.10	0	No	13
(Monitored and Sampled on November 1, 1995)						
MW1	-4.09	9.08	22.75	0	No	9.5
MW2	-3.73	7.30	22.30	0	No	10.5
MW3	-3.53	6.65	21.71	0	No	11
MW4	-4.23	9.16	25.13	0	No	11
MW5*	-4.13	8.40	26.11	0	--	0
MW6	-4.07	8.10	25.85	0	No	12.5
MW7*	-4.16	8.58	19.91	0	--	0
MW8*	-4.55	8.98	23.60	0	--	0
MW9*	-4.06	8.66	23.15	0	--	0
MW10	-4.26	6.95	23.15	0	No	11.5

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 August 1, 1995)						
MW1	-2.71	7.70	22.71	0	No	11
MW2	-2.59	6.16	22.55	0	No	12
MW3	-1.98	5.10	21.70	0	No	12
MW4	-2.85	7.78	25.21	0	No	12
MW5	-2.73	7.00	26.12	0	No	13
MW6	-2.73	6.76	24.80	0	No	13
MW7	-3.20	7.62	19.88	0	No	10
MW8	-2.68	7.11	23.11	0	No	11
MW9	-2.70	7.30	23.10	0	No	11
MW10	-3.10	5.79	23.11	0	No	12

Well #	Well Casing Elevation (feet)**
MW1	4.99
MW2	3.57
MW3	3.12
MW4	4.93
MW5	4.27
MW6	4.03
MW7	4.42
MW8	4.43
MW9	4.60
MW10	2.69

♦ 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 are relative to Mean Sea Level (MSL), per the City of Oakland Benchmark No. 3881 (elevation = 4.72 feet MSL).

-- Sheen determination was not performed.

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW1	2/4/97	--	120*	0.58	ND	ND	ND	150
	2/1/96	90♦	240	8.7	2	ND	0.66	250
	11/1/95	190♦♦	160	2.5	ND	0.82	0.57	280
	8/1/95	86♦	190	4	ND	3.7	2	--
	5/2/95	120♦	460	14	ND	14	13	--
	2/1/95	ND	120	1.7	ND	ND	ND	--
	11/7/94	270♦	890	16	ND	31	21	--
	8/2/94	130♦♦	700	13	0.62	2	3.6	--
	5/5/94	ND	96*	ND	ND	ND	ND	--
	2/10/94	ND	170*	0.9	2.3	ND	ND	--
	11/11/93	160♦♦	930	7.3	ND	25	19	--
	8/13/93	170♦♦	860	3.5	ND	17	20	--
	5/17/93	490♦♦	960**	39	ND	57	60	--
	2/3/93	ND	94**	ND	ND	1.4	1.6	--
	11/3/92	400♦	1,100	28	ND	80	78	--
	8/3/92	220♦	980	22	0.69	77	82	--
	5/5/92	120	310	5.7	ND	7.1	15	--
	2/7/92	ND	220	2.1	ND	10	16	--
	11/5/91	260	4,900	80	ND	150	160	--
	8/5/91	200	1,200	95	6.2	230	80	--
	2/21/91	690	26,000	280	39	1,200	1,900	--
	11/26/90	--	2,900	160	2.3	330	320	--
	8/28/90	--	1,700	140	1.4	180	150	--
Duplicate	8/28/90	--	2,600	180	3	810	270	--
	5/11/90	--	22,000	590	42	1,200	3,600	--
MW2	2/4/97	--	100*	ND	0.89	ND	ND	81
	2/1/96	5,500♦	22,000	470	77	1,400	5,900	ND
	11/1/95	4,100♦	18,000	490	110	1,300	4,600	190
	8/1/95	2,900♦	13,000	700	140	1,400	5,500	--
	5/2/95	2,300♦♦	5,600	150	ND	150	180	--
	2/1/95	1,800♦	9,300	300	210	630	2,600	--
	11/7/94	3,100♦♦	49,000	1,700	2,000	3,000	10,000	--
	8/2/94	8,500♦	32,000	2,400	2,200	2,900	12,000	--
	5/5/94	3,100♦♦	36,000	3,200	670	2,700	9,600	--
	2/10/94	2,000♦♦	12,000	1,000	17	880	940	--
	11/11/93	7,000♦♦	36,000	4,800	970	3,000	8,100	--
	8/13/93	2,800♦♦	44,000	5,100	600	2,900	8,500	--
	5/17/93	5,500♦♦	46,000	4,400	510	2,900	9,900	--
	2/03/93†	3,900♦	9,300	780	68	830	1,200	--
	11/03/92†	9,600♦	40,000	5,600	130	3,000	6,100	--
	8/03/92†	3,300♦♦	37,000	4,500	480	3,300	9,700	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW2	5/05/92†	4,600	26,000	2,300	110	2,700	6,900	--
(Cont.)	2/07/92†	2,300	11,000	1,400	30	1,900	1,400	--
	11/05/91††	3,900	110,000	4,200	200	3,400	8,600	--
	8/05/91†	4,200	33,000	2,900	190	3,400	7,900	--
	2/21/91†	7,000	3,400	160	61	200	490	--
	11/26/90†	3,800	15,000	1,600	450	1,100	2,100	--
	8/28/90†	3,100	27,000	2,600	1,300	1,900	3,000	--
	5/11/90	--	65,000	3,300	3,300	4,100	12,000	--
MW3	2/4/97	--	ND	ND	ND	ND	ND	ND
	2/1/96	160♦	ND	ND	ND	ND	ND	190
	11/1/95	200♦	ND	ND	ND	ND	ND	200
	8/1/95	ND	ND	ND	ND	ND	ND	--
	5/2/95	56	360*	ND	ND	ND	ND	--
	2/1/95	ND	100*	ND	ND	ND	ND	--
	11/7/94	ND	94*	ND	ND	ND	ND	--
	8/2/94	76	150*	ND	ND	ND	ND	--
	5/5/94	66	62*	ND	ND	ND	ND	--
	2/10/94	50♦♦	ND	ND	ND	ND	0.84	--
	11/11/93	51	ND	ND	ND	ND	ND	--
	8/13/93	ND	ND	ND	ND	ND	ND	--
	5/17/93	53	ND	ND	ND	ND	ND	--
	2/3/93	ND	ND	ND	ND	ND	ND	--
	11/3/92	52♦	ND	ND	ND	ND	ND	--
	8/3/92	58	ND	ND	ND	ND	ND	--
	5/5/92	56	ND	ND	ND	0.43	1.8	--
	2/7/92	ND	ND	ND	ND	ND	ND	--
	11/5/91	ND	31	ND	ND	ND	0.65	--
	8/5/91	63	ND	ND	ND	ND	ND	--
	2/21/91	--	ND	ND	ND	ND	0.64	--
	11/26/90	--	ND	ND	ND	ND	ND	--
	8/28/90	--	ND	ND	ND	ND	0.7	--
	5/11/90	--	ND	ND	ND	ND	ND	
MW4	2/4/97	--	130*	0.58	ND	ND	ND	150
	2/1/96	ND	91	2.7	ND	1.2	6.8	7.8
	11/1/95	3,300♦	4,900	12	ND	190	710	210
	8/1/95	3,400♦	7,900	21	ND	210	860	--
	5/2/95	2,500♦	5,400	36	ND	130	710	--
	2/1/95	ND	ND	ND	ND	ND	ND	--
	11/7/94	2,200♦	20,000	84	17	1,500	3,000	--
	8/2/94	2,500♦♦	17,000	38	ND	1,800	4,300	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW4	5/5/94	2,000♦♦	6,900	17	ND	480	1,300	--
(Cont.)	2/10/94	170♦	830	3.5	1.4	36	80	--
	11/11/93	4,000♦	16,000	110	12	1,800	3,800	--
	8/13/93	2,000♦♦	19,000	ND	ND	1,600	4,100	--
	5/17/93	3,100♦	2,500	ND	ND	170	410	--
	2/3/93	720♦♦	370	2.6	ND	1.2	53	--
	11/3/92	8,300♦	36,000	69	ND	3,000	7,400	--
	8/3/92	2,400♦	24,000	61	ND	2,100	5,400	--
	5/5/92	3,200	15,000	82	12	2,000	5,600	--
	2/7/92	2,300	8,100	24	4.9	1,800	3,200	--
	11/5/91	7,700	140,000	320	ND	4,800	13,000	--
	8/5/91	6,200	37,000	310	70	3,600	9,700	--
	2/21/91	4,100	33,000	210	21	3,800	12,000	--
	11/26/90	--	49,000	360	36	3,800	11,000	--
	8/28/90	--	62,000	810	72	4,400	4,600	--
MW5	2/4/97	--	ND	ND	ND	ND	ND	ND
	2/1/96	ND	ND	ND	ND	ND	ND	0.72
	11/1/95	SAMPLED SEMI-ANNUALLY						
	8/1/95	ND	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED SEMI-ANNUALLY						
	2/1/95	ND	ND	ND	ND	ND	ND	--
	11/7/94	SAMPLED SEMI-ANNUALLY						
	8/2/94	ND	ND	ND	ND	ND	ND	--
	5/5/94	SAMPLED SEMI-ANNUALLY						
	2/10/94	ND	ND	ND	ND	ND	0.59	--
	11/11/93	ND	ND	ND	ND	ND	ND	--
	8/13/93	ND	ND	ND	ND	ND	ND	--
	5/17/93	ND	ND	ND	ND	ND	ND	--
	2/3/93	ND	ND	ND	ND	ND	ND	--
	11/3/92	ND	ND	ND	ND	ND	ND	--
	8/3/92	ND	ND	ND	ND	ND	ND	--
	5/5/92	72	ND	ND	ND	0.42	1.4	--
	2/7/92	ND	ND	ND	ND	0.36	0.94	--
	11/5/91	ND	ND	ND	ND	ND	ND	--
	8/5/91	ND	ND	ND	ND	ND	ND	--
	2/21/91	--	56	ND	ND	ND	4.7	--
	11/26/90	--	ND	ND	ND	ND	ND	--
	8/28/90	--	ND	ND	ND	ND	1.2	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW6	2/4/97	--	95*	ND	1.0	ND	ND	96
	2/1/96	3,700♦	58,000	2,700	1,800	4,200	17,000	ND
	11/1/95	4,300♦	24,000	1,100	200	1,900	6,000	170
	8/1/95	2,800♦	23,000	1,400	510	940	7,300	--
	5/2/95	3,600♦♦	59,000	4,700	4,400	4,000	18,000	--
	2/1/95	2,700♦♦	55,000	7,700	9,100	4,500	20,000	--
	11/7/94	770♦	23,000	3,800	970	1,400	4,700	--
	8/2/94	2,400♦♦	28,000	2,200	940	1,600	7,500	--
	5/5/94	630♦♦	2,600	430	99	24	420	--
	2/10/94	ND	ND	3.5	ND	1.5	ND	--
	11/11/93	650♦♦	3,000	470	ND	220	270	--
	8/13/93	440♦♦	2,300	330	ND	95	40	--
	5/17/93	1,400♦	4,900	890	46	210	530	--
	2/03/93†	ND	ND	1.2	ND	ND	ND	--
	11/3/92	220♦	920	45	0.76	12	110	--
	8/3/92	170♦	1,100	180	1.1	62	78	--
	5/05/92†	47	ND	ND	ND	ND	1.3	--
	2/07/92†	ND	180	22	0.68	22	20	--
	11/05/91†	300	7,100	200	ND	190	580	--
	8/05/91†	130	860	130	11	92	150	--
	2/21/91†	160	750	77	14	23	140	--
	11/26/90†	320	4,800	1,000	200	340	650	--
Duplicate	11/26/90	--	4,000	800	120	250	440	--
	8/28/90††	1,000	12,000	1,700	1,400	230	2,100	--
MW7	2/4/97	--	ND	ND	ND	ND	ND	ND
	2/1/96	96♦	ND	ND	ND	ND	ND	1.4
	11/1/95	SAMPLED SEMI-ANNUALLY						
	8/1/95	ND	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED SEMI-ANNUALLY						
	2/1/95	ND	ND	ND	ND	ND	ND	--
	11/7/94	SAMPLED SEMI-ANNUALLY						
	8/2/94	ND	ND	ND	ND	ND	0.63	--
	5/5/94	SAMPLED SEMI-ANNUALLY						
	2/10/94	ND	ND	ND	ND	ND	ND	--
	11/11/93	66	ND	ND	ND	ND	ND	--
	8/13/93	ND	ND	ND	ND	ND	ND	--
	5/17/93	ND	ND	ND	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW8	2/4/97	--	ND	ND	ND	ND	ND	ND
	2/1/96	110♦	ND	ND	ND	ND	ND	1.3
	11/1/95	SAMPLED SEMI-ANNUALLY						
	8/1/95	ND	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED SEMI-ANNUALLY						
	2/1/95	ND	ND	ND	ND	ND	ND	--
	11/7/94	SAMPLED SEMI-ANNUALLY						
	8/2/94	ND	ND	ND	ND	ND	ND	--
	5/5/94	SAMPLED SEMI-ANNUALLY						
	2/10/94	ND	ND	ND	ND	ND	ND	--
	11/11/93	ND	ND	ND	ND	ND	ND	--
	8/13/93	ND	ND	ND	ND	ND	ND	--
	5/17/93	ND	ND	ND	ND	ND	ND	--
	2/3/93	ND	ND	ND	ND	ND	ND	--
	11/3/92	ND	ND	ND	ND	ND	ND	--
MW9	2/4/97	--	ND	ND	ND	ND	ND	ND
	2/1/96	76♦	ND	ND	ND	ND	ND	ND
	11/1/95	SAMPLED SEMI-ANNUALLY						
	8/1/95	ND	ND	ND	ND	ND	ND	--
	5/2/95	SAMPLED SEMI-ANNUALLY						
	2/1/95	65♦	ND	ND	ND	ND	ND	--
	11/7/94	SAMPLED SEMI-ANNUALLY						
	8/2/94	ND	ND	ND	ND	ND	ND	--
	5/5/94	SAMPLED SEMI-ANNUALLY						
	2/10/94	ND	ND	ND	ND	ND	ND	--
	11/11/93	ND	ND	ND	ND	ND	ND	--
	8/13/93	ND	ND	ND	ND	ND	ND	--
	5/17/93	ND	ND	ND	ND	ND	ND	--
	2/3/93	ND	ND	ND	ND	ND	ND	--
	11/3/92	ND	ND	ND	ND	ND	ND	--
MW10	2/4/97	--	ND	ND	ND	ND	ND	ND
	2/1/96	320♦	ND	ND	ND	ND	ND	1,300
	11/1/95	280	ND	ND	ND	ND	ND	830
	8/1/95	260	ND	ND	ND	ND	ND	--
	5/2/95	99	840*	ND	ND	ND	9.5	--
	2/1/95	72♦	560*	ND	ND	ND	ND	--
	11/7/94	120♦♦	1,100*	ND	ND	ND	ND	--
	8/2/94	110	95*	ND	ND	ND	ND	--
	5/5/94	55	1,000*	ND	ND	ND	ND	--
	2/10/94	71	1,480*	ND	ND	ND	ND	--

Table 2

Summary of Laboratory Analyses
Water

Well #	Date	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylenes	MTBE
MW10	11/11/93	88♦♦	1,600*	ND	ND	ND	ND	--
(Cont.)	8/13/93	97♦♦	1,500**	ND	ND	41	21	--
	5/17/93	ND	1,200*	ND	ND	ND	ND	--
	2/3/93	ND	1,200*	ND	ND	ND	ND	--
	11/3/92	160♦	740	11	2.1	32	56	--
MWD Duplicate	2/21/91 (MW6)	--	740	74	12	33	140	--

* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

** Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be diesel.

♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

† Total Oil and Grease (TOG) was non-detectable.

†† TOG was detected at a concentration of 78 µg/L (Nov. 91)
TOG was detected at a concentration of 16 µg/L (Aug. 90)

ND = Non-detectable.

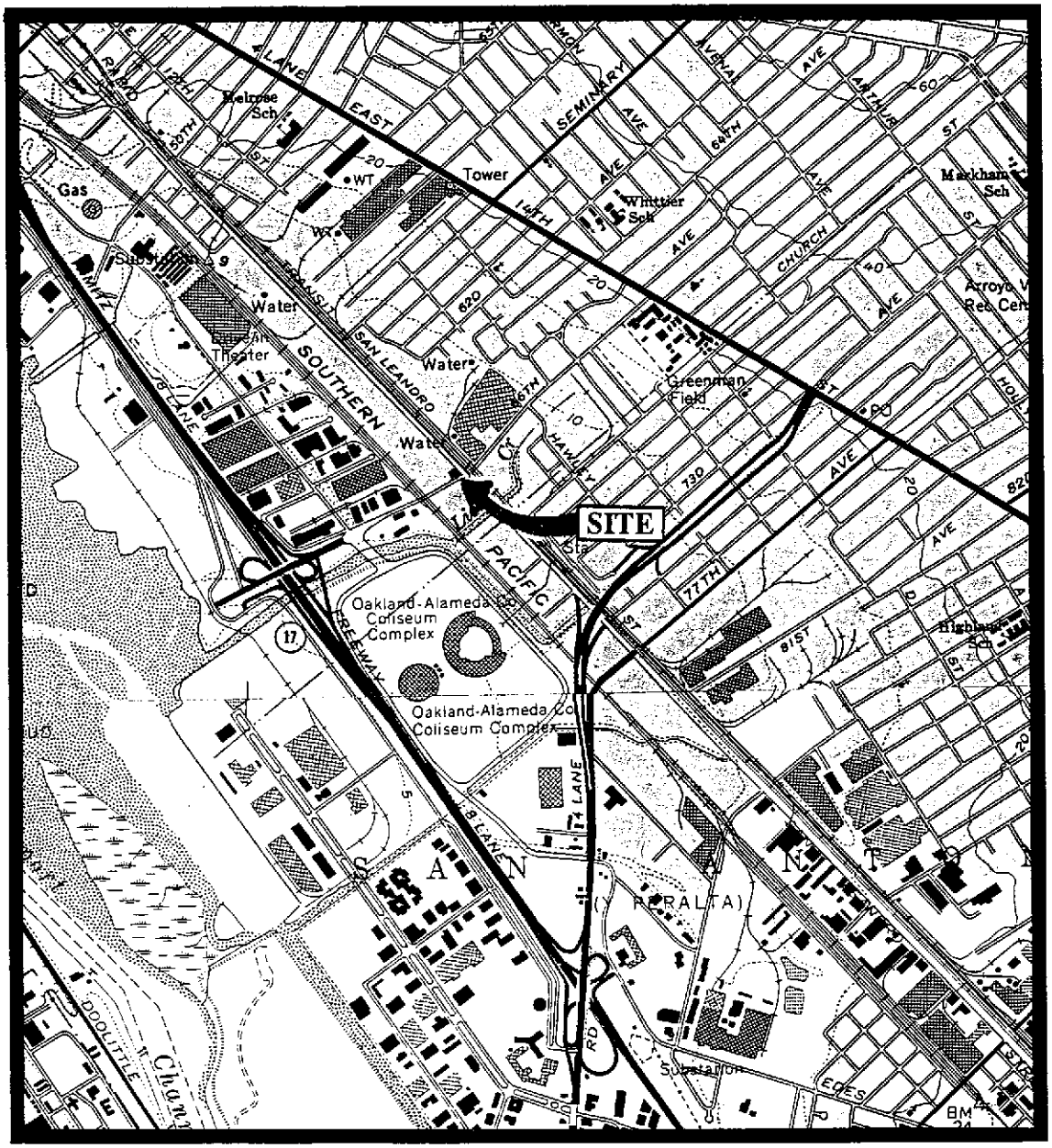
-- Indicates analysis was not performed.

Results are in micrograms per liter (µg/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 February 10, 1994, were provided by Kaprealian Engineering, Inc.

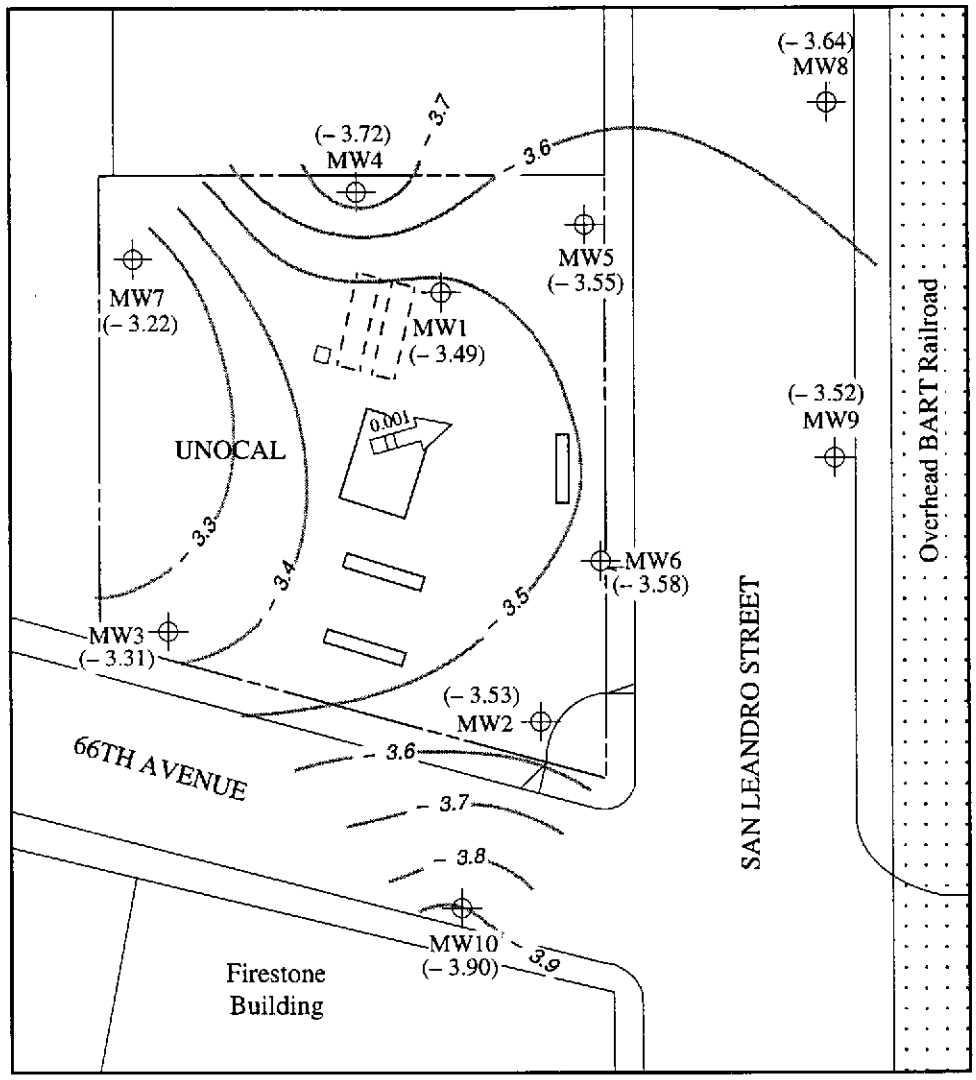


Base modified from 7.5 minute U.S.G.S.
Oakland East and San Leandro Quadrangles
(both photorevised 1980)

0 2000 4000

Approx. scale feet

mpds SERVICES, INCORPORATED	**UNOCAL SERVICE STATION #3135** **845 - 66TH AVENUE** **OAKLAND, CALIFORNIA**	**LOCATION MAP**



LEGEND

- Monitoring well
- ( ) Ground water elevation in feet relative to Mean Sea Level
- #.## Direction of ground water flow with approximate hydraulic gradient
- Contours of ground water elevation

0 60 120

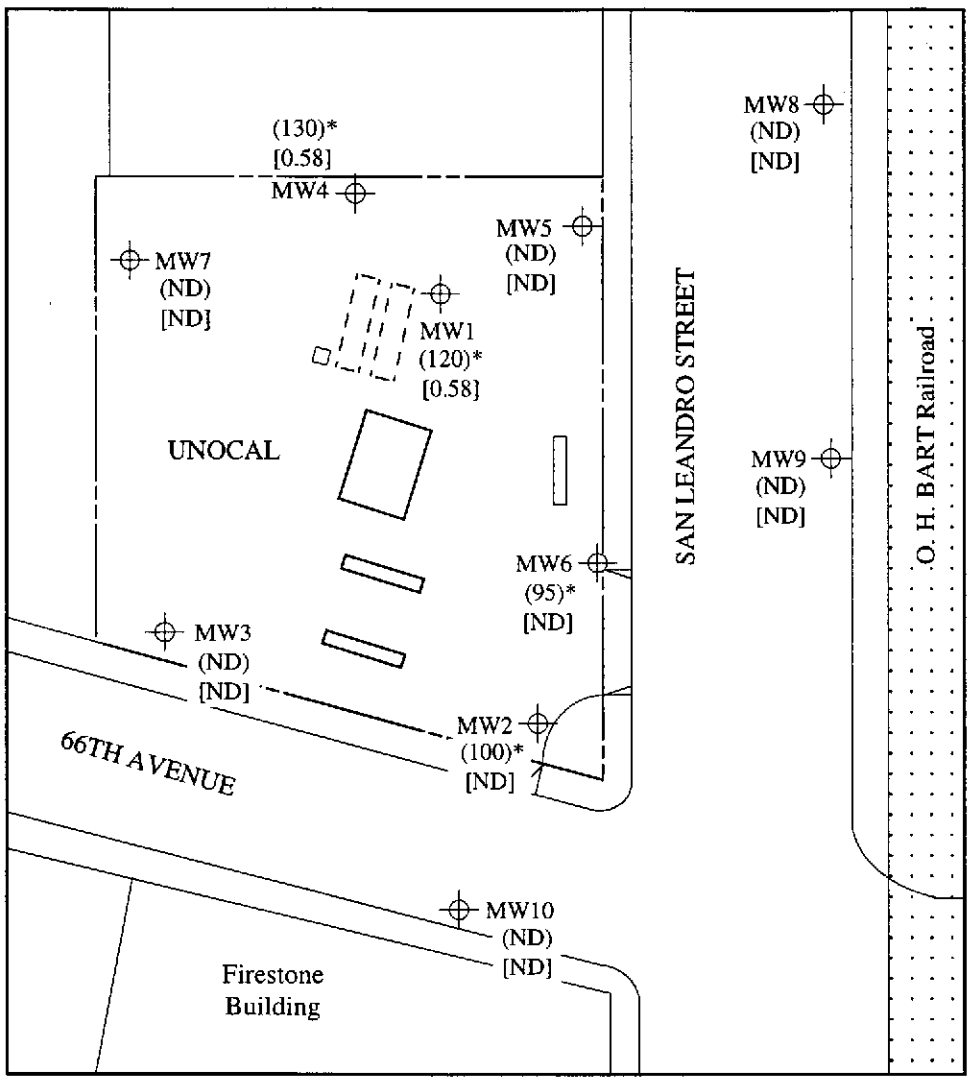
Approx. scale feet

POTENTIOMETRIC SURFACE MAP FOR THE FEBRUARY 4, 1997 MONITORING EVENT

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #3135
845 - 66TH AVENUE
OAKLAND, CALIFORNIA

FIGURE
1



LEGEND

- ⊕ Monitoring well
- ( ) Concentration of TPH as gasoline in µg/L
- [ ] Concentration of benzene in µg/L
- < > Concentration of TPH as diesel in µg/L
- ND Non-detectable
- * The lab reported that the hydrocarbons detected did not appear to be gasoline.

0 60 120

Approx. scale feet

PETROLEUM HYDROCARBON CONCENTRATIONS IN GROUND WATER ON FEBRUARY 4, 1997

mpds SERVICES, INCORPORATED

UNOCAL SERVICE STATION #3135
845 - 66TH AVENUE
OAKLAND, 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 #3135, 845 - 66th Ave., Oakland	Sampled: Feb 4, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Feb 4, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Feb 17, 1997
Attention: Jarrel Crider	First Sample #:	702-0238	

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	MTBE µg/L
702-0238	MW-1	120*	0.58	ND	ND	ND	150
702-0239	MW-2	100*	ND	0.89	ND	ND	81
702-0240	MW-3	ND	ND	ND	ND	ND	ND
702-0241	MW-4	130*	0.58	ND	ND	ND	150
702-0242	MW-5	ND	ND	ND	ND	ND	ND
702-0243	MW-6	95*	ND	1.0	ND	ND	96
702-0244	MW-7	ND	ND	ND	ND	ND	ND
702-0245	MW-8	ND	ND	ND	ND	ND	ND
702-0246	MW-9	ND	ND	ND	ND	ND	ND
702-0247	MW-10	ND	ND	ND	ND	ND	ND

* Hydrocarbons detected did not appear to be gasoline.

Detection Limits:	**50**	**0.50**	**0.50**	**0.50**	**0.50**	**5.0**

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

7020238.MPD <1>

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 #3135, 845 - 66th Ave., Oakland	Sampled: Feb 4, 1997
2401 Stanwell Dr., Ste. 300	Matrix Descript:	Water	Received: Feb 4, 1997
Concord, CA 94520	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Feb 17, 1997
Attention: Jarrel Crider	First Sample #:	702-0238	

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
702-0238	MW-1	Unidentified Hydrocarbons<C7*	1.0	2/7/97	HP-4	120
702-0239	MW-2	Unidentified Hydrocarbons<C7*	1.0	2/10/97	HP-5	95
702-0240	MW-3	--	1.0	2/7/97	HP-4	75
702-0241	MW-4	Unidentified Hydrocarbons<C7*	1.0	2/7/97	HP-4	92
702-0242	MW-5	--	1.0	2/7/97	HP-4	79
702-0243	MW-6	Unidentified Hydrocarbons<C7*	1.0	2/10/97	HP-5	83
702-0244	MW-7	--	1.0	2/7/97	HP-4	84
702-0245	MW-8	--	1.0	2/7/97	HP-4	83
702-0246	MW-9	--	1.0	2/7/97	HP-4	84
702-0247	MW-10	--	1.0	2/7/97	HP-4	83

SEQUOIA ANALYTICAL, #1271

Signature on File

Alan B. Kemp
Project Manager

Please Note:
* "Unidentified Hydrocarbons <C7" refers to unidentified peaks in the EPA 8010 range.

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

Client Project ID: Unocal #3135, 845 - 66th Ave., Oakland
Matrix: Liquid
QC Sample Group: 7020238-247

Reported: Feb 17, 1997

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#:	7020240	7020240	7020240	7020240
Date Prepared:	2/7/97	2/7/97	2/7/97	2/7/97
Date Analyzed:	2/7/97	2/7/97	2/7/97	2/7/97
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:	85	95	90	88
Matrix Spike Duplicate % Recovery:	85	100	90	93
Relative % Difference:	0.0	5.1	0.0	5.5
LCS Batch#:	2LCS020797	2LCS020797	2LCS020797	2LCS020797
Date Prepared:	2/7/97	2/7/97	2/7/97	2/7/97
Date Analyzed:	2/7/97	2/7/97	2/7/97	2/7/97
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
LCS % Recovery:	90	105	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.

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

Client Project ID: Unocal #3135, 845 - 66th Ave., Oakland
Matrix: Liquid
QC Sample Group: 7020238-247

Reported: Feb 20, 1997

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#:	7020337	7020337	7020337	7020337
Date Prepared:	2/10/97	2/10/97	2/10/97	2/10/97
Date Analyzed:	2/10/97	2/10/97	2/10/97	2/10/97
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Matrix Spike % Recovery:	95	90	95	90
Matrix Spike Duplicate % Recovery:	90	85	90	85
Relative % Difference:	5.4	5.7	5.4	5.7
LCS Batch#:	5LCS021097	5LCS021097	5LCS021097	5LCS021097
Date Prepared:	2/10/97	2/10/97	2/10/97	2/10/97
Date Analyzed:	2/10/97	2/10/97	2/10/97	2/10/97
Instrument I.D.#:	HP-5	HP-5	HP-5	HP-5
LCS % Recovery:	85	75	85	78
% 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 Stanwell Drive, Suite 400, Concord, CA 94520
Tel: (510) 602-5120 Fax: (510) 689-1918

9702067

CHAIN OF CUSTODY

SAMPLER: Joe AJEMIAN

WITNESSING AGENCY:

UNOCAL S/S # 3135 CITY: Oakland

ADDRESS: 845 66th Ave

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPHG BTEX	MTBE		ANALYSES REQUESTED					REMARKS
MW-1	2-4-97	3:00 P.M	✓	✓		2(VOA)	Wells	✓	✓		7020238	A-B				MTBE 5ppb.
MW-2	"	3:42 P.M	✓	✓		"	"	✓	✓		7020239					
MW-3	"	1:35 P.M	✓	✓		"	"	✓	✓		7020240					
MW-4	"	2:08 P.M	✓	✓		"	"	✓	✓		7020241					
MW-5	"	10:10 A.M	✓	✓		"	"	✓	✓		7020242					
MW-6	"	4:30 P.M	✓	✓		"	"	✓	✓		7020243					
MW-7	"	12:47 P.M	✓	✓		"	"	✓	✓		7020244					
MW-8	"	11:00 A.M	✓	✓		"	"	✓	✓		7020245					
MW-9	"	11:35 A.M	✓	✓		"	"	✓	✓		7020246					
MW-10	"	12:13 P.M	✓	✓		"	"	✓	✓		7020247	✓				

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
(SIGNATURE)	6:30 P.M 2-4-97	(SIGNATURE)
(SIGNATURE)	1400 2-5	(SIGNATURE)
(SIGNATURE)	1530 2-5	(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? 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: 02-04-97

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 – Oakland
845- 66th Ave.

DATE & TIME SAMPLED 2-4-97 3:00 A.M. P.M.

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER mw-1

WATER LEVEL-**INITIAL** 8.48

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 9.15

CONTAINERS 2

WELL DEPTH 22.65

PRESERVATIVES ✓

WELL CASING VOLUME 2.41

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000 (± 10% of TOTAL	pH (± 0.2)
2:30	0	67.9	4.88	7.45
	2.5	70.2	4.96	7.26
	5	69.4	4.95	7.20
2:42	7.5	70.6	4.95	7.10

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 – Oakland
845 66th Ave

DATE & TIME SAMPLED 2-4-97 3:42 A.M. (P.M.)

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-2

WATER LEVEL-**INITIAL** 7.10

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 8.81

CONTAINERS 2

PRESERVATIVES ✓

WELL DEPTH 22.50

WELL CASING VOLUME 2.62

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000) (± 10% of TOTAL	pH (± 0.2)
3:15	0	70.6	2.87	7.65
	3	71.4	3.12	7.37
	6	72.1	3.16	7.12
3:30	8	72.0	3.14	7.04

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 - Oakland
845 66th Ave.

DATE & TIME SAMPLED 2-4-97 1:35 A.M. (P.M.)

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-3

WATER LEVEL-**INITIAL** 6.43

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 7.36

CONTAINERS 2

WELL DEPTH 21.72

PRESERVATIVES ✓

WELL CASING VOLUME 2.60

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000) (± 10% of TOTAL	pH (± 0.2)
1:05	0	70.5	5.18	7.67
	2.5	71.3	5.22	7.36
	6	71.4	5.11	7.21
1:15	8	71.5	5.09	7.24

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 – Oakland
845 66th Ave

DATE & TIME SAMPLED 2-4-97 2:08 A.M. (P.M.)

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-4

WATER LEVEL-**INITIAL** 8.65

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 9.35

CONTAINERS 2

WELL DEPTH 25.15

PRESERVATIVES ✓

WELL CASING VOLUME 2.81

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000 (± 10% of TOTAL	pH (± 0.2)
1:45	0	69.6	2.36	7.96
	3	70.2	2.41	7.38
	6	70.8	2.42	7.22
1:58	9	70.8	2.43	7.17

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 - Oakland
845 66th Ave

DATE & TIME SAMPLED 2-4-97 10:10 (A.M) P.M.

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER mw-5

WATER LEVEL-**INITIAL** 7.82

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 9.02

CONTAINERS 2

WELL DEPTH 25.95

PRESERVATIVES ✓

WELL CASING VOLUME 3.08

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000) (± 10% of TOTAL	pH (± 0.2)
9:45	0	69.2	5.68	7.90
	3.5	69.5	5.62	7.63
	7	70.0	5.61	7.41
9:50	9.5	70.1	5.64	7.38

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135- Oakland
845 66th Ave.

DATE & TIME SAMPLED 2-4-97 4:30 A.M. (P.M.)

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-6

WATER LEVEL-**INITIAL** 7.61

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 8.47

CONTAINERS 2

WELL DEPTH 25.74

PRESERVATIVES ✓

WELL CASING VOLUME 3.08

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000) (± 10% of TOTAL	pH (± 0.2)
4:00	0	69.8	2.82	7.59
	3	70.6	2.90	7.50
	6	70.7	2.96	7.92
4:15	9.5	70.9	2.99	7.31

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 - Oakland
845 66th Ave

DATE & TIME SAMPLED 2-4-97 12:47 A.M. (P.M.)

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-7

WATER LEVEL-**INITIAL** 7.64

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 8.56

CONTAINERS 2

WELL DEPTH 19.85

PRESERVATIVES ✓

WELL CASING VOLUME 2.08

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000 (± 10% of TOTAL	pH (± 0.2)
12:30	0	70.6	4.38	7.49
	2	72.1	4.30	7.52
	4	72.3	4.29	7.40
12:37	6.5	72.4	4.28	7.30

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 - Oakland
845 66th Ave

DATE & TIME SAMPLED 2-4-97 11:00 (A.M.) P.M.

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-8

WATER LEVEL-**INITIAL** 8.07

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 8.71

CONTAINERS 2

WELL DEPTH 23.10

PRESERVATIVES ✓

WELL CASING VOLUME 2.56

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x1000 (± 10% of TOTAL	pH (± 0.2)
10:30	0	71.2	3.76	7.97
	2.5	71.9	3.79	7.41
	6	72.3	3.82	7.32
10:43	8	73.0	3.82	7.25

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 Oakland
845 66th Ave

DATE & TIME SAMPLED 2-4-97 11:35 (A.M.) P.M.

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-9

WATER LEVEL-**INITIAL** 8.12

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 8.96

CONTAINERS 2

WELL DEPTH 23.10

PRESERVATIVES ✓

WELL CASING VOLUME 2.55

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
11:15	0	69.0	4.26	7.62
	3	70.7	4.27	7.39
	6	71.0	4.28	7.29
11:25	8	71.4	4.28	7.21

† 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

/P&S

MPDS Services Inc.
2401 Stanwell Drive
Concord, California 94520

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

PURGING/SAMPLING DATA SHEET

SAMPLING LOCATION: #3135 - Oakland
345 66th Ave

DATE & TIME SAMPLED 2-4-97 12:13 ~~A.M.~~ P.M.

FIELD TECHNICIAN Joe

PURGE METHOD Pump

DATE(S) PURGED 2-4-97

WELL NUMBER MW-10

WATER LEVEL-**INITIAL** 6.59

SAMPLING METHOD Bail

WATER LEVEL-**FINAL** 7.38

CONTAINERS 2

WELL DEPTH 23.08

PRESERVATIVES ✓

WELL CASING VOLUME 2.80

†CASING DIAMETER 2"

TIME	GALLONS PURGED	TEMPERATURE (°F) (± 1°F)	ELECTRICAL CONDUCTIVITY ([µmhos/cm]x100) (± 10% of TOTAL	pH (± 0.2)
11:45	0	68.9	3.92	7.57
	3	69.6	3.95	7.36
	6	70.4	3.97	7.26
12:00	9	70.6	3.94	7.17

† 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

/P&S