

20-203



# GETTLER-RYAN INC.

## TRANSMITTAL

July 19, 2002  
G-R #180063

AUG 06 2002

TO: Mr. David B. De Witt  
Phillips 66 Company  
2000 Crow Canyon Place, Suite 400  
San Ramon, California 94583

CC: Mr. Douglas Lee  
Gettler Ryan, Inc.  
Dublin, California

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

RE: **Tosco (Unocal) Service Station  
#0746  
3943 Broadway  
Oakland California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	July 5, 2002	Groundwater Monitoring and Sampling Report First Semi-Annual-Event of May 24, 2002

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by **August 1, 2002**, this report will be distributed to the following:

cc: Ms. Eva Chu, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94502

Enclosure

trans/0746-DBD



# GETTLER-RYAN INC.

July 5, 2002  
G-R Job #180063

Mr. David B. De Witt  
Phillips 66 Company  
2000 Crow Canyon Place, Suite 400  
San Ramon, California 94583

**RE: First Semi-Annual Event of May 24, 2002**  
Groundwater Monitoring & Sampling Report  
Tosco (Unocal) Service Station #0746  
3943 Broadway  
Oakland, California


Dear Mr. De Witt:

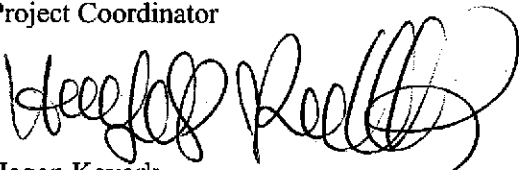
This report documents the monthly site visits and the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were present in one well (MW-5). Static water level data and groundwater elevations are summarized in Table 1. Product Thickness/Removal Data are presented in Table 3. Dissolved Oxygen Concentrations are summarized in Table 2. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

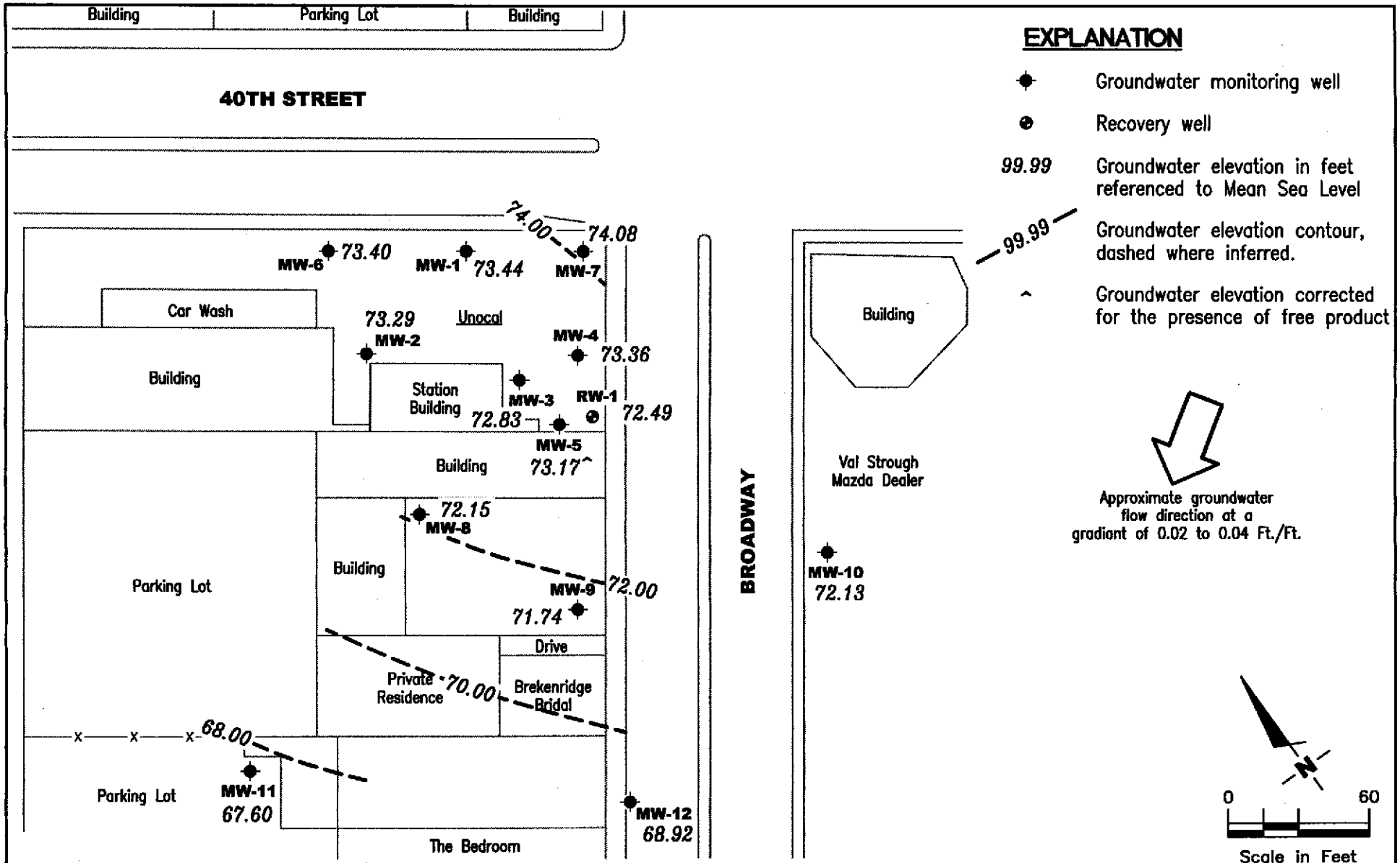
  
Deanna L. Harding  
Project Coordinator

  
Hagop Kevork  
P.E. No. C55734



- Figure 1: Potentiometric Map
- Figure 2: Concentration Map
- Table 1: Groundwater Monitoring Data and Analytical Results
- Table 2: Dissolved Oxygen Concentrations
- Table 3: Product Thickness/Removal Data
- Table 4: Groundwater Analytical Results – Oxygenate Compounds
- Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports

0746.qml



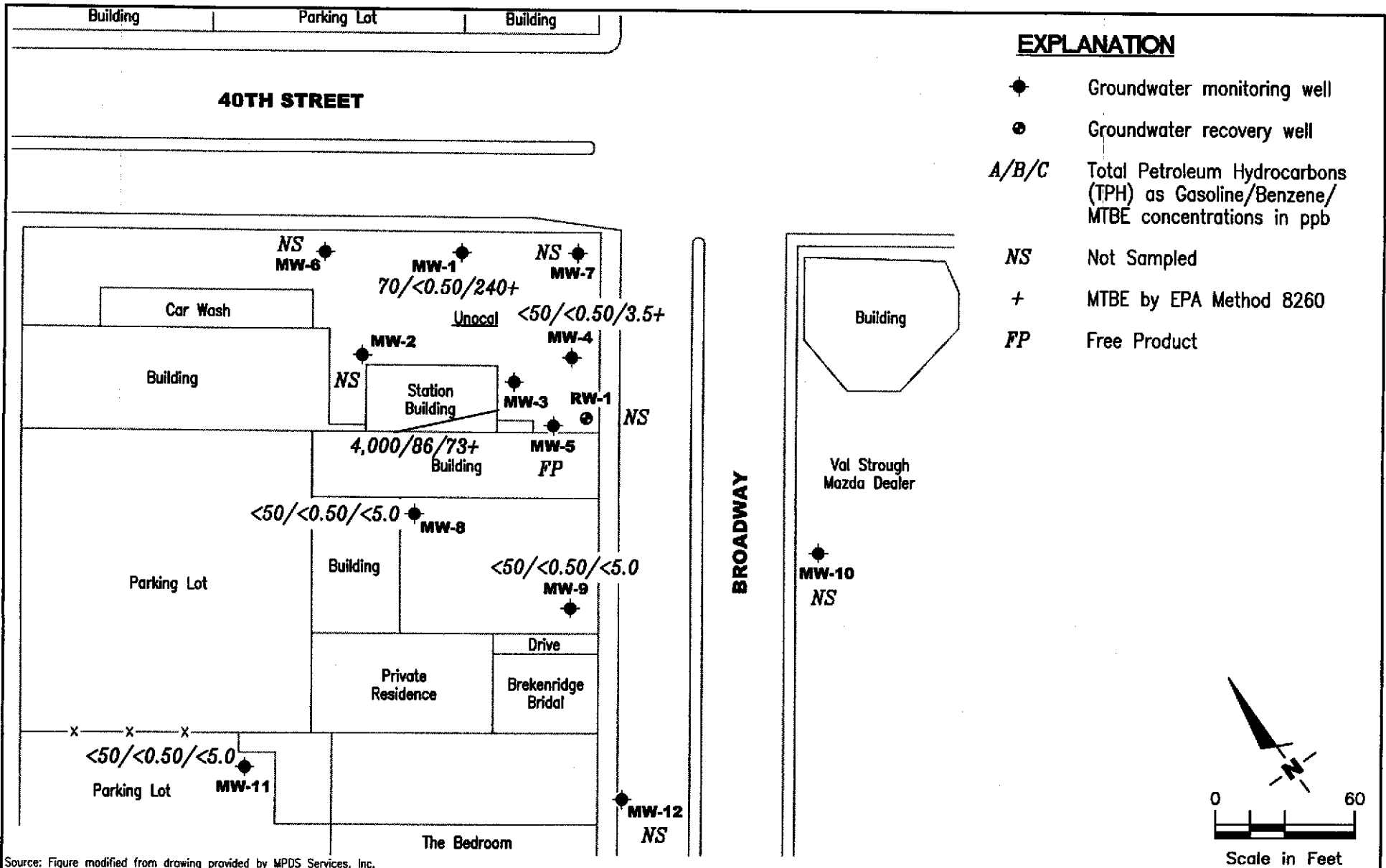
Source: Figure modified from drawing provided by MPDS Services, Inc.

**GETTLER - RYAN INC.**  
 6747 Sierra Ct., Suite J  
 Dublin, CA 94568 (925) 551-7555

**POTENTIOMETRIC MAP**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

FIGURE  
**1**

JOB NUMBER 180063	REVIEWED BY	DATE May 24, 2002	REVISED DATE
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Source: Figure modified from drawing provided by MPDS Services, Inc.

**GETTLER - RYAN INC.**  
 6747 Sierra Ct., Suite J  
 Dublin, CA 94568 (925) 551-7555

**CONCENTRATION MAP**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

FIGURE

2

JOB NUMBER  
 180063

REVIEWED BY

DATE  
 May 24, 2002

REVISED DATE

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
				Thickness (ft.)	TPH-G (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	--	
81.07	12/21/92	8.12	72.95	0.00	--	--	--	--	--	--
	01/30/93	7.63	73.44	0.00	--	--	--	--	--	--
	02/24/93	7.16	73.91	0.00	1,100	280	4.9	120	140	--
	03/22/93	6.26	74.81	0.00	--	--	--	--	--	--
	04/28/93	7.91	73.16	0.00	--	--	--	--	--	--
	05/25/93	7.87	73.20	0.00	260	27	4.9	2.6	54	--
80.54	06/23/93	7.66	72.88	0.00	--	--	--	--	--	--
	07/22/93	7.87	72.67	0.00	--	--	--	--	--	--
	08/25/93	8.00	72.54	0.00	ND	ND	ND	ND	ND	--
	09/22/93	8.10	72.44	0.00	--	--	--	--	--	--
	10/28/93	8.15	72.39	0.00	--	--	--	--	--	--
	11/30/93	7.65	72.89	0.00	SAMPLED SEMI-ANNUALLY			--	--	--
	02/16/94	7.46	73.08	0.00	ND	0.84	ND	ND	0.59	--
	05/31/94	7.80	72.74	0.00	--	--	--	--	--	--
	08/31/94	8.27	72.27	0.00	ND	ND	0.98	ND	0.84	--
	09/27/94	8.37	72.17	0.00	--	--	--	--	--	--
	10/11/94	8.36	72.18	0.00	--	--	--	--	--	--
11/10/94	6.43	74.11	0.00	--	--	--	--	--	--	
02/07/95	7.06	73.48	0.00	6,100	670	ND	120	60	--	

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	05/03/95	6.85	73.69	0.00	260	21	39	17	24	--
(cont)	08/03/95	7.69	72.85	0.00	--	--	--	--	--	--
	11/07/95	8.15	72.39	0.00	ND	ND	ND	ND	ND	--
	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
NP	11/11/98	7.37	73.17	0.00	ND	ND	ND	ND	ND	200
NP	05/20/99	7.41	73.13	0.00	ND	ND	ND	ND	ND	89/47 <sup>7,8,9</sup>
	11/15/99	7.84	72.70	0.00	ND	ND	ND	ND	ND	8.12/7.19 <sup>12</sup>
	05/22/00	7.53	73.01	0.00	ND	0.89	ND	ND	ND	220/290 <sup>12</sup>
	11/22/00	7.35	73.19	0.00	ND	ND	ND	ND	ND	105/142 <sup>7</sup>
	05/15/01	7.48	73.06	0.00	345 <sup>11</sup>	ND <sup>5</sup>	3.41	2.77	25.2	178/374 <sup>12</sup>
	11/23/01	7.57	72.97	0.00	<50	<0.50	<0.50	<0.50	<0.50	350/350 <sup>12</sup>
	05/24/02	7.10	73.44	0.00	70 <sup>11</sup>	<0.50	<0.50	<0.50	<0.50	200/240 <sup>7</sup>
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	--
	11/07/90	--	--	--	ND	ND	ND	ND	ND	--
	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 <sup>1</sup>	ND	ND	ND	ND	--
81.62	12/21/92	9.14	72.48	0.00	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2	01/30/93	8.99	72.63	0.00	--	--	--	--	--	--
(cont)	02/24/93	8.03	73.59	0.00	11,000 <sup>1</sup>	ND	ND	ND	ND	--
	03/22/93	9.50	72.12	0.00	--	--	--	--	--	--
	04/28/93	8.87	72.75	0.00	--	--	--	--	--	--
	05/25/93	9.04	72.58	0.00	1,300 <sup>1</sup>	ND	ND	ND	ND	2,700
81.32	06/23/93	9.17	72.15	0.00	--	--	--	--	--	--
	07/22/93	9.42	71.90	0.00	--	--	--	--	--	--
	08/25/93	9.53	71.79	0.00	190 <sup>1</sup>	ND	ND	ND	ND	--
	09/22/93	9.67	71.65	0.00	--	--	--	--	--	--
	10/28/93	9.65	71.67	0.00	--	--	--	--	--	--
	11/30/93	9.18	72.14	0.00	480 <sup>1</sup>	ND	ND	ND	ND	--
	02/16/94	8.91	72.41	0.00	3,200 <sup>1</sup>	ND	ND	ND	ND	--
	05/31/94	9.36	71.96	0.00	1,100 <sup>1</sup>	ND	ND	ND	ND	--
	08/31/94	9.85	71.47	0.00	310 <sup>1</sup>	ND	ND	ND	ND	--
	09/27/94	9.95	71.37	0.00	--	--	--	--	--	--
	10/11/95	9.95	71.37	0.00	--	--	--	--	--	--
	11/10/94	7.47	73.85	0.00	95 <sup>2</sup>	ND	ND	ND	ND	--
	02/07/95	8.29	73.03	0.00	1,600 <sup>1</sup>	ND	ND	ND	ND	--
	05/03/95	8.12	73.20	0.00	ND	ND	ND	ND	ND	--
	08/03/95	9.35	71.97	0.00	ND	ND	ND	ND	ND	--
	11/07/95	9.65	71.67	0.00	ND	ND	ND	ND	ND	160 <sup>3</sup>
	05/06/96	8.90	72.42	0.00	SAMPLING DISCONTINUED <sup>4</sup>			--	--	--
	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	--	--	--	--	--	--
	11/11/98	8.88	72.44	0.00	--	--	--	--	--	--
	05/20/99	8.68	72.64	0.00	--	--	--	--	--	--
	11/15/99	8.91	72.41	0.00	--	--	--	--	--	--
	05/22/00	8.61	72.71	0.00	--	--	--	--	--	--
	11/22/00	8.64	72.68	0.00	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-2 (cont)	05/15/01	8.73	72.59	0.00	--	--	--	--	--	--	
	11/23/01	8.61	72.71	0.00	--	--	--	--	--	--	
	05/24/02	8.03	73.29	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	--	
	05/28/91	--	--	--	24,000	570	1,100	810	4,200	--	
	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 <sup>2</sup>	1,800	6,400	3,000	15,000	--		
82.01	12/04/92	10.30	71.71**	0.00	--	--	--	--	--	--	
	12/21/92	9.78	72.23	Trace	--	--	--	--	--	--	
	01/09/93	8.55	73.46	0.00	--	--	--	--	--	--	
	01/30/93	8.90	73.11	0.00	--	--	--	--	--	--	
	02/10/93	9.01	73.01**	0.01	--	--	--	--	--	--	
	02/24/93	8.26	73.76**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	03/09/93	9.18	72.85**	0.02	--	--	--	--	--	--	
	03/22/93	8.81	73.22**	0.02	--	--	--	--	--	--	
	04/08/93	9.14	72.89**	0.02	--	--	--	--	--	--	
	04/28/93	9.44	72.59**	0.03	--	--	--	--	--	--	
	05/12/93	9.57	72.46**	0.03	--	--	--	--	--	--	
	05/25/93	9.45	72.58**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						
	81.41	06/07/93	8.94	72.47	<0.01	--	--	--	--	--	--
06/23/93		9.20	72.23**	0.02	--	--	--	--	--	--	



**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	07/08/93	9.31	72.12**	0.03	--	--	--	--	--	--
(cont)	07/22/93	9.47	71.94	<0.01	--	--	--	--	--	--
	08/11/93	9.59	71.82	<0.01	--	--	--	--	--	--
	08/25/93	9.67	71.76**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	09/08/93	10.34	71.07	<0.01	--	--	--	--	--	--
	09/22/93	9.84	71.59**	0.02	--	--	--	--	--	--
	10/07/93	9.87	71.54	<0.01	--	--	--	--	--	--
	10/28/93	10.03	71.38	0.00	--	--	--	--	--	--
	11/12/93	9.76	71.65	<0.01	--	--	--	--	--	--
	11/30/93	9.66	71.77**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	02/16/94	8.87	72.54	Sheen	57,000	910	2,500	2,100	9,000	--
	05/31/94	9.48	71.93	<0.01	39,000	670	630	1,500	6,200	--
	08/31/94	10.08	71.33	0.00	44,000	500	240	1,400	5,700	--
	09/24/94	10.22	71.19	0.00	--	--	--	--	--	--
	10/11/94	10.41	71.01**	0.01	--	--	--	--	--	--
	11/10/94	7.47	73.94	Sheen	86,000	3,300	3,800	1,800	8,300	--
	02/07/95	8.05	73.36	0.00	45,000	1,400	1,300	1,500	5,600	--
	03/14/95	7.05	74.36	0.00	--	--	--	--	--	--
	05/03/95	7.91	73.50	0.00	26,000	740	990	1,100	4,400	--
	08/03/95	9.28	72.13	0.00	18,000	59	ND	530	1,900	--
	11/07/95	10.79	70.62	0.00	17,000	110	26	400	1,500	880 <sup>3</sup>
	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 <sup>5</sup>	310	320	ND <sup>5</sup>
NP	11/11/98	9.25	72.16	0.00	8,700	500	ND <sup>5</sup>	330	310	ND <sup>5</sup>
NP	05/20/99	8.95	72.46	0.00	4,300	250	ND <sup>5</sup>	ND <sup>5</sup>	86	ND <sup>5</sup>
	11/15/99	10.35	71.06	0.00	6,720 <sup>11</sup>	326	ND <sup>5</sup>	398	226	120/45.1 <sup>12</sup>
	05/22/00	9.14	72.27	0.00	4,000 <sup>11</sup>	99	4.5	190	75	100/94 <sup>12</sup>
	11/22/00	9.33	72.08	0.00	6.130 <sup>15</sup>	93.7	6.71	174	47.8	212/131 <sup>7</sup>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3 (cont)	05/15/01	9.25	72.16	0.00	4,490 <sup>11</sup>	229	7.09	160	31.6	97.1/75.5 <sup>12</sup>
	11/23/01	9.12	72.29	0.00	3,500 <sup>11</sup>	41	<5.0	120	8.0	320/390 <sup>7</sup>
	05/24/02	8.58	72.83	0.00	4,000 <sup>11</sup>	86	6.0	120	5.8	120/73 <sup>7</sup>
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	--
	02/06/92	--	--	--	5,700	2,200	140	57	980	--
	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	--
81.48	12/21/93	9.10	72.38	0.00	--	--	--	--	--	--
	01/30/93	8.35	73.13	0.00	--	--	--	--	--	--
	02/24/93	8.17	73.31	0.00	140	12	0.64	9.4	3.7	--
	03/22/93	8.12	73.36	0.00	--	--	--	--	--	--
	04/28/93	9.36	72.12	0.00	--	--	--	--	--	--
81.29	05/25/93	8.75	72.73	0.00	74	10	ND	4.6	1.8	--
	06/23/93	8.90	72.39	0.00	--	--	--	--	--	--
	07/22/93	9.26	72.03	0.00	--	--	--	--	--	--
	08/25/93	9.45	71.84	0.00	640	100	1.1	100	22	--
	09/22/93	9.63	71.66	0.00	--	--	--	--	--	--
	10/28/93	9.62	71.67	0.00	--	--	--	--	--	--
	11/30/93	9.40	71.89	0.00	200	28	ND	17	8.1	--
	02/16/94	9.21	72.08	0.00	190	11	0.98	21	6.6	--
	05/31/94	9.11	72.18	0.00	1,100	190	ND	100	58	--
	08/31/94	10.01	71.28	0.00	400	17	0.94	14	5.2	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							MTBE (ppb)
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
MW-4	09/27/94	10.09	71.20	0.00	--	--	--	--	--	--	--
(cont)	10/11/94	11.50	69.79	0.00	--	--	--	--	--	--	--
	11/10/94	9.21	72.08	0.00	7,700	1,800	280	460	1,300	--	--
	02/07/95	7.66	73.63	0.00	540	47	ND	17	2.5	--	--
	05/03/95	8.29	73.00	0.00	160	8.3	0.52	1.5	3.7	--	--
	08/03/95	8.60	72.69	0.00	57	2.0	ND	ND	ND	--	--
	11/07/95	10.28	71.01	0.00	ND	0.71	ND	ND	ND	0.86	0.86
	05/06/96	8.70	72.59	0.00	1,200	12	11	15	36	ND	ND
	11/05/96	10.00	71.29	0.00	700	32	0.71	1.8	1.3	6.5	6.5
	05/15/97	9.37	71.92	0.00	51	ND	ND	ND	ND	ND	ND
	11/12/97	8.92	72.37	0.00	74	1.7	ND	ND	ND	ND	ND
NP	05/04/98	9.48	71.81	0.00	ND	ND	ND	ND	ND	ND	ND
NP	11/11/98	9.13	72.16	0.00	ND	0.63	ND	ND	ND	ND	ND
NP	05/20/99	8.41	72.88	0.00	ND	ND	ND	ND	ND	ND	ND
	11/15/99	9.68	71.61	0.00	ND	ND	ND	ND	ND	ND	ND
	05/22/00	8.60	72.69	0.00	ND	ND	ND	ND	ND	ND	ND
	11/22/00	8.91	72.38	0.00	ND	ND	ND	ND	ND	ND	ND
	05/15/01	8.66	72.63	0.00	ND	ND	1.10	ND	1.16	ND	ND
	11/23/01	8.84	72.45	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0
	05/24/02	7.93	73.36	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	9.6/3.5 <sup>7</sup>
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 PRODUCT					--	--
	11/19/91	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	02/06/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	05/23/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						MTBE (ppb)	
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
MW-5	08/26/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
(cont)	11/20/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
81.59	12/04/92	10.03	71.62**	0.08	--	--	--	--	--	--	
	12/21/92	9.50	72.10**	0.01	--	--	--	--	--	--	
	01/09/93	8.22	73.37	0.00	--	--	--	--	--	--	
	01/30/93	8.58	73.01	Trace	--	--	--	--	--	--	
	02/10/93	8.68	72.91	Trace	--	--	--	--	--	--	
	02/24/93	7.91	73.69**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	03/09/93	8.87	72.73**	0.01	--	--	--	--	--	--	
	03/22/93	8.46	73.14**	0.01	--	--	--	--	--	--	
	04/08/93	8.84	72.76**	0.01	--	--	--	--	--	--	
	04/28/93	9.14	72.47**	0.02	--	--	--	--	--	--	
	05/12/93	9.28	72.33**	0.02	--	--	--	--	--	--	
	05/25/93	9.63	72.06**	0.13	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
81.38	06/07/93	9.75	71.64**	0.01	--	--	--	--	--	--	
	06/23/93	9.32	72.08**	0.03	--	--	--	--	--	--	
	07/08/93	9.48	71.93**	0.04	--	--	--	--	--	--	
	07/22/93	9.73	71.77**	0.16	--	--	--	--	--	--	
	08/11/93	9.84	71.57**	0.04	--	--	--	--	--	--	
	08/25/93	9.81	71.59**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	09/08/93	10.09	71.31**	0.03	--	--	--	--	--	--	
	09/22/93	10.01	71.41**	0.05	--	--	--	--	--	--	
	10/07/93	9.94	71.46**	0.03	--	--	--	--	--	--	
	10/28/93	10.04	71.36**	0.02	--	--	--	--	--	--	
	11/12/93	9.79	71.59	<0.01	--	--	--	--	--	--	
	11/30/93	9.62	71.76	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	02/16/94	8.95	72.45**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	05/31/94	9.63	71.75	<0.01	43,000	1,500	1,200	1,600	6,700	--	
	08/31/94	10.25	71.15**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--
	09/27/94	10.38	71.00	<0.01	--	--	--	--	--	--	
	10/11/94	10.45	70.95**	0.02	--	--	--	--	--	--	

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5	11/10/94	7.54	73.90**	0.08	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
(cont)	02/07/95	8.10	73.28	0.00	25,000	1,400	740	990	3,000	--
	03/14/95	7.04	74.34	0.00	--	--	--	--	--	--
	05/03/95	7.98	73.40	0.00	12,000	680	160	600	1,800	--
	08/03/95	9.25	72.13	0.00	23,000	940	280	810	2,700	--
	11/07/95	10.00	71.38	0.00	40,000	510	280	1,000	5,700	630 <sup>3</sup>
	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 <sup>5</sup>
	11/11/98	9.23	72.43**	0.37	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	02/22/99	7.69	73.88**	0.25	--	--	--	--	--	--
	04/02/99 <sup>6</sup>	8.19	73.40**	0.28	--	--	--	--	--	--
	05/04/99	8.44	72.95**	0.01	--	--	--	--	--	--
	05/20/99	8.73	72.68**	0.04	--	--	--	--	--	--
	06/29/99	8.91	72.51**	0.05	--	--	--	--	--	--
	07/29/99	9.12	72.31**	0.07	--	--	--	--	--	--
	08/24/99	9.37	72.08**	0.09	--	--	--	--	--	--
	09/27/99	9.51	71.92**	0.06	--	--	--	--	--	--
	10/28/99	--	--	0.05	--	--	--	--	--	--
	11/15/99	9.29	72.09	Sheen	--	--	--	--	--	--
	12/20/99 <sup>13</sup>	9.14	72.24	0.00	--	--	--	--	--	--
	01/20/00 <sup>13</sup>	9.08	72.30	0.00	--	--	--	--	--	--
	02/26/00 <sup>13</sup>	8.69	72.69	0.00	--	--	--	--	--	--
	03/31/00 <sup>13</sup>	8.48	72.90	0.00	--	--	--	--	--	--
	04/13/00	8.66	72.72	0.00	--	--	--	--	--	--
	05/22/00 <sup>14</sup>	9.06	72.32	0.00	240,000 <sup>11</sup>	33,000	5,000	18,000	59,000	640/21 <sup>12</sup>
	11/22/00 <sup>16</sup>	9.24	72.64**	0.67	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--
	02/14/01 <sup>17</sup>	7.63	74.00**	0.33	--	--	--	--	--	--
	03/28/01 <sup>17</sup>	8.82	72.56	0.00	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							MTBE (ppb)
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
MW-5	04/28/01 <sup>17</sup>	8.66	72.72	0.00	--	--	--	--	--	--	--
(cont)	05/15/01 <sup>17</sup>	8.97	72.41	0.00	--	--	--	--	--	--	--
	06/29/01 <sup>17</sup>	8.73	72.65	0.00	--	--	--	--	--	--	--
	07/17/01 <sup>17</sup>	8.92	72.48**	0.02	--	--	--	--	--	--	--
	08/30/01 <sup>17</sup>	8.85	72.53	0.00	--	--	--	--	--	--	--
	09/24/01 <sup>17</sup>	8.89	72.49	0.00	--	--	--	--	--	--	--
	10/15/01 <sup>17</sup>	9.11	72.29**	0.03	--	--	--	--	--	--	--
	11/23/01 <sup>17</sup>	8.77	72.61	0.00	29,000 <sup>11</sup>	3,900	450	1,400	3,500	<500	
	12/10/01 <sup>17</sup>	8.75	72.63	0.00	--	--	--	--	--	--	--
	01/14/02 <sup>17</sup>	8.26	73.12	0.00	--	--	--	--	--	--	--
	02/22/02 <sup>17</sup>	6.30	75.08	0.00	--	--	--	--	--	--	--
	03/11/02 <sup>17</sup>	6.47	74.91	0.00	--	--	--	--	--	--	--
	04/15/02 <sup>17</sup>	6.56	74.82	0.00	--	--	--	--	--	--	--
	05/24/02 <sup>17</sup>	8.32	73.17**	0.15	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	
MW-6	11/07/90	--	--	--	ND	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	--	--
80.47	12/21/92	7.71	72.76	0.00	--	--	--	--	--	--	--
	01/30/93	7.25	73.22	0.00	--	--	--	--	--	--	--
	02/24/93	6.74	73.73	0.00	ND	ND	ND	ND	ND	--	--
	03/22/93	5.85	74.62	0.00	--	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-6	04/28/93	7.58	72.89	0.00	--	--	--	--	--	--	
(cont)	05/25/93	7.48	72.99	0.00	ND	ND	ND	ND	ND	--	
79.94	06/23/93	7.34	72.60	0.00	--	--	--	--	--	--	
	07/22/93	7.53	72.41	0.00	--	--	--	--	--	--	
	08/25/93	7.66	72.28	0.00	ND	ND	ND	ND	ND	--	
	09/22/93	7.76	72.18	0.00	--	--	--	--	--	--	
	10/28/93	8.30	71.64	0.00	--	--	--	--	--	--	
	11/30/93	7.40	72.54	0.00	SAMPLED SEMI-ANNUALLY					--	--
	02/16/94	7.13	72.81	0.00	ND	ND	ND	ND	ND	--	
	05/31/94	7.49	72.45	0.00	--	--	--	--	--	--	
	08/31/94	7.93	72.01	0.00	ND	ND	1.5	ND	1.6	--	
	09/27/94	8.03	71.91	0.00	--	--	--	--	--	--	
	10/11/94	8.05	71.89	0.00	--	--	--	--	--	--	
	11/10/94	6.12	73.82	0.00	--	--	--	--	--	--	
	02/07/95	6.65	73.29	0.00	ND	ND	ND	ND	ND	--	
	05/03/95	6.47	73.47	0.00	ND	ND	ND	ND	1.0	--	
	08/03/95	7.28	72.66	0.00	--	--	--	--	--	--	
	11/07/95	7.98	71.96	0.00	ND	ND	ND	ND	ND	--	
	05/06/96	7.80	72.14	0.00	SAMPLING DISCONTINUED <sup>4</sup>					--	--
	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	--	--	--	--	--	--	
	11/11/98	7.04	72.90	0.00	--	--	--	--	--	--	
	05/20/99	7.00	72.94	0.00	--	--	--	--	--	--	
	11/15/99	7.42	72.52	0.00	--	--	--	--	--	--	
	05/22/00	7.24	72.70	0.00	--	--	--	--	--	--	
	11/22/00	7.40	72.54	0.00	--	--	--	--	--	--	
	05/15/01	7.12	72.82	0.00	--	--	--	--	--	--	
	11/23/01	7.19	72.75	0.00	--	--	--	--	--	--	
	<b>05/24/02</b>	<b>6.54</b>	<b>73.40</b>	<b>0.00</b>							

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							MTBE (ppb)
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
MW-7	11/07/90	--	--	--	ND	ND	ND	ND	ND	ND	--
	02/25/91	--	--	--	70	ND	ND	ND	ND	0.52	--
	05/28/91	--	--	--	39	ND	ND	ND	ND	0.73	--
	08/28/91	--	--	--	ND	ND	ND	ND	ND	ND	--
	11/19/91	--	--	--	32	ND	ND	ND	ND	ND	--
	02/06/92	--	--	--	ND	ND	ND	ND	ND	ND	--
	05/23/92	--	--	--	ND	ND	ND	ND	ND	ND	--
	08/26/92	--	--	--	ND	ND	ND	0.73	ND	ND	--
	11/20/92	--	--	--	ND	ND	ND	ND	ND	ND	--
81.83	12/21/92	8.42	73.41	0.00	--	--	--	--	--	--	--
	01/30/93	8.21	73.62	0.00	--	--	--	--	--	--	--
	02/24/93	7.85	73.98	0.00	ND	ND	ND	ND	ND	ND	--
	03/22/93	6.97	74.86	0.00	--	--	--	--	--	--	--
	04/28/93	8.39	73.44	0.00	--	--	--	--	--	--	--
	05/25/93	8.43	73.40	0.00	ND	ND	ND	ND	ND	ND	--
81.64	06/23/93	8.47	73.17	0.00	--	--	--	--	--	--	--
	07/22/93	8.83	72.81	0.00	--	--	--	--	--	--	--
	08/25/93	8.81	72.83	0.00	ND	ND	ND	ND	ND	ND	--
	09/22/93	8.96	72.68	0.00	--	--	--	--	--	--	--
	10/28/93	8.98	72.66	0.00	--	--	--	--	--	--	--
	11/30/93	8.65	72.99	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
	02/16/94	8.36	73.28	0.00	ND	ND	ND	ND	0.7	--	--
	05/31/94	8.67	72.97	0.00	--	--	--	--	--	--	--
	08/31/94	9.12	72.52	0.00	ND	ND	0.8	ND	0.75	--	--
	09/27/94	9.22	72.42	0.00	--	--	--	--	--	--	--
	10/11/94	9.23	72.41	0.00	--	--	--	--	--	--	--
	11/10/94	7.66	73.98	0.00	--	--	--	--	--	--	--
	02/07/95	7.88	73.76	0.00	ND	ND	ND	ND	ND	ND	--
	05/03/95	7.71	73.93	0.00	ND	ND	ND	ND	1.0	--	--
08/03/95	8.40	73.24	0.00	--	--	--	--	--	--	--	
11/07/95	8.95	72.69	0.00	ND	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*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-7	05/06/96	8.15	73.49	0.00	--	--	--	--	--	--
(cont)	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	--	--	--	--	--	--
	11/11/98	8.20	73.44	0.00	--	--	--	--	--	--
	05/20/99	8.04	73.60	0.00	--	--	--	--	--	--
	11/15/99	8.17	73.47	0.00	--	--	--	--	--	--
	NP 05/22/00	8.10	73.54	0.00	--	--	--	--	--	--
	11/22/00	8.30	73.34	0.00	--	--	--	--	--	--
	05/15/01	8.09	73.55	0.00	--	--	--	--	--	--
	11/23/01	8.14	73.50	0.00	--	--	--	--	--	--
	<b>05/24/02</b>	<b>7.56</b>	<b>74.08</b>	<b>0.00</b>	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--
81.71	12/21/92	INACCESSIBLE	--	--	--	--	--	--	--	--
	01/09/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	01/30/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	02/10/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	02/24/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	03/09/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	03/22/93	INACCESSIBLE	--	--	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-8	04/08/93	INACCESSIBLE	--	--	--	--	--	--	--	--
(cont)	04/28/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	05/12/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	05/25/93	10.12	71.59	0.00	1,200	5.4	ND	9.0	21	--
81.41	06/07/93	9.98	71.43	0.00	--	--	--	--	--	--
	06/23/93	10.36	71.05	0.00	--	--	--	--	--	--
	07/08/93	10.52	70.89	0.00	--	--	--	--	--	--
	07/22/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	08/11/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	08/25/93	10.95	70.46	0.00	1,800	11	17	8.9	29	--
	09/08/93	11.34	70.07	0.00	--	--	--	--	--	--
	09/22/93	11.13	70.28	0.00	--	--	--	--	--	--
	10/07/93	10.96	70.45	0.00	--	--	--	--	--	--
	10/28/93	11.19	70.22	0.00	--	--	--	--	--	--
	11/12/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	11/30/93	10.42	70.99	0.00	3,500	18	ND	ND	ND	--
	02/16/94	9.86	71.55	0.00	990	4.9	1.8	2.4	4.5	--
	05/31/94	10.61	70.80	0.00	350	3.0	1.0	0.73	1.7	--
	08/31/94	11.37	70.04	0.00	1,800 <sup>1</sup>	ND	ND	ND	ND	--
	09/27/94	INACCESSIBLE (PARKED OVER)	--	--	--	--	--	--	--	--
	10/11/94	11.50	69.91	0.00	--	--	--	--	--	--
	11/10/94	7.81	73.60	0.00	940	6.7	6.3	ND	16	--
	02/07/95	8.69	72.72	0.00	230	1.4	0.95	0.9	1.1	--
	05/03/95	8.60	72.81	0.00	75	ND	ND	ND	1.0	--
	08/03/95	INACCESSIBLE (PARKED OVER)	--	--	--	--	--	--	--	--
	11/07/95	11.05	70.36	0.00	210	1.3	1.2	ND	ND	-- <sup>3</sup>
	05/06/96	INACCESSIBLE (PARKED OVER)	--	--	--	--	--	--	--	--
	11/05/96	INACCESSIBLE (PARKED OVER)	--	--	--	--	--	--	--	--
	05/15/97	10.46	70.95	0.00	ND	ND	ND	ND	ND	43
	11/12/97	INACCESSIBLE (PARKED OVER)	--	--	--	--	--	--	--	--
	05/04/98	INACCESSIBLE (PARKED OVER)	--	--	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							MTBE (ppb)
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
MW-8	11/11/98	INACCESSIBLE (PARKED OVER)									--
(cont)	NP 05/20/99	9.75	71.66	0.00	ND	ND	ND	ND	ND	ND	23/10 <sup>7,8,10</sup>
	11/15/99	INACCESSIBLE (PARKED OVER)									--
	NP 05/22/00	9.80	71.61	0.00	ND	ND	1.9	ND	3.3	ND	
	NP 11/22/00	9.76	71.65	0.00	ND	ND	1.16	ND	1.22	ND	
	NP 05/15/01	9.87	71.54	0.00	ND	ND	ND	ND	ND	ND	
	NP 11/23/01	9.92	71.49	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0	
	<b>NP 05/24/02</b>	<b>9.26</b>	<b>72.15</b>	<b>0.00</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	
<b>MW-9</b>	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									--
81.13	12/21/92	INACCESSIBLE									--
	01/30/93	INACCESSIBLE									--
	02/24/93	INACCESSIBLE									--
	03/22/93	INACCESSIBLE									--
	04/28/93	INACCESSIBLE									--
	05/25/93	11.50	69.63	0.00	160	6.1	ND	7.4	1.1	--	
80.53	06/23/93	9.78	70.75	0.00	--	--	--	--	--	--	
	07/22/93	10.10	70.43	0.00	--	--	--	--	--	--	
	08/25/93	10.44	70.09	0.00	220	10	ND	6.8	1.4	--	
	09/22/93	10.64	69.89	0.00	--	--	--	--	--	--	
	10/28/93	10.68	69.85	0.00	--	--	--	--	--	--	
	11/30/93	9.87	70.66	0.00	200	5.6	ND	2.9	2.7	--	

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-9	02/16/94	9.21	71.32	0.00	250	5.1	1.3	4.4	1.5	--
(cont)	05/31/94	10.15	70.38	0.00	360	7.8	0.97	4.6	2.2	--
	08/31/94	10.97	69.56	0.00	650	7.7	2.8	4.4	5.0	59
	09/27/94	11.10	69.43	0.00	--	--	--	--	--	--
	10/11/94	11.20	69.33	0.00	--	--	--	--	--	--
	11/10/94	7.25	73.28	0.00	ND	ND	ND	ND	ND	--
	02/07/95	7.76	72.77	0.00	57	0.7	ND	0.86	ND	--
	05/03/95	7.82	72.71	0.00	ND	0.85	0.67	1.3	1.0	--
	08/03/95	9.70	70.83	0.00	91	1.1	ND	ND	ND	--
	11/07/95	10.64	69.89	0.00	130	1.5	0.62	0.71	ND	60 <sup>3</sup>
	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
NP	11/11/98	9.23	71.30	0.00	ND	ND	ND	ND	ND	ND
NP	05/20/99	8.78	71.75	0.00	ND	ND	ND	ND	ND	ND
	11/15/99	9.12	71.41	0.00	ND	ND	ND	ND	ND	ND
	05/22/00	9.17	71.36	0.00	ND	ND	1.9	ND	3.5	ND
	11/22/00	9.08	71.45	0.00	ND	ND	1.18	ND	1.16	ND
	05/15/01	8.85	71.68	0.00	ND	ND	ND	ND	ND	ND
	11/23/01	9.10	71.43	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	05/24/02	8.79	71.74	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
<b>MW-10</b>	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	--
81.90	12/21/92	13.41	68.49	0.00	--	--	--	--	--	--
	01/30/93	11.60	70.30	0.00	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product							MTBE (ppb)
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)		
MW-10	02/24/93	11.23	70.67	0.00	ND	ND	ND	ND	ND	ND	--
(cont)	03/22/93	10.89	71.01	0.00	--	--	--	--	--	--	--
	04/28/93	12.11	69.79	0.00	--	--	--	--	--	--	--
	05/25/93	12.02	69.88	0.00	ND	ND	ND	ND	ND	ND	--
81.61	06/23/93	12.11	69.50	0.00	--	--	--	--	--	--	--
	07/22/93	12.49	69.12	0.00	--	--	--	--	--	--	--
	08/25/93	12.78	68.83	0.00	ND	ND	ND	ND	ND	ND	--
	09/22/93	13.06	68.55	0.00	--	--	--	--	--	--	--
	10/28/93	13.23	--	0.00	--	--	--	--	--	--	--
	11/30/93	INACCESSIBLE	--	--	--	--	--	--	--	--	--
	02/16/94	12.43	69.18	0.00	ND	ND	ND	ND	ND	ND	--
	05/31/94	12.69	68.92	0.00	ND	ND	0.9	ND	0.91	--	--
	08/31/94	13.47	68.14	0.00	ND	ND	0.64	ND	0.54	--	--
	09/27/94	13.72	67.89	0.00	--	--	--	--	--	--	--
	10/11/94	14.80	66.81	0.00	--	--	--	--	--	--	--
	11/10/94	12.64	68.97	0.00	ND	ND	ND	ND	ND	ND	--
	02/07/95	10.29	71.32	0.00	SAMPLED SEMI-ANNUALLY			--	--	--	--
	05/03/95	10.22	71.39	0.00	ND	ND	ND	ND	0.65	--	--
	08/03/95	11.73	69.88	0.00	--	--	--	--	--	--	--
	11/07/95	12.98	68.63	0.00	ND	ND	ND	ND	ND	ND	--
	05/06/96	10.90	70.71	0.00	SAMPLING DISCONTINUED <sup>4</sup>			--	--	--	--
	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	--	--	--	--	--	--	--
	11/11/98	12.03	69.58	0.00	--	--	--	--	--	--	--
	05/20/99	10.05	71.56	0.00	--	--	--	--	--	--	--
	11/15/99	10.16	71.45	0.00	--	--	--	--	--	--	--
	05/22/00	10.06	71.55	0.00	--	--	--	--	--	--	--
	11/22/00	10.12	71.49	0.00	--	--	--	--	--	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-10 (cont)	05/15/01	10.08	71.53	0.00	--	--	--	--	--	--
	11/23/01	10.14	71.47	0.00	--	--	--	--	--	--
	05/24/02	9.48	72.13	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	--
78.43	12/21/92	12.34	66.09	0.00	--	--	--	--	--	--
	01/30/93	14.17	64.26	0.00	--	--	--	--	--	--
	02/24/93	12.70	65.73	0.00	ND	ND	ND	ND	ND	--
	03/22/93	8.95	69.48	0.00	--	--	--	--	--	--
	04/28/93	13.87	64.56	0.00	--	--	--	--	--	--
	05/25/93	15.14	63.29	0.00	ND	ND	0.75	ND	1.0	--
	06/23/93	15.08	63.10	0.00	--	--	--	--	--	--
78.18	07/22/93	15.46	62.72	0.00	--	--	--	--	--	--
	08/25/93	14.10	64.08	0.00	ND	ND	ND	ND	ND	--
	09/22/93	15.03	63.15	0.00	--	--	--	--	--	--
	10/28/93	13.84	64.34	0.00	--	--	--	--	--	--
	11/30/93	13.04	65.14	0.00	ND	ND	ND	ND	ND	--
	02/16/94	12.76	65.42	0.00	ND	ND	ND	ND	ND	--
	05/31/94	12.79	65.39	0.00	ND	ND	ND	ND	ND	--
	08/31/94	12.97	65.21	0.00	ND	ND	1.5	ND	1.8	--
	09/27/94	14.88	63.30	0.00	--	--	--	--	--	--
	10/11/94	13.40	64.78	0.00	--	--	--	--	--	--
	11/10/94	13.57	64.61	0.00	ND	ND	ND	ND	ND	--
	02/07/95	12.28	65.90	0.00	SAMPLED SEMI-ANNUALLY			--	--	--
	05/03/95	9.28	68.90	0.00	ND	ND	ND	ND	ND	--
08/03/95	12.67	65.51	0.00	--	--	--	--	--	--	
11/07/95	12.28	65.90	0.00	ND	ND	ND	ND	ND	--	

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**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-11	05/06/96	13.30	64.88	0.00	SAMPLING DISCONTINUED <sup>4</sup>					--
(cont)	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	--	--	--	--	--	--
	11/11/98	11.40	66.78	0.00	--	--	--	--	--	--
NP	05/20/99	10.71	67.47	0.00	ND	ND	ND	ND	ND	ND
	11/15/99	11.32	66.86	0.00	ND	ND	1.04	ND	ND	ND
	05/22/00	10.98	67.20	0.00	ND	ND	ND	ND	ND	ND
	11/22/00	11.17	67.01	0.00	ND	ND	ND	ND	ND	ND
	05/15/01	10.93	67.25	0.00	ND	ND	ND	ND	ND	ND
	11/23/01	11.08	67.10	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	05/24/02	10.58	67.60	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
<b>MW-12</b>	08/26/92	--	--	--	ND	ND	ND	ND	ND	--
	11/20/92	--	--	--	ND	ND	ND	ND	ND	--
79.89	12/21/92	12.11	67.78	0.00	--	--	--	--	--	--
	01/30/93	13.18	66.71	0.00	--	--	--	--	--	--
	02/24/93	12.13	67.76	0.00	ND	ND	ND	ND	ND	--
	03/22/93	11.22	68.67	0.00	--	--	--	--	--	--
	04/28/93	13.42	66.47	0.00	--	--	--	--	--	--
	05/25/93	13.68	66.21	0.00	ND	ND	ND	ND	ND	--
79.61	06/23/93	14.56	65.05	0.00	--	--	--	--	--	--
	07/22/93	14.96	64.65	0.00	--	--	--	--	--	--
	08/25/93	13.61	66.00	0.00	ND	ND	ND	ND	ND	--
	09/22/93	15.02	64.59	0.00	--	--	--	--	--	--
	10/28/93	14.04	65.57	0.00	--	--	--	--	--	--
	11/30/93	13.28	66.33	0.00	ND	ND	ND	ND	ND	--
	02/16/94	12.76	66.85	0.00	ND	ND	ND	ND	ND	--
	08/31/94	12.82	66.79	0.00	ND	ND	1.0	ND	1.0	ND

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-12	05/31/94	12.64	66.97	0.00	ND	ND	0.81	ND	0.82	--
(cont)	09/27/94	14.66	64.95	0.00	--	--	--	--	--	--
	10/11/94	14.25	65.36	0.00	--	--	--	--	--	--
	11/10/94	13.40	66.21	0.00	ND	ND	ND	ND	ND	--
	02/07/95	11.72	67.89	0.00	SAMPLED SEMI-ANNUALLY			--	--	--
	05/03/95	13.38	66.23	0.00	ND	ND	ND	ND	ND	--
	08/03/95	13.47	66.14	0.00	--	--	--	--	--	--
	11/07/95	12.78	66.83	0.00	ND	ND	ND	ND	ND	--
	05/06/96	13.25	66.36	0.00	SAMPLING DISCONTINUED <sup>4</sup>			--	--	--
	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	--	--	--	--	--	--
	11/11/98	11.53	68.08	0.00	--	--	--	--	--	--
	05/20/99	10.84	68.77	0.00	--	--	--	--	--	--
	11/15/99	11.36	68.25	0.00	--	--	--	--	--	--
	05/22/00	11.19	68.42	0.00	--	--	--	--	--	--
	11/22/00	11.36	68.25	0.00	--	--	--	--	--	--
	05/15/01	11.04	68.57	0.00	--	--	--	--	--	--
	11/23/01	11.14	68.47	0.00	--	--	--	--	--	--
	<b>05/24/02</b>	<b>10.69</b>	<b>68.92</b>	<b>0.00</b>	--	--	--	--	--	--
<b>RW-1</b>										
81.20	02/24/93	7.19	74.01	0.00	--	--	--	--	--	--
	05/12/93	8.82	72.38	0.00	--	--	--	--	--	--
	05/25/93	8.58	72.62	0.00	--	--	--	--	--	--
80.63	06/07/93	8.16	72.47	0.00	--	--	--	--	--	--
	06/23/93	8.53	72.10	0.00	--	--	--	--	--	--
	07/08/93	8.69	71.94	0.00	--	--	--	--	--	--
	08/11/93	9.00	71.63	0.00	--	--	--	--	--	--



**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	Product						
				Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
RW-1	08/25/93	9.07	71.56	0.00	--	--	--	--	--	--
(cont)	09/08/93	9.71	70.92	0.00	--	--	--	--	--	--
	09/22/93	9.25	71.38	0.00	--	--	--	--	--	--
	11/12/93	9.00	71.63	<0.01	--	--	--	--	--	--
	02/16/94	7.82	72.81	0.00	--	--	--	--	--	--
	05/31/94	8.81	71.82	0.00	--	--	--	--	--	--
	08/31/94	9.61	71.02	0.00	--	--	--	--	--	--
	11/10/94	6.34	74.29	0.00	--	--	--	--	--	--
	02/07/95	7.18	73.45	0.00	--	--	--	--	--	--
	03/14/95	6.01	74.62	0.00	--	--	--	--	--	--
	10/15/01	8.43	72.20	0.00	--	--	--	--	--	--
	11/23/01	8.57	72.06	0.00	--	--	--	--	--	--
	12/10/01	8.51	72.12	0.00	--	--	--	--	--	--
	01/14/02	8.13	72.50	0.00	--	--	--	--	--	--
	02/22/02	6.18	74.45	0.00	--	--	--	--	--	--
	03/11/02	6.31	74.32	0.00	--	--	--	--	--	--
	04/15/02	6.39	74.24	0.00	--	--	--	--	--	--
	05/24/02	8.14	72.49	0.00	--	--	--	--	--	--
<b>Trip Blank</b>										
TB-LB	05/04/98	--	--	--	ND	ND	ND	ND	ND	ND
	11/11/98	--	--	--	ND	ND	ND	ND	ND	ND
	05/20/99	--	--	--	ND	ND	ND	ND	ND	ND
	11/15/99	--	--	--	ND	ND	1.12	ND	ND	ND
	05/22/00	--	--	--	ND	ND	ND	ND	ND	ND
	11/22/00	--	--	--	ND	ND	ND	ND	ND	ND
	05/15/01	--	--	--	ND	ND	ND	ND	ND	ND
	11/23/01	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	05/24/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0

**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 compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing (ft.) = Feet	TPH-G = Total Petroleum Hydrocarbons as Gasoline B = Benzene	MTBE = Methyl tertiary butyl ether (ppb) = Parts per billion
DTW = Depth to Water	T = Toluene	ND = Not Detected
GWE = Groundwater Elevation (msl) = Mean sea level	E = Ethylbenzene X = Xylenes	-- = 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).  
Prior to June 7, 1993, DTW measurements were taken from the top of well covers.
- \*\* Groundwater elevation corrected due to the presence of free product; correction factor:  $[(TOC-DTW)+(Product\ Thickness\ x\ 0.75)]$ .
- <sup>1</sup> Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- <sup>2</sup> Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- <sup>3</sup> 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.
- <sup>4</sup> Sampling discontinued per Alameda County Health Care Services' letter dated January 24, 1996.
- <sup>5</sup> Detection limit raised. Refer to analytical reports.
- <sup>6</sup> Twelve minutes after water/product was bailed, well was monitored again, (DTW = 8.06 ft. and Product Thickness 0.04 ft.).
- <sup>7</sup> MTBE by EPA Method 8260.
- <sup>8</sup> Sample analyzed past hold time (June 9, 1999).
- <sup>9</sup> First run on MTBE by EPA Method 8260 was 92 ppb and analyzed past hold time (June 9, 1999).
- <sup>10</sup> First run on MTBE by EPA Method 8260 was 12 ppb and analyzed past hold time (June 9, 1999).
- <sup>11</sup> Laboratory report indicates gasoline C6-C12.
- <sup>12</sup> MTBE by EPA Method 8260 analyzed outside the EPA recommended holding time.
- <sup>13</sup> Less than 1 ounce of product found in skimmer.
- <sup>14</sup> 1.5 ounces of product found in skimmer.
- <sup>15</sup> Laboratory report indicates weathered gasoline C6-C12.
- <sup>16</sup> Skimmer not present in well.
- <sup>17</sup> Skimmer installed/present in well.

**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	-- <sup>1</sup>
	05/15/97	3.92	-- <sup>1</sup>
	11/12/97	4.16	-- <sup>1</sup>
	05/04/98	3.84	-- <sup>1</sup>
	11/11/98	2.85	-- <sup>1</sup>
	05/20/99	3.30	-- <sup>1</sup>
MW-2	08/19/95	--	2.77
	05/15/97	3.01	-- <sup>1</sup>
	11/12/97	3.27	-- <sup>1</sup>
	05/04/98	3.63	-- <sup>1</sup>
MW-3	08/19/95	--	2.06
	11/07/95	--	1.68
	05/06/96	3.18	3.40
	11/05/96	2.03	-- <sup>1</sup>
	05/15/97	3.08	-- <sup>1</sup>
	05/04/98	2.98	-- <sup>1</sup>
	11/11/98	2.22	-- <sup>1</sup>
MW-4	05/20/99	2.60	-- <sup>1</sup>
	08/19/95	--	2.19
	11/07/95	--	8.43
	05/06/96	3.75	5.97
	11/05/96	2.11	-- <sup>1</sup>
	05/15/97	3.24	-- <sup>1</sup>
	11/12/97	3.11	-- <sup>1</sup>
	05/04/98	3.73	-- <sup>1</sup>
	11/11/98	4.33	-- <sup>1</sup>
05/20/99	3.90	-- <sup>1</sup>	
MW-5	08/19/95	--	2.09
	11/07/95	--	1.79
	05/06/96	2.91	1.80
	11/05/96	1.85	-- <sup>1</sup>
	05/15/97	2.10	-- <sup>1</sup>
	11/12/97	1.98	-- <sup>1</sup>
	05/04/98	1.69	-- <sup>1</sup>
MW-6	05/15/97	2.90	-- <sup>1</sup>
	05/04/98	3.57	-- <sup>1</sup>

**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-7	05/15/97	2.21	-- <sup>1</sup>
	05/04/98	3.09	-- <sup>1</sup>
MW-8	11/05/96	INACCESSIBLE (PARKED OVER)	
	05/15/97	2.88	-- <sup>1</sup>
	11/12/97	INACCESSIBLE (PARKED OVER)	
	05/04/98	INACCESSIBLE (PARKED OVER)	
	11/11/98	INACCESSIBLE (PARKED OVER)	
	05/20/99	3.55	-- <sup>1</sup>
MW-9	05/06/96	4.23	3.25
	11/05/96	2.98	-- <sup>1</sup>
	05/15/97	3.04	-- <sup>1</sup>
	11/12/97	4.02	-- <sup>1</sup>
	05/04/98	3.41	-- <sup>1</sup>
	11/11/98	5.19	-- <sup>1</sup>
	05/20/99	4.46	-- <sup>1</sup>
MW-10	05/15/97	1.61	-- <sup>1</sup>
	05/04/98	2.85	-- <sup>1</sup>
MW-11	05/15/97	1.68	-- <sup>1</sup>
	05/04/98	2.94	-- <sup>1</sup>
	05/20/99	3.22	-- <sup>1</sup>
MW-12	05/15/97	2.10	-- <sup>1</sup>
	05/04/98	3.41	-- <sup>1</sup>
RW-1	11/07/95	--	2.13

**EXPLANATIONS:**

Dissolved oxygen concentrations prior to May 4, 1998, were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = milligrams per liter

-- = Not Measured

<sup>1</sup> Wells were not purged prior to sampling.

**Table 3**  
**Product Thickness/Removal Data**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID	DATE	DTW (ft.)	Product Thickness (ft.)	Amount Bailed Product	Amount Bailed Water	Amount Bailed (Product + Water)
MW-5	11/11/1998	9.23	0.37	--	--	0.25 gallons
	02/22/99	7.69	0.25	5 oz.	3 gallons	--
	04/02/99 <sup>1,2</sup>	8.19	0.28	9 oz.	20 oz.	29 oz.
	05/04/99	8.44	0.01	--	--	--
	05/20/99	8.73	0.04	--	--	1 oz.
	06/29/99	8.91	0.05	--	--	4 oz.
	07/29/99	9.12	0.07	4 oz.	8 oz.	12 oz.
	08/24/99	9.37	0.09	--	--	4 oz.
	09/27/99	9.51	0.06	--	--	3.5 oz.
	10/28/99 <sup>3</sup>	--	0.05	--	--	3.0 oz.
	11/15/99	9.29	Sheen	--	--	16 oz.
	12/20/99	9.14	0.00	-- <sup>4</sup>	--	<1.0 oz
	01/20/00	9.08	0.00	-- <sup>4</sup>	--	<1.0 oz
	02/26/00	8.69	0.00	-- <sup>4</sup>	--	<1.0 oz
	03/31/00	8.48	0.00	-- <sup>4</sup>	--	<1.0 oz
	04/13/00	8.66	0.00	0.00	0.00	0.00
	05/22/00	9.06	0.00	-- <sup>5</sup>	--	1.5 oz.
	11/22/00 <sup>6</sup>	9.24	0.67	15 oz.	3 gallons	3.12 gallons
	02/14/01 <sup>7</sup>	7.63	0.33	8 oz.	64 oz.	72 oz.
	03/28/01 <sup>7</sup>	8.82	0.00	-- <sup>8</sup>	--	20 oz.
	04/28/01 <sup>7</sup>	8.66	0.00	-- <sup>9</sup>	--	7 oz.
	05/15/01 <sup>7</sup>	8.97	0.00	-- <sup>10</sup>	--	6 oz.
	06/29/01 <sup>7</sup>	8.73	0.00	-- <sup>11</sup>	--	3 oz.
	07/17/01 <sup>7</sup>	8.92	0.02	-- <sup>11</sup>	--	3 oz.
	08/30/01 <sup>7</sup>	8.85	0.00	0.00	0.00	0.00
	09/24/01 <sup>7</sup>	8.89	0.00	-- <sup>12</sup>	0.00	0.00
	10/15/01 <sup>7</sup>	9.11	0.03	4 oz.	2 gallons	2.03 gallons
	11/23/01 <sup>7</sup>	8.77	0.00	-- <sup>4</sup>	--	<1.0 oz
	12/10/01 <sup>7</sup>	8.75	0.00	0.00	0.00	0.00
	01/14/02 <sup>7</sup>	8.26	0.00	-- <sup>12</sup>	0.00	0.00
	02/22/02 <sup>7</sup>	6.30	0.00	-- <sup>13</sup>	0.00	0.00
	03/11/02 <sup>7</sup>	6.47	0.00	0.00	0.00	0.00
	04/15/02 <sup>7</sup>	6.56	0.00	-- <sup>12</sup>	0.00	0.00
	05/24/02 <sup>7</sup>	8.32	0.15	4.5 oz. <sup>14</sup>	2.00	2.04

**Table 3**  
**Product Thickness/Removal Data**  
Tosco (Unocal) Service Station #0746  
3943 Broadway  
Oakland, California

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**EXPLANATIONS:**

DTW = Depth to water

(ft.) = Feet

oz. = ounces

-- = Not Measured

- 1 A new skimmer (Petro Trap) was installed.
- 2 Twelve minutes after water/product was bailed, well was monitored again, (DTW = 8.06 ft. and Product Thickness 0.04 ft.).
- 3 Replaced skimmer.
- 4 Less than 1 oz. of product found in skimmer.
- 5 1.5 oz. of product found in skimmer.
- 6 Skimmer not present in well.
- 7 Skimmer was re-installed / skimmer present in well.
- 8 20 oz. of product found in skimmer.
- 9 7 oz. of product found in skimmer.
- 10 6 oz. of product found in skimmer.
- 11 3 oz. of product found in skimmer.
- 12 A few drops of product found in skimmer.
- 13 Approximately 1 oz. of product found in skimmer.
- 14 1.5 oz. of product found in skimmer and 3 oz. of product from well.

**Table 4**  
**Groundwater Analytical Results - Oxygenate Compounds**  
 Tosco (Unocal) Service Station #0746  
 3943 Broadway  
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
<b>MW-1</b>									
	05/20/99 <sup>1,3</sup>	ND	ND	<sup>2</sup> 92/47	ND	ND	ND	--	--
	11/15/99 <sup>4</sup>	ND	ND	7.19	ND	ND	ND	--	--
	05/22/00 <sup>4</sup>	ND	130	290	ND	ND	ND	--	--
	11/22/00	-- <sup>6</sup>	-- <sup>6</sup>	142	ND	ND	ND	--	--
	05/15/01 <sup>4</sup>	ND <sup>5</sup>	ND <sup>5</sup>	374	ND <sup>5</sup>	ND <sup>5</sup>	ND <sup>5</sup>	--	--
	11/23/01 <sup>4</sup>	<1,400	<57	350	<2.9	<2.9	<2.9	<2.9	<2.9
	05/24/02	<1,000	<200	240	<4.0	<4.0	<4.0	<4.0	<4.0
<b>MW-3</b>									
	05/22/00 <sup>4</sup>	ND	ND	94	ND	ND	ND	--	--
	11/22/00	-- <sup>6</sup>	-- <sup>6</sup>	131	ND	ND	ND	--	--
	05/15/01 <sup>4</sup>	ND <sup>5</sup>	ND <sup>5</sup>	75.5	ND <sup>5</sup>	ND <sup>5</sup>	ND <sup>5</sup>	--	--
	11/23/01	<1,200	79	390	<2.5	<2.5	<2.5	<2.5	<2.5
	05/24/02	<500	<100	73	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MW-4</b>	05/24/02	<500	<100	3.5	<2.0	<2.0	<2.0	<2.0	<2.0
<b>MW-5</b>									
	05/22/00 <sup>4</sup>	ND <sup>5</sup>	ND <sup>5</sup>	21	ND <sup>5</sup>	ND <sup>5</sup>	ND <sup>5</sup>	--	--
<b>MW-8</b>									
	05/20/99 <sup>1,3</sup>	ND	ND	<sup>2</sup> 12/10	ND	ND	ND	--	--
	11/15/99 <sup>4</sup>	ND <sup>5</sup>	ND <sup>5</sup>	45.1	ND <sup>5</sup>	ND <sup>5</sup>	ND <sup>5</sup>	--	--

**Table 4**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Tosco (Unocal) Service Station #0746  
3943 Broadway  
Oakland, California

**EXPLANATIONS:**

TBA = Tertiary butyl alcohol  
MTBE = Methyl tertiary butyl ether  
DIPE = Di-isopropyl ether  
ETBE = Ethyl tertiary butyl ether  
TAME = Tertiary amyl methyl ether  
1,2-DCA = 1,2-Dichloroethane  
EDB = 1,2-Dibromoethane  
(ppb) = Parts per billion  
ND = Not Detected  
-- = Not Analyzed

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds

- <sup>1</sup> Analyzed past hold time (June 9, 1999).
- <sup>2</sup> First run MTBE was for qualitative use only.
- <sup>3</sup> Report revised July 6, 1999.
- <sup>4</sup> Laboratory report indicates sample was analyzed outside of the EPA recommended holding time.
- <sup>5</sup> Detection limit raised. Refer to analytical reports.
- <sup>6</sup> Laboratory did not analyze for Ethanol and TBA.



## 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 an 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, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. The measurements are taken 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 Phillips 66 Company, the purge water and decontamination water generated during sampling activities is transported to Phillips 66 - San Francisco Refinery, located in Rodeo, California.

**TOSCO (UNOCAL) SERVICE STATION #0746  
OAKLAND, CA**

**MONTHLY MONITORING EVENT OF  
DECEMBER 10, 2001**

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA.

Job#: 180063  
Date: 12-10-01  
Sampler: Joe

Well ID MW-5  
Well Diameter 2 in.  
Total Depth 20.14 ft  
Depth to Water 8.75 ft

Well Condition: OK  
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes, Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm K}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

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

COMMENTS: No product found in skimmer or well.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA.

Job#: 180063  
Date: 12-10-01  
Sampler: Soe

Well ID: RW-1  
Well Diameter: 6 in.  
Total Depth: 17.38 ft.  
Depth to Water: 8.51 ft.

Well Condition: OK

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

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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal)	pH	Conductivity $\mu\text{mhos/cm} \times$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

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

COMMENTS: No product found in well.

**TOSCO (UNOCAL) SERVICE STATION #0746  
OAKLAND, CA**

**MONTHLY MONITORING EVENT  
OF JANUARY 14, 2002**

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/Facility # 0746 Job#: 180063  
 Address: 3943 Broadway Date: 1-14-02  
 City: Oakland, CA Sampler: Joe

Well ID MW-5 Well Condition: OK

Well Diameter 2 in  
 Total Depth 20.14 ft  
 Depth to Water 8.26 ft

Hydrocarbon Thickness:	<u>A</u> in	Amount Bailed (product/water):	<u>0</u> (gal)
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 $\mu\text{mhos/cm} \times$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3Y04	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: A few drops of product found in skimmer. No product found in well.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/ Facility # 0746 Job#: 180063  
 Address: 3943 Broadway Date: 1-14-02  
 City: Oakland, CA Sampler: Joc

Well ID rw-1 Well Condition: O.K  
 Well Diameter 6 in Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
 Total Depth 17.38 ft  
 Depth to Water 8.13 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 $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3Y04	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: No product found in well.

**TOSCO (UNOCAL) SERVICE STATION #0746  
OAKLAND, CA**

**MONTHLY MONITORING EVENT  
OF FEBRUARY 22, 2002**



**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA.

Job#: 180063  
Date: 2-22-02  
Sampler: Joe

Well ID: MW-5  
Well Diameter: 2 in.  
Total Depth: 20.14 ft.  
Depth to Water: 6.30 ft.

Well Condition: OK  
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal)  
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
if yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm X	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
←	3Y04	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: Approx. one ounce of product found in skimmer. No product in well.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/Facility # 0746 Job#: 180063  
 Address: 3943 Broadway Date: 2-22-02  
 City: Oakland Sampler: Joe

Well ID RW-1 Well Condition: OK  
 Well Diameter 6 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
 Total Depth 17.38 ft.  
 Depth to Water 6.18 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: \_\_\_\_\_ Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
 Purging Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? \_\_\_\_\_ if yes: Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3Y0A	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**TOSCO (UNOCAL) SERVICE STATION #0746  
OAKLAND, CA**

**MONTHLY MONITORING EVENT OF  
MARCH 11, 2002**

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA.

Job#: 180063  
Date: 3-11-02  
Sampler: Sec

Well ID: MW-5 Well Condition: o.k.

Well Diameter: 2 in.  
Total Depth: 20.14 ft  
Depth to Water: 6.47 ft

Hydrocarbon Thickness:	Amount Bailed (product/water):	(gal)
<u>0</u> in.	<u>0</u>	
Volume Factor (VF)	2" = 0.17 3" = 0.38 6" = 1.50 12" = 5.80	4" = 0.66

\_\_\_\_\_ 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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>

COMMENTS: No product found in skimmer. No Product in well.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland

Job#: 180063  
Date: 3-11-02  
Sampler: JOL

Well ID: RW-1  
Well Diameter: 6 in.  
Total Depth: 17.38 ft.  
Depth to Water: 6.31 ft.

Well Condition: OK  
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3Y04	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**TOSCO (UNOCAL) SERVICE STATION #0746**  
**OAKLAND, CA**

**MONTHLY MONITORING EVENT**  
**OF APRIL 15, 2002**

## WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland

Job#: 180063  
Date: 4-15-02  
Sampler: Joe

Well ID: MW-5 Well Condition: OK

Well Diameter: 2 in.  
Total Depth: 20.14 ft.  
Depth to Water: 6.56 ft.

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

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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

### LABORATORY INFORMATION

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

COMMENTS: A few deep drops of product found in skimmer.  
No product in well.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Orlando

Job#: 180063  
Date: 4-15-02  
Sampler: 50c

Well ID RW-1  
Well Diameter 6 in.  
Total Depth 17.38 ft.  
Depth to Water 6.39 ft.

Well Condition: O.K.

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

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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: \_\_\_\_\_  
Water Color: \_\_\_\_\_ Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

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

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



***TOSCO (UNOCAL) SERVICE STATION #0746  
OAKLAND, CA***

***SEMI-ANNUAL MONITORING AND SAMPLING  
EVENT OF MAY 24, 2002***

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, Ct.

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

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

Well Diameter: 2 in  
Total Depth: 19.82 ft  
Depth to Water: 7.10 ft

Hydrocarbon Thickness:	<u>0</u> <sup>ft</sup>	Amount Bailed (product/water):	<u>0</u> (gal)
Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

12.72 x VF 0.17 = 2.16 x 3 (case volume) = Estimated Purge Volume: 7 (gal)

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 10:10  
Sampling Time: 10:20 AM (1020)  
Purging Flow Rate: 1 gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear/hot  
Water Color: clear Odor: none  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:08</u>	<u>2.5</u>	<u>7.17</u>	<u>9.82</u>	<u>73.1</u>	_____	_____	_____
<u>10:10</u>	<u>5</u>	<u>7.20</u>	<u>10.41</u>	<u>73.6</u>	_____	_____	_____
<u>10:12</u>	<u>7</u>	<u>7.08</u>	<u>10.32</u>	<u>73.0</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-2  
Well Diameter: 2 in.  
Total Depth: 19.86 ft.  
Depth to Water: 8.03 ft.

Well Condition: O.k.

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> (gal.)
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm.  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

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

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>3YOA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>

COMMENTS: M. only

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-3  
Well Diameter: 2 in  
Total Depth: 22.35 ft  
Depth to Water: 8.58 ft

Well Condition: O.K.  
Hydrocarbon Thickness: 0 in (product/water): 0 gal  
Volume Factor (VF):  
2" = 0.17      3" = 0.38      4" = 0.66  
6" = 1.50      12" = 5.80

13.77 X VF 0.17 = 2.34 X 3 (case volume) = Estimated Purge Volume: 7.05 gal

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 12:10  
Sampling Time: 12:30 PM (1230)  
Purging Flow Rate: 1 gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear/hot  
Water Color: clear Odor: same  
Sediment Description: \_\_\_\_\_  
if yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:17</u>	<u>2.5</u>	<u>7.70</u>	<u>4.87</u>	<u>72.6</u>	_____	_____	_____
<u>12:19</u>	<u>5</u>	<u>7.40</u>	<u>5.15</u>	<u>72.1</u>	_____	_____	_____
<u>12:21</u>	<u>7.5</u>	<u>7.35</u>	<u>5.21</u>	<u>72.8</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
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: 19.97 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	

12.04 x VF 0.17 = 2.05 x 3 (case volume) = Estimated Purge Volume: 6.5 (gal.)

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 10:26 Weather Conditions: clear/hot  
Sampling Time: 10:53 AM (1053) Water Color: clear Odor: mild  
Purging Flow Rate: 0.5 gpm Sediment Description: \_\_\_\_\_  
Did well de-water? \_\_\_\_\_ If yes: Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal)	pH	Conductivity (µmhos/cm) x 10 <sup>2</sup>	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:35</u>	<u>2</u>	<u>7.30</u>	<u>7.92</u>	<u>66.2</u>			
<u>10:40</u>	<u>4</u>	<u>7.20</u>	<u>8.18</u>	<u>66.4</u>			
<u>10:44</u>	<u>6.5</u>	<u>7.24</u>	<u>8.30</u>	<u>66.7</u>			
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>3 Yok</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-5  
Well Diameter: 2 in  
Total Depth: 20.15 ft  
Depth to Water: 8.32 ft

Well Condition: O.k.  
Hydrocarbon Thickness: 0.15' ft Amount Bailed (product/water): 1.5 ounces skimmer / 3.02 oz. / 1.29 gal  

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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: yes/strong  
Sediment Description: \_\_\_\_\_  
if yes: Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal

Time	Volume (gal)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>

COMMENTS: Removed 1.5 oz of product from skimmer; 3.02 oz of product from well. Small dedicated drum on site for product

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-6  
Well Diameter: 2 in  
Total Depth: 19.68 ft  
Depth to Water: 6.54 ft

Well Condition: O.k.  
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
if yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

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

**LABORATORY INFORMATION**

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

COMMENTS: M-only

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID MW-7  
Well Diameter 2 in.  
Total Depth 18.42 ft  
Depth to Water 7.56 ft

Well Condition: O.K.  
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 gal.  
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
6" = 1.50 12" = 5.80

\_\_\_\_\_ X VF \_\_\_\_\_ = \_\_\_\_\_ X 3 (cass 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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal.

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

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>

COMMENTS: M only



**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746

Job#: 180063

Address: 3943 Broadway

Date: 5-24-02

City: Oakland, CA

Sampler: Joe

Well ID MW-8

Well Condition: O.K.

Well Diameter 2 in

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

Total Depth 21.27 ft

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

Depth to Water 9.26 ft

\_\_\_\_\_ 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: 11:51 AM (1151)

Water Color: clear Odor: none

Purging Flow Rate: \_\_\_\_\_ gpm

Sediment Description: \_\_\_\_\_

Did well de-water? \_\_\_\_\_

If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3 Vol	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: No Purge S.

E2 Auto Sales Lot.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
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 21.81 ft

Depth to Water 8.79 ft

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

13.02 x VF 0.17 = 2.21 x 3 (case volume) = Estimated Purge Volume: 7 gal

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 11:12  
Sampling Time: 11:40 AM (1140)  
Purging Flow Rate: 0.2 gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear/hot  
Water Color: clear Odor: none  
Sediment Description: \_\_\_\_\_  
if yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ gal

Time	Volume (gal)	pH	Conductivity (µmhos/cm X)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>11:26</u>	<u>2.5</u>	<u>7.94</u>	<u>13.68</u>	<u>66.1</u>	_____	_____	_____
<u>11:26</u>	<u>5</u>	<u>7.81</u>	<u>12.88</u>	<u>66.3</u>	_____	_____	_____
<u>11:31</u>	<u>7</u>	<u>7.72</u>	<u>12.92</u>	<u>66.0</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>304</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-10  
Well Diameter: 2 in.  
Total Depth: 21.46 ft.  
Depth to Water: 9.48 ft.

Well Condition: O.K.

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> (gal)
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

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

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPH, BTEX, MTBE</u>

COMMENTS: M only

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-11  
Well Diameter: 2 in.  
Total Depth: 19.15 ft.  
Depth to Water: 10.58 ft.

Well Condition: O.k.

Hydrocarbon Thickness:	<u>0</u> in.	Amount Bailed (product/water):	<u>0</u> (gal)
Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

8.57 x VF 0.17 = 1.46 x 3 (case volume) = Estimated Purge Volume: 4.5 (gal)

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 9:14  
Sampling Time: 9:40 A.M. (0940)  
Purging Flow Rate: 0.5 gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear/hot  
Water Color: clear Odor: none  
Sediment Description: \_\_\_\_\_  
if yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal)

Time	Volume (gal)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:21</u>	<u>1</u>	<u>7.10</u>	<u>11.31</u>	<u>67.0</u>	_____	_____	_____
<u>9:25</u>	<u>3</u>	<u>7.15</u>	<u>11.38</u>	<u>66.4</u>	_____	_____	_____
<u>9:29</u>	<u>4.5</u>	<u>7.24</u>	<u>11.40</u>	<u>66.6</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-11</u>	<u>3Yok</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: Red Cross lot.

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: MW-12  
Well Diameter: 2 in  
Total Depth: 17.51 ft  
Depth to Water: 10.69 ft

Well Condition: O.K.  
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)  
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
if yes: Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	3Y04	Y	HCL	Seq.	TPHG, BTEX, MTBE

COMMENTS: M-only

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # 0746  
Address: 3943 Broadway  
City: Oakland, CA

Job#: 180063  
Date: 5-24-02  
Sampler: Joe

Well ID: ~~MW~~ RW-1  
Well Diameter: 6 in.  
Total Depth: 17.38 ft  
Depth to Water: 8.14 ft

Well Condition: OK  
Hydrocarbon Thickness: 0 in.  
Amount Bailed (product/water): 0 (gal.)  
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: \_\_\_\_\_  
Sampling Time: \_\_\_\_\_  
Purging Flow Rate: \_\_\_\_\_ gpm  
Did well de-water? \_\_\_\_\_

Weather Conditions: clear  
Water Color: clear Odor: \_\_\_\_\_  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm X	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-</u>	<u>3Y04</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>

COMMENTS: Mid only





**Sequoia  
Analytical**

1551 Industrial Road  
San Carlos, CA 94070  
(650) 232-9600  
FAX (650) 232-9612  
www.sequoialabs.com

10 June, 2002

Deanna Harding  
Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin, CA 94568

05/24/02 14:30

JUN 10

RE: Tosco(1)  
Sequoia Report: L205085

GETTLER-RYAN ANALYTICAL  
GENERAL CHEMISTRY

Enclosed are the results of analyses for samples received by the laboratory on 05/24/02 14:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Richard G. Yee  
Organics Dept. Manager

CA ELAP Certificate #2360





Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Tosco(1)  
Project Number: Tosco #0746, Oakland  
Project Manager: Deanna Harding

Reported:  
06/10/02 13:09

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L205085-01	Water	05/24/02 00:00	05/24/02 14:30
MW-1	L205085-02	Water	05/24/02 10:20	05/24/02 14:30
MW-3	L205085-03	Water	05/24/02 12:30	05/24/02 14:30
MW-4	L205085-04	Water	05/24/02 10:53	05/24/02 14:30
MW-8	L205085-05	Water	05/24/02 11:51	05/24/02 14:30
MW-9	L205085-06	Water	05/24/02 11:40	05/24/02 14:30
MW-11	L205085-07	Water	05/24/02 09:40	05/24/02 14:30

Sequoia Analytical - San Carlos

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Richard G. Yee, Organics Dept. Manager

Gettler-Ryan/Geostrategies(1)  
 6747 Sierra Court, Suite J  
 Dublin CA, 94568

 Project: Tosco(1)  
 Project Number: Tosco #0746, Oakland  
 Project Manager: Deanna Harding

 Reported:  
 06/10/02 13:09

### Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B

#### Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TB-LB (L205085-01) Water</b> Sampled: 05/24/02 00:00 Received: 05/24/02 14:30									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2060009	06/05/02	06/06/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		90.7 %	70-130	"	"	"	"	"	
<b>MW-1 (L205085-02) Water</b> Sampled: 05/24/02 10:20 Received: 05/24/02 14:30									
Purgeable Hydrocarbons as Gasoline	70	50	ug/l	1	2060009	06/05/02	06/06/02	EPA 8021B	P-01
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	200	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		93.4 %	70-130	"	"	"	"	"	
<b>MW-3 (L205085-03) Water</b> Sampled: 05/24/02 12:30 Received: 05/24/02 14:30									
Purgeable Hydrocarbons as Gasoline	4000	500	ug/l	10	2060009	06/06/02	06/06/02	EPA 8021B	P-01
Benzene	86	5.0	"	"	"	"	"	"	
Toluene	6.0	5.0	"	"	"	"	"	"	
Ethylbenzene	120	5.0	"	"	"	"	"	"	
Xylenes (total)	5.8	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	120	50	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		121 %	70-130	"	"	"	"	"	



Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Tosco(1)  
Project Number: Tosco #0746, Oakland  
Project Manager: Deanna Harding

Reported:  
06/10/02 13:09

**Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-4 (L205085-04) Water Sampled: 05/24/02 10:53 Received: 05/24/02 14:30</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2060009	06/05/02	06/05/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	9.6	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		92.4 %	70-130		"	"	"	"	
<b>MW-8 (L205085-05) Water Sampled: 05/24/02 11:51 Received: 05/24/02 14:30</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2060009	06/05/02	06/05/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		93.8 %	70-130		"	"	"	"	
<b>MW-9 (L205085-06) Water Sampled: 05/24/02 11:40 Received: 05/24/02 14:30</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2060009	06/05/02	06/06/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		95.7 %	70-130		"	"	"	"	



Geffler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Tosco(1)  
Project Number: Tosco #0746, Oakland  
Project Manager: Deanna Harding

Reported:  
06/10/02 13:09

**Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B  
Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-11 (L205085-07) Water</b> <b>Sampled: 05/24/02 09:40</b> <b>Received: 05/24/02 14:30</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2060009	06/05/02	06/06/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		94.4 %		70-130	"	"	"	"	



Gettler-Ryan/Geostrategies(1)  
6747 Sierra Court, Suite J  
Dublin CA, 94568

Project: Tosco(1)  
Project Number: Tosco #0746, Oakland  
Project Manager: Deanna Harding

Reported:  
06/10/02 13:09

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L205085-02) Water</b> <b>Sampled: 05/24/02 10:20</b> <b>Received: 05/24/02 14:30</b>									
Ethanol	ND	1000	ug/l	2	2060013	06/07/02	06/07/02	EPA 8260B	
1,2-Dibromoethane	ND	4.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	4.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	4.0	"	"	"	"	"	"	
Methyl tert-butyl ether	240	4.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	4.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	200	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %	70-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96.8 %	70-130		"	"	"	"	
<b>MW-3 (L205085-03) Water</b> <b>Sampled: 05/24/02 12:30</b> <b>Received: 05/24/02 14:30</b>									
Ethanol	ND	500	ug/l	1	2060013	06/07/02	06/07/02	EPA 8260B	
1,2-Dibromoethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	73	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		91.6 %	70-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96.6 %	70-130		"	"	"	"	
<b>MW-4 (L205085-04) Water</b> <b>Sampled: 05/24/02 10:53</b> <b>Received: 05/24/02 14:30</b>									
Ethanol	ND	500	ug/l	1	2060013	06/07/02	06/07/02	EPA 8260B	
1,2-Dibromoethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Methyl tert-butyl ether	3.5	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		99.0 %	70-130		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97.2 %	70-130		"	"	"	"	



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Reported:  
06/10/02 13:09

**Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2060009 - EPA 5030B (P/T)**

**Blank (2060009-BLK1)**

Prepared & Analyzed: 06/05/02

Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							

Surrogate: a,a,a-Trifluorotoluene 10.9 " 10.0 109 70-130

**Blank (2060009-BLK2)**

Prepared & Analyzed: 06/06/02

Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							

Surrogate: a,a,a-Trifluorotoluene 10.2 " 10.0 102 70-130

**LCS (2060009-BS1)**

Prepared & Analyzed: 06/05/02

Benzene	10.9	0.50	ug/l	10.0		109	70-130			
Toluene	9.77	0.50	"	10.0		97.7	70-130			
Ethylbenzene	8.59	0.50	"	10.0		85.9	70-130			
Xylenes (total)	25.3	0.50	"	30.0		84.3	70-130			

Surrogate: a,a,a-Trifluorotoluene 10.1 " 10.0 101 70-130

**LCS (2060009-BS2)**

Prepared & Analyzed: 06/05/02

Purgeable Hydrocarbons as Gasoline	275	50	ug/l	250		110	70-130			
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Surrogate: a,a,a-Trifluorotoluene 9.16 " 10.0 91.6 70-130

Gettler-Ryan/Geostrategies(1)  
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 Dublin CA, 94568

 Project: Tosco(1)  
 Project Number: Tosco #0746, Oakland  
 Project Manager: Deanna Harding

 Reported:  
 06/10/02 13:09

**Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control  
 Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2060009 - EPA 5030B (P/T)**

<b>LCS (2060009-BS3)</b>		Prepared & Analyzed: 06/06/02								
Benzene	10.1	0.50	ug/l	10.0		101	70-130			
Toluene	9.06	0.50	"	10.0		90.6	70-130			
Ethylbenzene	8.18	0.50	"	10.0		81.8	70-130			
Xylenes (total)	24.3	0.50	"	30.0		81.0	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>10.2</i>		<i>"</i>	<i>10.0</i>		<i>102</i>	<i>70-130</i>			

<b>LCS (2060009-BS4)</b>		Prepared & Analyzed: 06/06/02								
Purgeable Hydrocarbons as Gasoline	230	50	ug/l	250		92.0	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>9.68</i>		<i>"</i>	<i>10.0</i>		<i>96.8</i>	<i>70-130</i>			

<b>Matrix Spike (2060009-MS1)</b>		Source: L205085-05		Prepared: 06/05/02		Analyzed: 06/06/02				
Benzene	10.6	0.50	ug/l	10.0	ND	106	60-140			
Toluene	9.31	0.50	"	10.0	ND	93.1	60-140			
Ethylbenzene	8.49	0.50	"	10.0	ND	84.9	60-140			
Xylenes (total)	25.4	0.50	"	30.0	ND	84.7	60-140			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>9.37</i>		<i>"</i>	<i>10.0</i>		<i>93.7</i>	<i>70-130</i>			

<b>Matrix Spike Dup (2060009-MSD1)</b>		Source: L205085-05		Prepared: 06/05/02		Analyzed: 06/06/02				
Benzene	11.4	0.50	ug/l	10.0	ND	114	60-140	7.27	25	
Toluene	10.0	0.50	"	10.0	ND	100	60-140	7.15	25	
Ethylbenzene	9.10	0.50	"	10.0	ND	91.0	60-140	6.94	25	
Xylenes (total)	27.0	0.50	"	30.0	ND	90.0	60-140	6.11	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	<i>9.18</i>		<i>"</i>	<i>10.0</i>		<i>91.8</i>	<i>70-130</i>			



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Project: Tosco(1)  
Project Number: Tosco #0746, Oakland  
Project Manager: Deanna Harding

**Reported:**  
06/10/02 13:09

### Notes and Definitions

P-01 Chromatogram Pattern: Gasoline C6-C12  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference





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Reported:  
06/10/02 13:09

**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 2060013 - EPA 5030B [P/T]</b>										
<b>Blank (2060013-BLK1)</b> <span style="float:right">Prepared &amp; Analyzed: 06/07/02</span>										
Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Methyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Tert-butyl alcohol	ND	100	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.0		"	50.0		100	70-130			
<i>Surrogate: Toluene-d8</i>	49.0		"	50.0		98.0	70-130			
<b>LCS (2060013-BS1)</b> <span style="float:right">Prepared &amp; Analyzed: 06/07/02</span>										
Methyl tert-butyl ether	46.4	2.0	ug/l	50.0		92.8	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	47.5		"	50.0		95.0	70-130			
<i>Surrogate: Toluene-d8</i>	51.5		"	50.0		103	70-130			
<b>Matrix Spike (2060013-MS1)</b> <span style="float:right">Source: L205085-04 Prepared &amp; Analyzed: 06/07/02</span>										
Methyl tert-butyl ether	56.7	2.0	ug/l	50.0	3.5	106	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	49.8		"	50.0		99.6	70-130			
<i>Surrogate: Toluene-d8</i>	50.8		"	50.0		102	70-130			
<b>Matrix Spike Dup (2060013-MSD1)</b> <span style="float:right">Source: L205085-04 Prepared &amp; Analyzed: 06/07/02</span>										
Methyl tert-butyl ether	55.6	2.0	ug/l	50.0	3.5	104	60-140	1.96	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.1		"	50.0		96.2	70-130			
<i>Surrogate: Toluene-d8</i>	51.9		"	50.0		104	70-130			



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**Reported:**  
06/10/02 13:09

### Notes and Definitions

P-01      Chromatogram Pattern: Gasoline C6-C12  
DET      Analyte DETECTED  
ND      Analyte NOT DETECTED at or above the reporting limit  
NR      Not Reported  
dry      Sample results reported on a dry weight basis  
RPD      Relative Percent Difference