GETTLER-RYAN INC.

TRANSMITTAL

TO: Alameda County Health Care Services
1131 Harbor Bay Parkway
Alameda, California 94502

DATE: August 3, 1998
G-R #: 180063

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: Tosco (Unocal) SS #0746
3943 Broadway
Oakland, California 94611

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	July 23, 1998	Groundwater Monitoring and Sampling Report Semi-Annual 1998 - Event of May 4, 1998

COMMENTS:

At the request of Tosco Marketing Company, we are providing you a copy of the above referenced report. The site is monitored and sampled on a semi-annual basis. If you have questions please contact the Tosco Project Manager, Ms. Tina R. Berry at (925) 277-2321.

Enclosure

cc: Mr. Doug Lee, Gettler-Ryan Inc., Dublin, CA

agency/0746trb.qmt

GETTLER-RYAN INC.

July 23, 1998
G-R Job #180063

Confirm MTBE w/ 8260

Ms. Tina R. Berry
Tosco Marketing Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

RE: Semi-Annual 1998 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #0746
3943 Broadway
Oakland, California

Dear Ms. Berry:

This report documents the semi-annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On May 4, 1998, field personnel monitored eleven wells (MW-1 through MW-7 and MW-9 through MW-12) and sampled five wells (MW-1, MW-3 through MW-5, and MW-9) at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Table 1, and Dissolved Oxygen Concentrations are summarized in Table 2. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

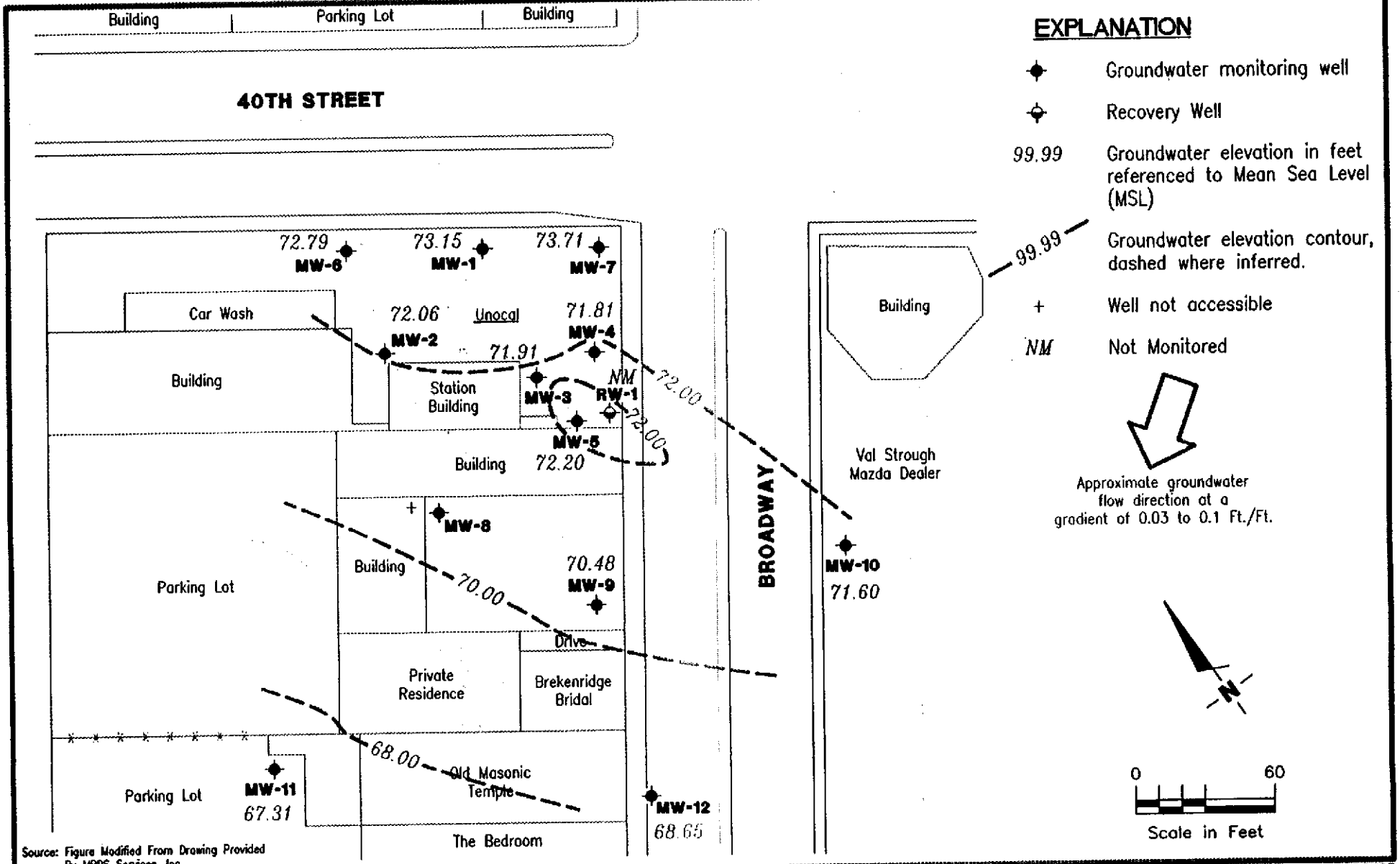
Deanna L. Harding
Project Coordinator

Stephen J. Carter
Senior Geologist, R.G. No. 5577

REGISTERED GEOLOGIST
STEPHEN J. CARTER
No. 5577
STATE OF CALIFORNIA

Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Dissolved Oxygen Concentrations
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

0746.qml



Source: Figure Modified From Drawing Provided By MPDS Services, Inc.

FIGURE 1

Gettler - Ryan Inc.

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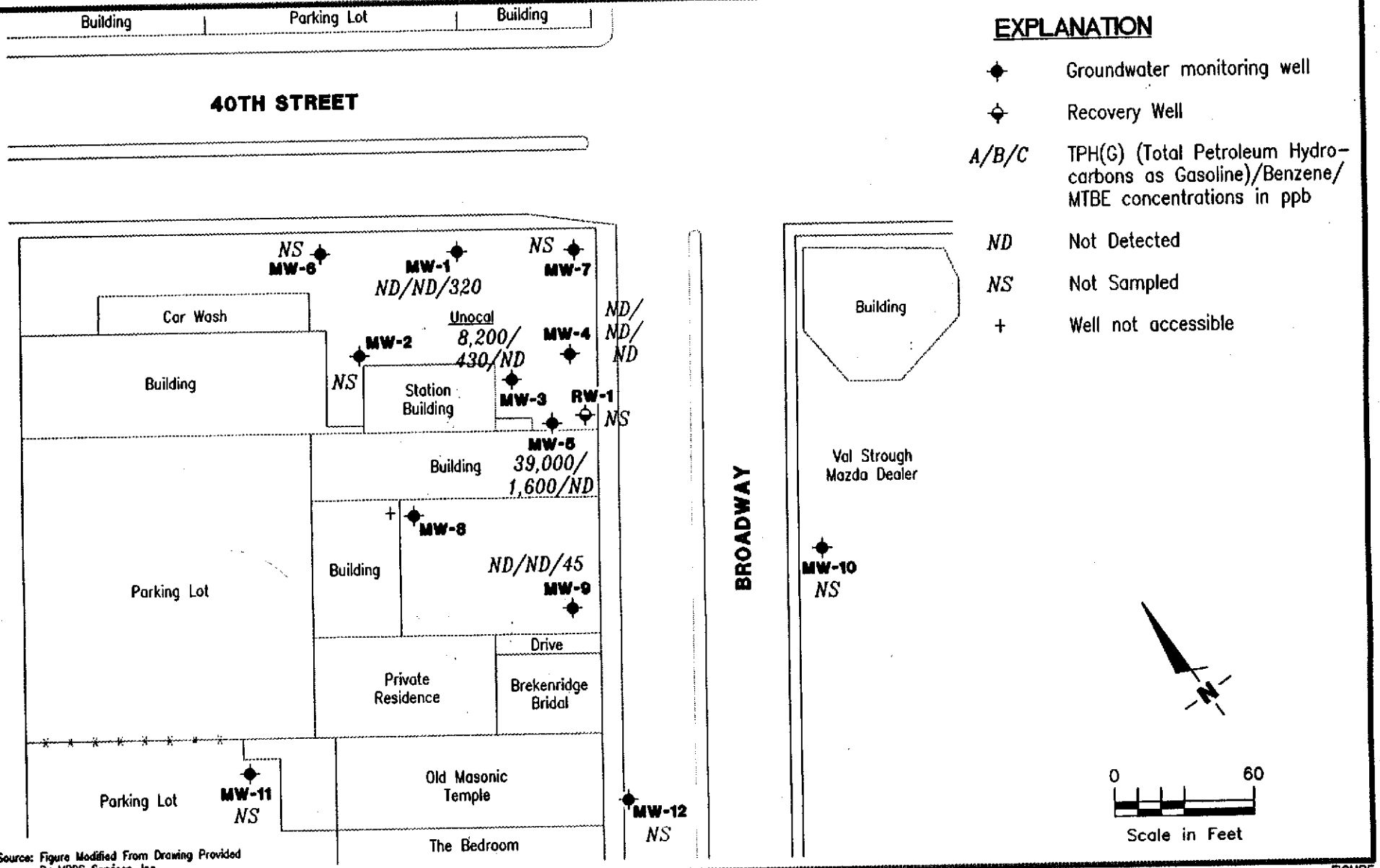
Dublin, CA 94568
(925) 551-7555

POTENTIOMETRIC MAP
Tosco (Unocal) Service Station No. 0746
3943 Broadway
Oakland, California

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180063		May 4, 1998	



Source: Figure Modified From Drawing Provided By MPDS Services, Inc.

FIGURE 2

Gettler - Ryan Inc.

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Dublin, CA 94568
(925) 551-7555

CONCENTRATION MAP
Tosco (Unocal) Service Station No. 0746
3943 Broadway
Oakland, California

JOB NUMBER 180063

REVIEWED BY

DATE May 4, 1998

REVISED DATE

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<		ppb			>
MW-1	11/01/89				ND	ND	ND	ND	0.3	--
	02/15/90				170	7.9	ND	2.2	2.8	--
	08/16/90				ND	ND	ND	ND	ND	--
	11/07/90				45	ND	ND	ND	ND	--
	02/25/91				ND	ND	ND	ND	ND	--
	05/28/91				ND	ND	ND	ND	ND	--
	08/28/91				ND	ND	ND	ND	ND	--
	11/19/91				ND	ND	ND	ND	ND	--
	02/06/92				ND	ND	ND	ND	ND	--
	05/23/92				ND	ND	ND	ND	ND	--
	08/26/92				ND	ND	ND	ND	ND	--
	11/20/92				ND	0.75	ND	ND	ND	--
	02/24/93				1,100	280	4.9	120	140	--
	05/25/93				260	27	4.9	2.6	54	--
	08/25/93				ND	ND	ND	ND	ND	--
	11/30/93				SAMPLED SEMI-ANNUALLY		--	--	--	--
	02/16/94				ND	0.84	ND	ND	0.59	--
	08/31/94				ND	ND	0.98	ND	0.84	--
	11/10/94				--	--	--	--	--	--
	02/07/95				6,100	670	ND	120	60	--
	05/03/95				260	21	39	17	24	--
	08/03/95				--	--	--	--	--	--
	11/07/95				ND	ND	ND	ND	ND	--
80.54	05/06/96	7.40	73.14	0.00	170	1.0	20	2.3	17	55
	11/05/96	7.90	72.64	0.00	ND	ND	ND	ND	ND	5.2
	05/15/97	7.77	72.77	0.00	ND	ND	ND	ND	ND	16
	11/12/97	7.48	73.06	0.00	ND	ND	ND	ND	ND	11
NP	**05/04/98**	**7.39**	**73.15**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**320**
MW-2	11/01/89				200	ND	ND	3.0	1.2	--
	02/15/90				ND	ND	ND	ND	ND	--
	08/16/90				ND	ND	6.7	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<--------		ppb			-------->
MW-2	11/07/90				ND	ND	ND	ND	ND	--
(cont)	02/25/91				ND	0.68	0.42	ND	0.86	--
	05/28/91				ND	ND	ND	ND	ND	--
	08/28/91				ND	ND	ND	ND	ND	--
	11/19/91				ND	ND	ND	ND	ND	--
	02/06/92				ND	0.36	0.66	ND	0.62	--
	05/23/92				ND	ND	ND	ND	ND	--
	08/26/92				ND	ND	ND	ND	ND	--
	11/20/92				510[1]	ND	ND	ND	ND	--
	02/24/93				11,000[1]	ND	ND	ND	ND	--
	05/25/93				1,300[1]	ND	ND	ND	ND	2,700
	08/25/93				190[1]	ND	ND	ND	ND	--
	11/30/93				480[1]	ND	ND	ND	ND	--
	02/16/94				3,200[1]	ND	ND	ND	ND	--
	05/31/94				1,100[1]	ND	ND	ND	ND	--
	08/31/94				310[1]	ND	ND	ND	ND	--
	11/10/94				95[2]	ND	ND	ND	ND	--
	02/07/95				1,600[1]	ND	ND	ND	ND	--
	05/03/95				ND	ND	ND	ND	ND	--
	08/03/95				ND	ND	ND	ND	ND	--
	11/07/95				ND	ND	ND	ND	ND	160[3]
81.32	05/06/96	8.90	72.42	0.00	SAMPLING DISCONTINUED[4]		--	--	--	--
	11/05/96	10.98	70.34	0.00	--	--	--	--	--	--
	05/15/97	9.13	72.19	0.00	--	--	--	--	--	--
	11/12/97	9.84	71.48	0.00	--	--	--	--	--	--
	05/04/98	**9.26**	**72.06**	**0.00**	--	--	--	--	--	--
MW-3	11/01/89				13,000	57	48	1.7	120	--
	02/15/90				20,000	1,700	2,100	750	3,100	--
	08/16/90				6,800	600	660	760	160	--
	11/07/90				42,000	1,400	5,000	1,800	7,500	--
	02/25/91				37,000	730	2,900	1,300	7,300	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<--------		ppb			-------->
MW-3	05/28/91				24,000	570	1,100	810	4,200	--
(cont)	08/28/91				16,000	650	2,200	1,100	5,400	--
	11/19/91				22,000	250	440	660	3,000	--
	02/06/92				24,000	600	1,800	1,200	5,800	--
	05/23/92				25,000	300	130	880	4,900	--
	08/26/92				20,000	690	1,900	1,300	5,700	--
	11/20/92				1,100,000[2]	1,800	6,400	3,000	15,000	--
	02/24/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	05/25/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	08/25/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	11/30/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	02/16/94				57,000	910	2,500	2,100	9,000	--
	05/31/94				39,000	670	630	1,500	6,200	--
	08/31/94				44,000	500	240	1,400	5,700	--
	11/10/94				86,000	3,300	3,800	1,800	8,300	--
	02/07/95				45,000	1,400	1,300	1,500	5,600	--
	05/03/95				26,000	740	990	1,100	4,400	--
	08/03/95				18,000	59	ND	530	1,900	--
	11/07/95				17,000	110	26	400	1,500	880[3]
81.41	05/06/96	9.44	71.97	Sheen	5,100	48	ND	87	210	370
	11/05/96	10.64	70.77	0.00	35,000	2,200	ND	1,200	2,800	460
	05/15/97	9.61	71.80	0.00	2,400	110	ND	ND	140	100
	11/12/97	9.18	72.23	0.00	29,000	2,000	ND	1,800	3,000	ND
NP	**05/04/98**	**9.50**	**71.91**	**0.00**	**8,200**	**430**	**ND[5]**	**310**	**320**	**ND[5]**
MW-4	02/15/90				150	8.0	8.0	10	45	--
	08/16/90				3,600	480	17	230	260	--
	11/07/90				180	1.5	0.37	6.3	26	--
	02/25/91				22,000	600	1,300	780	2,800	--
	05/28/91				38	ND	ND	ND	1.9	--
	08/28/91				2,000	1,500	20	120	300	--
	11/19/91				55	9.2	4.5	1.4	6.7	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<----------		ppb			---------->
MW-4	02/06/92				5,700	2,200	140	57	980	--
(cont)	05/23/92				ND	ND	ND	ND	ND	--
	08/26/92				120	86	0.52	0.57	1.6	--
	11/20/92				ND	6.2	ND	1.2	0.52	--
	02/24/93				140	12	0.64	9.4	3.7	--
	05/25/93				74	10	ND	4.6	1.8	--
	08/25/93				640	100	1.1	100	22	--
	11/30/93				200	28	ND	17	8.1	--
	02/16/94				190	11	0.98	21	6.6	--
	05/31/94				1,100	190	ND	100	58	--
	08/31/94				400	17	0.94	14	5.2	--
	11/10/94				7,700	1,800	280	460	1,300	--
	02/07/95				540	47	ND	17	2.5	--
	05/03/95				160	8.3	0.52	1.5	3.7	--
	08/03/95				57	2.0	ND	ND	ND	--
	11/07/95				ND	0.71	ND	ND	ND	0.86
81.29	05/06/96	8.70	72.59	0.00	1,200	12	11	15	36	ND
	11/05/96	10.00	71.29	0.00	700	32	0.71	1.8	1.3	6.5
	05/15/97	9.37	71.92	0.00	51	ND	ND	ND	ND	ND
	11/12/97	8.92	72.37	0.00	74	1.7	ND	ND	ND	ND
NP	**05/04/98**	**9.48**	**71.81**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
MW-5	02/15/90				24,000	1,500	1,700	260	3,600	--
	08/16/90				16,000	1,400	1,900	2,800	660	--
	11/07/90				20,000	640	1,100	670	3,000	--
	02/25/91				25,000	950	1,300	900	3,500	--
	05/28/91				24,000	2,300	3,400	1,300	6,000	--
	08/28/91				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	11/19/91				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	02/06/92				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	05/23/92				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
	08/26/92				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*		Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
						<--------		ppb			-------->
MW-5		11/20/92				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
(cont)		02/24/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		05/25/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		08/25/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		11/30/93				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		02/16/94				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		05/31/94				43,000	1,500	1,200	1,600	6,700	--
		08/31/94				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		11/10/94				NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUC				--	--
		02/07/95				25,000	1,400	740	990	3,000	--
		05/03/95				12,000	680	160	600	1,800	--
		08/03/95				23,000	940	280	810	2,700	--
		11/07/95				40,000	510	280	1,000	5,700	630[3]
81.38		05/06/96	9.03	72.35	Sheen	13,000	200	ND	180	610	170
		11/05/96	10.41	70.97	0.00	35,000	1,800	ND	1,300	4,900	580
		05/15/97	9.41	71.97	Sheen	10,000	490	ND	ND	1,300	ND
		11/12/97	9.27	72.11	0.00	100	5.1	ND	ND	ND	74
	NP	**05/04/98**	**9.18**	**72.20**	**0.00**	**39,000**	**1,600**	**230**	**1,000**	**3,200**	ND[5]
MW-6		11/07/90				ND	ND	ND	ND	ND	--
		02/25/91				ND	0.37	0.4	0.35	1.5	--
		05/28/91				ND	ND	ND	ND	0.42	--
		08/28/91				ND	ND	ND	ND	ND	--
		11/19/91				ND	ND	ND	ND	ND	--
		02/06/92				ND	ND	ND	ND	ND	--
		05/23/92				ND	ND	ND	ND	ND	--
		08/26/92				ND	ND	ND	ND	ND	--
		11/20/92				ND	ND	ND	ND	ND	--
		02/24/93				ND	ND	ND	ND	ND	--
		05/25/93				ND	ND	ND	ND	ND	--
		08/25/93				ND	ND	ND	ND	ND	--
		11/30/93				SAMPLED SEMI-ANNUALLY		--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<--------		*ppb*			-------->
MW-6	02/16/94				ND	ND	ND	ND	ND	--
(cont)	08/31/94				ND	ND	1.5	ND	1.6	--
	11/10/94				--	--	--	--	--	--
	02/07/95				ND	ND	ND	ND	ND	--
	05/03/95				ND	ND	ND	ND	1.0	--
	08/03/95				--	--	--	--	--	--
	11/07/95				ND	ND	ND	ND	ND	--
79.94	05/06/96	7.80	72.14	0.00	SAMPLING DISCONTINUED[4]		--	--	--	--
	11/05/96	7.63	72.31	0.00	--	--	--	--	--	--
	05/15/97	7.41	72.53	0.00	--	--	--	--	--	--
	11/12/97	7.51	72.43	0.00	--	--	--	--	--	--
	05/04/98	**7.15**	**72.79**	**0.00**	--	--	--	--	--	--
MW-7	11/07/90				ND	ND	ND	ND	ND	--
	02/25/91				70	ND	ND	ND	0.52	--
	05/28/91				39	ND	ND	ND	0.73	--
	08/28/91				ND	ND	ND	ND	ND	--
	11/19/91				32	ND	ND	ND	ND	--
	02/06/92				ND	ND	ND	ND	ND	--
	05/23/92				ND	ND	ND	ND	ND	--
	08/26/92				ND	ND	ND	0.73	ND	--
	11/20/92				ND	ND	ND	ND	ND	--
	02/24/93				ND	ND	ND	ND	ND	--
	05/25/93				ND	ND	ND	ND	ND	--
	08/25/93				ND	ND	ND	ND	ND	--
	11/30/93				SAMPLED SEMI-ANNUALLY		--	--	--	--
	02/16/94				ND	ND	ND	ND	0.7	--
	08/31/94				ND	ND	0.8	ND	0.75	--
	11/10/94				--	--	--	--	--	--
	02/07/95				ND	ND	ND	ND	ND	--
	05/03/95				ND	ND	ND	ND	1.0	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<		ppb			>
MW-7	08/03/95				--	--	--	--	--	--
(cont)	11/07/95				ND	ND	ND	ND	ND	--
81.64	05/06/96	8.15	73.49	0.00	--	--	--	--	--	--
	11/05/96	8.67	72.97	0.00	--	--	--	--	--	--
	05/15/97	8.47	73.17	0.00	--	--	--	--	--	--
	11/12/97	7.88	73.76	0.00	--	--	--	--	--	--
	05/04/98	**7.93**	**73.71**	**0.00**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	11/07/90				4,700	28	38	86	7,200	--
	02/25/91				5,300	17	6.1	53	300	--
	05/28/91				4,800	4.2	1.3	5.1	170	--
	08/28/91				1,800	3.2	1.9	19	74	--
	11/19/91				1,600	8.1	1.8	19	52	--
	02/06/92				2,600	4.1	7.0	31	93	--
	05/23/92				2,100	8.6	1.6	1.7	28	--
	08/26/92				1,800	12	8.0	4.0	13	--
	11/20/92	INACCESSIBLE	--	--	--	--	--	--	--	--
	02/24/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	05/25/93				1,200	5.4	ND	9.0	21	--
	08/25/93				1,800	11	17	8.9	29	--
	11/30/93				3,500	18	ND	ND	ND	--
	02/16/94				990	4.9	1.8	2.4	4.5	--
	05/31/94				350	3.0	1.0	0.73	1.7	--
	08/31/94				1,800[1]	ND	ND	ND	ND	--
	11/10/94				940	6.7	6.3	ND	16	--
	02/07/95				230	1.4	0.95	0.9	1.1	--
	05/03/95				75	ND	ND	ND	1.0	--
	08/03/95	INACCESSIBLE (PARKED OVER)		--	--	--	--	--	--	--
	11/07/95				210	1.3	1.2	ND	ND	--[3]
81.41	05/06/96	INACCESSIBLE (PARKED OVER)		--	--	--	--	--	--	--
	11/05/96	INACCESSIBLE (PARKED OVER)		--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*		Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
						<----------ppb---------->					
MW-8		05/15/97	10.46	70.95	0.00	ND	ND	ND	ND	ND	43
(cont)		11/12/97	INACCESSIBLE (PARKED OVER)		--	--	--	--	--	--	--
		05/04/98	**INACCESSIBLE (PARKED OVER)**			--	--	--	--	--	--
MW-9		11/07/90				480	7.8	1.2	13	47	--
		02/25/91				390	13	1.1	2.8	14	--
		05/28/91				590	6.0	0.43	6.8	1.4	--
		08/28/91				450	17	0.9	13	14	--
		11/19/91				360	17	0.45	15	11	--
		02/06/92				660	41	1.0	33	15	--
		05/23/92				460	18	0.66	1.4	3.2	--
		08/26/92				250	13	ND	8.6	3.8	--
		11/20/92	INACCESSIBLE	--	--	--	--	--	--	--	--
		02/24/93	INACCESSIBLE	--	--	--	--	--	--	--	--
		05/25/93				160	6.1	ND	7.4	1.1	--
		08/25/93				220	10	ND	6.8	1.4	--
		11/30/93				200	5.6	ND	2.9	2.7	--
		02/16/94				250	5.1	1.3	4.4	1.5	--
		05/31/94				360	7.8	0.97	4.6	2.2	--
		08/31/94				650	7.7	2.8	4.4	5.0	59
		11/10/94				ND	ND	ND	ND	ND	--
		02/07/95				57	0.7	ND	0.86	ND	--
		05/03/95				ND	0.85	0.67	1.3	1.0	--
		08/03/95				91	1.1	ND	ND	ND	--
		11/07/95				130	1.5	0.62	0.71	ND	60[3]
80.53		05/06/96	9.01	71.52	0.00	860	6.1	13	6.0	25	ND
		11/05/96	11.42	69.11	0.00	84	0.74	ND	1.2	4.5	ND
		05/15/97	9.89	70.64	0.00	ND	ND	ND	ND	ND	ND
		11/12/97	10.22	70.31	0.00	ND	0.55	ND	ND	ND	74
	NP	**05/04/98**	**10.05**	**70.48**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**45**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<----------ppb---------->					
MW-10	02/06/92				ND	ND	ND	ND	ND	--
	05/23/92				ND	ND	ND	ND	ND	--
	08/26/92				ND	ND	ND	ND	ND	--
	11/20/92				ND	ND	ND	ND	ND	--
	02/24/93				ND	ND	ND	ND	ND	--
	05/25/93				ND	ND	ND	ND	ND	--
	08/25/93				ND	ND	ND	ND	ND	--
	11/30/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	02/16/94				ND	ND	ND	ND	ND	--
	05/31/94				ND	ND	0.9	ND	0.91	--
	08/31/94				ND	ND	0.64	ND	0.54	--
	11/10/94				ND	ND	ND	ND	ND	--
	02/07/95				SAMPLED SEMI-ANNUALLY		--	--	--	--
	05/03/95				ND	ND	ND	ND	0.65	--
	08/03/95				--	--	--	--	--	--
	11/07/95				ND	ND	ND	ND	ND	--
81.61	05/06/96	10.90	70.71	0.00	SAMPLING DISCONTINUED[4]		--	--	--	--
	11/05/96	11.96	69.65	0.00	--	--	--	--	--	--
	05/15/97	10.79	70.82	0.00	--	--	--	--	--	--
	11/12/97	10.07	71.54	0.00	--	--	--	--	--	--
	05/04/98	**10.01**	**71.60**	**0.00**	--	--	--	--	--	--
MW-11	02/06/92				ND	ND	ND	ND	ND	--
	05/23/92				ND	ND	ND	ND	ND	--
	08/26/92				ND	ND	ND	ND	ND	--
	11/20/92				ND	ND	ND	ND	ND	--
	02/24/93				ND	ND	ND	ND	ND	--
	05/25/93				ND	ND	0.75	ND	1.0	--
	08/25/93				ND	ND	ND	ND	ND	--
	11/30/93				ND	ND	ND	ND	ND	--
	02/16/94				ND	ND	ND	ND	ND	--
	05/31/94				ND	ND	ND	ND	ND	--
	08/31/94				ND	ND	1.5	ND	1.8	--
	11/10/94				ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G)	B	T	E	X	MTBE
					<----------ppb---------->					
MW-11	02/07/95				SAMPLED SEMI-ANNUALLY		--	--	--	--
(cont)	05/03/95				ND	ND	ND	ND	ND	--
	08/03/95				--	--	--	--	--	--
	11/07/95				ND	ND	ND	ND	ND	--
78.18	05/06/96	13.30	64.88	0.00	SAMPLING DISCONTINUED[4]		--	--	--	--
	11/05/96	10.90	67.28	0.00	--	--	--	--	--	--
	05/15/97	11.65	66.53	0.00	--	--	--	--	--	--
	11/12/97	9.66	68.52	0.00	--	--	--	--	--	--
	05/04/98	**10.87**	**67.31**	**0.00**	--	--	--	--	--	--
MW-12	08/26/92				ND	ND	ND	ND	ND	--
	11/20/92				ND	ND	ND	ND	ND	--
	11/30/93				ND	ND	ND	ND	ND	--
	08/25/93				ND	ND	ND	ND	ND	--
	05/25/93				ND	ND	ND	ND	ND	--
	02/24/93				ND	ND	ND	ND	ND	--
	02/16/94				ND	ND	ND	ND	ND	--
	08/31/94				ND	ND	1.0	ND	1.0	ND
	05/31/94				ND	ND	0.81	ND	0.82	--
	11/10/94				ND	ND	ND	ND	ND	--
	02/07/95				SAMPLED SEMI-ANNUALLY		--	--	--	--
	05/03/95				ND	ND	ND	ND	ND	--
	08/03/95				--	--	--	--	--	--
	11/07/95				ND	ND	ND	ND	ND	--
79.61	05/06/96	13.25	66.36	0.00	SAMPLING DISCONTINUED[4]		--	--	--	--
	11/05/96	11.88	67.73	0.00	--	--	--	--	--	--
	05/15/97	11.72	67.89	0.00	--	--	--	--	--	--
	11/12/97	10.01	69.60	0.00	--	--	--	--	--	--
	05/04/98	**10.96**	**68.65**	**0.00**	--	--	--	--	--	--
Trip Blank										
TB-LB	**05/04/98**	--	--	--	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 4, 1998, were provided by MPDS Services, Inc.

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
msl = Relative to mean sea level
TPH(G) = Total Petroleum Hydrocarbons as Gasoline

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether

ppb = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed
NP = No Purge

* TOC elevations have been surveyed relative to mean sea level (msl) per the City of Oakland Benchmark BM#1336 (Elevation = 82.28 feet msl).

1 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.

2 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

3 Laboratory has identified the presence of MTBE at a level greater than or equal to the taste and odor threshold of 40 ppb in the sample collected from this well.

4 Sampling discontinued per Alameda County Health Care Services' letter dated January 24, 1996.

5 Detection limit raised. Refer to analytical results.

Depth to water and groundwater elevation history will be updated in future reports.

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID	Date	Before Purging (mg/L)	After Purging (mg/L)
MW-1	05/06/96	5.21	4.13
	11/05/96	3.12	--[1]
	05/15/97	3.92	--[1]
	11/12/97	4.16	--[1]
	05/04/98	**3.84**	--[1]
MW-2	08/19/95	--	2.77
	05/15/97	3.01	--[1]
	11/12/97	3.27	--[1]
	05/04/98	**3.63**	--[1]
MW-3	08/19/95	--	2.06
	11/07/95	--	1.68
	05/06/96	3.18	3.40
	11/05/96	2.03	--[1]
	05/15/97	3.08	--[1]
	05/04/98	**2.98**	--[1]
MW-4	08/19/95	--	2.19
	11/07/95	--	8.43
	05/06/96	3.75	5.97
	11/05/96	2.11	--[1]
	05/15/97	3.24	--[1]
	11/12/97	3.11	--[1]
	05/04/98	**3.73**	--[1]
MW-5	08/19/95	--	2.09
	11/07/95	--	1.79
	05/06/96	2.91	1.80
	11/05/96	1.85	--[1]
	05/15/97	2.10	--[1]
	11/12/97	1.98	--[1]
	05/04/98	**1.69**	--[1]
MW-6	05/15/97	2.90	--[1]
	05/04/98	**3.57**	--[1]
MW-7	05/15/97	2.21	--[1]
	05/04/98	**3.09**	--[1]

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #0746

3943 Broadway

Oakland, California

Well ID	Date	Before Purging (mg/L)	After Purging (mg/L)
MW-8	11/05/96	INACCESSIBLE (PARKED OVER)	
	05/15/97	2.88	--[1]
	11/12/97	INACCESSIBLE (PARKED OVER)	
	05/04/98	**INACCESSIBLE (PARKED OVER)**	
MW-9	05/06/96	4.23	3.25
	11/05/96	2.98	--[1]
	05/15/97	3.04	--[1]
	11/12/97	4.02	--[1]
	05/04/98	**3.41**	--[1]
MW-10	05/15/97	1.61	--[1]
	05/04/98	**2.85**	--[1]
MW-11	05/15/97	1.68	--[1]
	05/04/98	**2.94**	--[1]
MW-12	05/15/97	2.10	--[1]
	05/04/98	**3.41**	--[1]
RW-1	11/07/95	--	2.13

EXPLANATIONS:

Dissolved oxygen concentrations prior to May 4, 1998, were provided by MPDS Services, Inc.

mg/L = milligrams per liter

-- = Not Measured

[1] Wells were not purged prior to sampling.

Note : Measurements were taken using a LaMotte DO4000 dissolved oxygen meter.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-1 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.90 ft.

Depth to Water 7.39 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other: _____

Sampling Equipment: (Disposable Bailer) / Bailer / Pressure Bailer / Grab Sample / Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: 10:20 AM Water Color: Semi-clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X1000	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
_____	_____	7.53	2.97	67.0	3.84	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: [illegible]

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-2 Well Condition: o.k.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.96 ft.

Depth to Water 9.26 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:	Sampling Equipment:
Disposable Bailer	(Disposable Bailer)
Bailer	Bailer
Stack	Pressure Bailer
Suction	Grab Sample
Grundfos	
Other: _____	Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: [redacted] Water Color: clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None.

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 10	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.37	5.12	65.0	3.63		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: Monitored purging and took DO readings.

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID: MW-3 Well Condition: o.k.

Well Diameter: 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth: 22.43 ft.

Depth to Water: 9.50 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer; Bailer; Stack; Suction; Grundfos; Other: _____

Sampling Equipment: (Disposable Bailer); ~~Bailer~~; Pressure Bailer; Grab Sample; Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: 10:38 A.M Water Color: semi-clear Odor: strong

Purging Flow Rate: _____ gpm. Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.39	1.83	66.3	2.98		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 VOA	Y	HCl	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

3/97-fieldst.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-4 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 20.03 ft.

Depth to Water 9.48 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:
- Disposable Bailer
- Bailer
- Stack
- Suction
- Grundfos
- Other: _____

Sampling Equipment:
- (Disposable Bailer)
- Bailer
- Pressure Bailer
- Grab Sample
- Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: 11:00 AM Water Color: murky Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X(10)	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.12	3.87	65.9	3.73		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	3 VOA	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-5 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 20.18 ft.

Depth to Water 9.18 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other: _____

Sampling Equipment: (Disposable Bailer) / ~~Bailer~~ / Pressure Bailer / Grab Sample / Other: _____

Starting Time: _____ Weather Conditions: _____

Sampling Time: 11:22 A.M. Water Color: _____ Odor: _____

Purging Flow Rate: _____ gpm Sediment Description: _____

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm x1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.02	1.36	66.1	1.69		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 VOA	Y	HCl	Seq.	TPHG, BTEX, MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID: MW-6 Well Condition: o.k.

Well Diameter: 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 [gal.]

Total Depth: 19.78 ft.

Depth to Water: 7.15 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ [gal.]

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other: _____

Sampling Equipment: (Disposable Bailer) / ~~Bailer~~ / Pressure Bailer / Grab Sample / Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: _____ Water Color: clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ [gal.]

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 1000	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.30	4.71	66.1	3.57		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: Monitored purging and took DO readings

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-7 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 18.50 ft.

Depth to Water 7.93 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / Suction / Grundfos / Other: _____

Sampling Equipment: (Disposable Bailer) / Bailer / Pressure Bailer / Grab Sample / Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: _____ Water Color: clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.63	6.52	64.9	3.09		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: Monitored daily and took DO readings

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-8 Well Condition: ~~okay~~ *See notes below

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth ft.

Depth to Water ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____

Sampling Equipment: Disposable Bailer, Bailer, Pressure Bailer, Grab Sample, Other: _____

Starting Time: _____ Weather Conditions: _____

Sampling Time: _____ Water Color: _____ Odor: _____

Purging Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: * Well was packed over and inaccessible. Dilapidated car couldn't be moved

9/97-fieldst.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-9 Well Condition: o.k.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 21.93 ft.

Depth to Water 10.05 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment:
- Disposable Bailer
- Bailer
- Stack
- Suction
- Grundfos
- Other: _____

Sampling Equipment:
- (Disposable Bailer)
- ~~Bailer~~
- Pressure Bailer
- Grab Sample
- Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: 11:45 A.M. Water Color: clear Odor: None

Purging Flow Rate: _____ gpm. Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm x 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
					3.41		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	3 VOA	Y	HCL	Sog.	TPHG, BTEX, MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-10 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 21.78 ft

Depth to Water 10.01 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____

Sampling Equipment: (Disposable Bailer), ~~Bailer~~, Pressure Bailer, Grab Sample, Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: _____ Water Color: clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.22	4.19	65.2	2.85		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: Monitored and took DO readings

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-11 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.20 ft.

Depth to Water 10.87 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____

Sampling Equipment: (Disposable Bailer), ~~Bailer~~, Pressure Bailer, Grab Sample, Other: _____

Starting Time: _____ Weather Conditions: clear

Sampling Time: _____ Water Color: clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.16	4.67	65.3	2.94		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: Monitored during and took DO readings

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WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 0746 Job#: 180063

Address: 3943 Broadway Date: 5-4-98

City: Oakland Sampler: Joe

Well ID MW-12 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 17.65 ft

Depth to Water 10.96 ft

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

_____ X VF _____ = _____ X 3 (case volume) = Estimated Purge Volume: _____ (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____

Sampling Equipment: (Disposable Bailer), Bailer, Pressure Bailer, Grab Sample, Other: _____

Starting Time: _____ Weather Conditions: Clear

Sampling Time: _____ Water Color: clear Odor: None

Purging Flow Rate: _____ gpm Sediment Description: None

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		7.53	4.36	65.0	3.41		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES

COMMENTS: Monitored water and took DO readings

9/97-fieldst.fm

Chain of Custody Record

TOSCO

Tosco Marketing Company
2000 Crow Canyon Pl., Ste. 400
San Ramon, California 94583

Facility Number: UNOCAL SS#BP0746
Facility Address: 3943 BROADWAY, OAKLAND, CA
Consultant Project Number: 180063.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name): MS. TINA BERRY
(Phone): 925-277-2321
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE ASCMIAN
Collection Date: 5-1-98
Signature: Joe Ascmian

Analyses To Be Performed: 8015/8020

DO NOT BILL TB-LB ANALYSIS

9805121

Sample Number	Lab Sample Number	Number of Containers	Matrix: S = Soil, W = Water, A = Air, C = Charcoal	Type: G = Grab, C = Composite, D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
TB-LB	1	1 VOA	W	-		HCL	Yes	✓													
MW-1	2	3 VOA	✓	G	10:20 A.M	-	✓	✓													
MW-3	3	✓	✓	✓	10:38 A.M	✓	✓	✓													
MW-4	4	✓	✓	✓	11:00 A.M	✓	✓	✓													
MW-5	5	✓	✓	✓	11:22 A.M	✓	✓	✓													
MW-9	6	✓	✓	✓	11:45 A.M	✓	✓	✓													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Joe Ascmian	G-R Inc.	5-4-98 3:00 P.M.			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					5/4 1500

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

Chain of Custody Record

TOSCO

Tosco Marketing Company
2000 Crow Canyon Pl, Ste. 400
San Ramon, California 94583

Facility Number: UNOCAL SS#BP0746
Facility Address: 3943 BROADWAY, OAKLAND, CA
Consultant Project Number: 180063.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name): MS. TINA BERRY
(Phone) 925-277-2321
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): JOE ASCMIAN
Collection Date: 5-4-98
Signature: Joe Ascmian

Analyses To Be Performed 9805121

DO NOT BILL TB-LB ANALYSIS

9805121

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)						Remarks
TB-LB	1	1 VOA	W	-		HCL	Yes	✓													
MW-1	2	3 VOA	✓	G	10:20 A.M	-	✓	✓													
MW-3	3	✓	✓	✓	10:38 A.M	-	✓	✓													
MW-4	4	✓	✓	✓	11:00 A.M	-	✓	✓													
MW-5	5	✓	✓	✓	11:22 A.M	-	✓	✓													
MW-9	6	✓	✓	✓	11:45 A.M	-	✓	✓													

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Joe Ascmian	G-R Inc.	5-4-98 3:00 P.M.			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					5/4 1500

Turn Around Time (Circle Choice)

24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: UNOCAL BP0746, 180063.85
Sample Descript: TB-LB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9805121-01

Sampled: 05/04/98
Received: 05/04/98
Analyzed: 05/15/98
Reported: 05/27/98

QC Batch Number: GC051598BTEX05A
Instrument ID: HP5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	74

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

SEQUOIA ANALYTICAL - ELAP #1271

Tod Granicher
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies	Client Proj. ID: UNOCAL BP0746, 180063.85	Sampled: 05/04/98
6747 Sierra Court Suite J	Sample Descript: MW-1	Received: 05/04/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/15/98
Attention: Deanna Harding	Lab Number: 9805121-02	Reported: 05/27/98

QC Batch Number: GC051598BTEX05A
Instrument ID: HP5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**320**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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

SEQUOIA ANALYTICAL - ELAP #1271

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Deanna Harding

Client Proj. ID: UNOCAL BP0746, 180063.85
Sample Descript: MW-3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9805121-03

Sampled: 05/04/98
Received: 05/04/98

Analyzed: 05/15/98
Reported: 05/27/98

QC Batch Number: GC051598BTEX02A
Instrument ID: HP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**5000**	**8200**
Methyl t-Butyl Ether	250	N.D.
Benzene	**50**	**430**
Toluene	50	N.D.
Ethyl Benzene	**50**	**310**
Xylenes (Total)	**50**	**320**
Chromatogram Pattern:		**Gasoline**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100

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

SEQUOIA ANALYTICAL - ELAP #1271

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: UNOCAL BP0746, 180063.85	Sampled: 05/04/98
6747 Sierra Court Suite J	Sample Descript: MW-4	Received: 05/04/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/15/98
Attention: Deanna Harding	Lab Number: 9805121-04	Reported: 05/27/98

QC Batch Number: GC051598BTEX05A
Instrument ID: HP5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	75

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

SEQUOIA ANALYTICAL - ELAP #1271

Tod Granicher
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies	Client Proj. ID: UNOCAL BP0746, 180063.85	Sampled: 05/04/98
6747 Sierra Court Suite J	Sample Descript: MW-5	Received: 05/04/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/15/98
Attention: Deanna Harding	Lab Number: 9805121-05	Reported: 05/27/98

QC Batch Number: GC051598BTEX05A
Instrument ID: HP5

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**20000**	**39000**
Methyl t-Butyl Ether	1000	N.D.
Benzene	**200**	**1600**
Toluene	**200**	**230**
Ethyl Benzene	**200**	**1000**
Xylenes (Total)	**200**	**3200**
Chromatogram Pattern:		**Gasoline**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	74

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

SEQUOIA ANALYTICAL - ELAP #1271

Tod Granicher
Project Manager

Sequoia Analytical

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1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies	Client Proj. ID: UNOCAL BP0746, 180063.85	Sampled: 05/04/98
6747 Sierra Court Suite J	Sample Descript: MW-9	Received: 05/04/98
Dublin, CA 94568	Matrix: LIQUID	Extracted: 05/15/98
	Analysis Method: 8015Mod/8020	Analyzed: 05/22/98
Attention: Deanna Harding	Lab Number: 9805121-06	Reported: 05/27/98

QC Batch Number: GC051598BTEXEXC
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**45**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	74

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

SEQUOIA ANALYTICAL - ELAP #1271

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal BP0746, 180063.85
Matrix: Liquid
Work Order #: 9805121 01-06
Reported: Jun 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	BTEX as TPH
QC Batch#:	GC051598802002A	GC051598802002A	GC051598802002A	GC051598802002A	GC051598802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8050711	8050711	8050711	8050711	8050711
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP2	HP2	HP2	HP2	HP2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	330 µg/L
Result:	18	18	19	55	340
MS % Recovery:	90	90	95	92	103
Dup. Result:	20	20	21	61	350
MSD % Recov.:	100	100	105	102	106
RPD:	10.5	10.5	10	10.3	2.9
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS051598	LCS051598	LCS051598	LCS051598	LCS051598
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP2	HP2	HP2	HP2	HP2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	330 µg/L
LCS Result:	19	18	19	57	330
LCS % Recov.:	95	90	95	95	100
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140

SEQUOIA ANALYTICAL
ELAP #1271

Tod Granicher
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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste J
Dublin, CA 94568
Attention: Deanna Harding

Client Project ID: Unocal BP0746, 180063.85
Matrix: Liquid
Work Order #: 9805121 01-06
Reported: Jun 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	BTEX as TPH
QC Batch#:	GC051598802005A	GC051598802005A	GC051598802005A	GC051598802005A	GC051598802005A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8050428	8050428	8050428	8050428	8050428
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP5	HP5	HP5	HP5	HP5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	290 µg/L
Result:	15	15	18	48	280
MS % Recovery:	75	75	80	80	97
Dup. Result:	16	16	16	48	300
MSD % Recov.:	80	80	80	80	103
RPD:	6.5	6.5	0.0	0.0	6.9
RPD Limit:	0-20	0-20	0-20	0-20	0-50
LCS #:	LCS051598	LCS051598	LCS051598	LCS051598	LCS051598
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP5	HP5	HP5	HP5	HP5
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	290 µg/L
LCS Result:	17	18	17	54	330
LCS % Recov.:	85	90	85	90	114
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140

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ELAP #1271

Tod Granicher
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.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: UNOCAL BP0746, 180063.85	Received: 05/04/98
6747 Sierra Court Suite J		
Dublin, CA 94568	Lab Proj. ID: 9805121	Reported: 05/27/98
Attention: Deanna Harding		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

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Tod Granicher
Project Manager