



GETTLER-RYAN INC.

TRANSMITTAL

March 18, 2002

G-R #180065

APR 03 2002

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

CC: Mr. Douglas Lee
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

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

RE: **Tosco (Unocal) Service Station
#5043
449 Hegenberger Road
Oakland, California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	March 11, 2002	Groundwater Monitoring and Sampling Report First Quarter – Event of January 31, 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 **April 1, 2002**, this report will be distributed to the following:

cc: Mr. Barney M. Chan, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California 94502
Beretta Investment Group, 39560 Stevenson Place, Suite 118, Fremont, CA 94539

Enclosure

trans/5043.dbd



GETTLER - RYAN INC.

March 11, 2002
G-R Job #180065

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

RE: First Quarter Event of January 31, 2002
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5043
449 Hegenberger Road
Oakland, California

APR 03 2002

Dear Mr. De Witt:

This report documents 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. Static water level data and groundwater elevations are summarized in Table 1. Product Thickness/Removal Data is summarized in Table 3. A Potentiometric Map is included as Figure 1.

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

Sincerely,

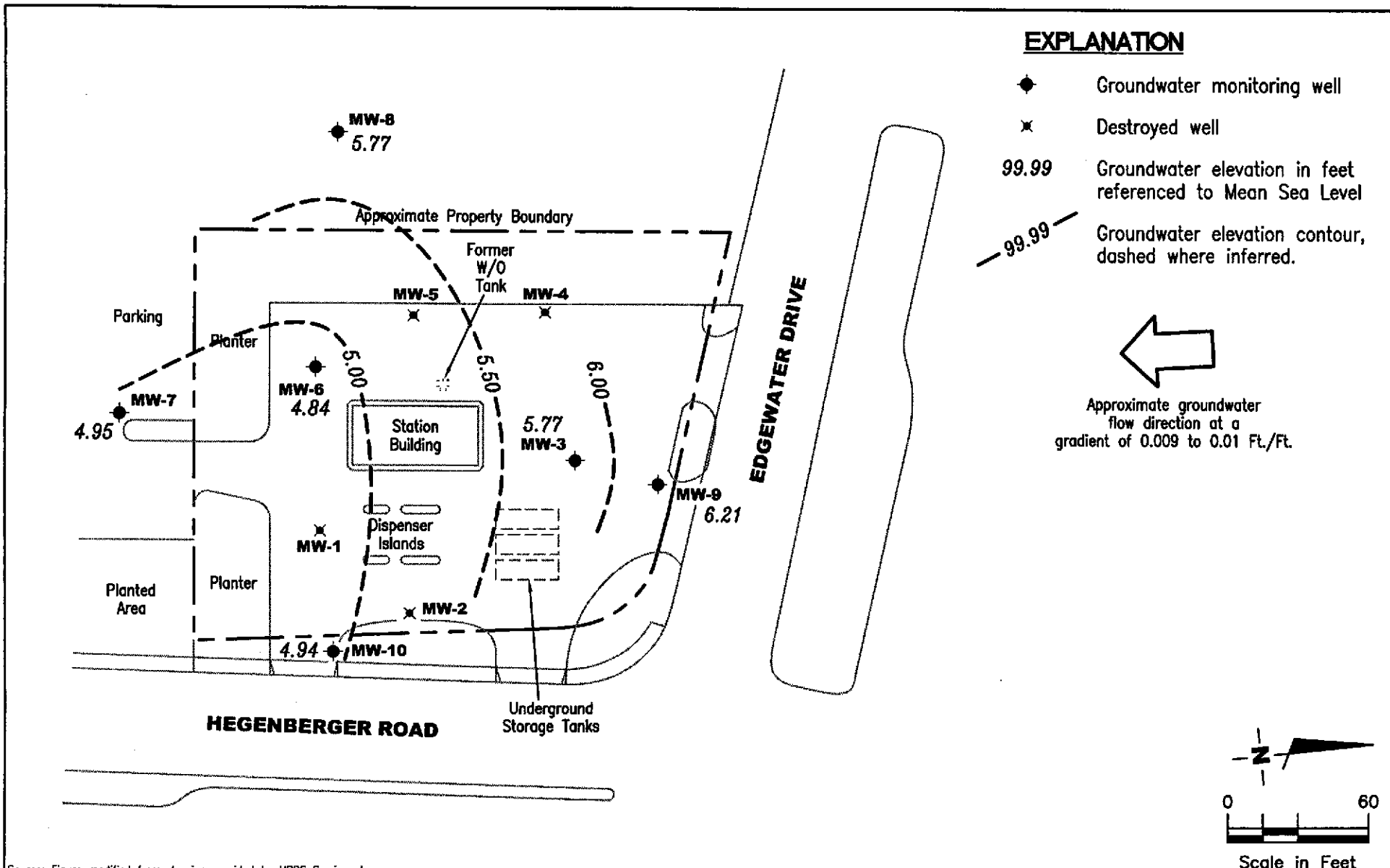
Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734



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

5043.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 #5043
 449 Hegenberger Road
 Oakland, California

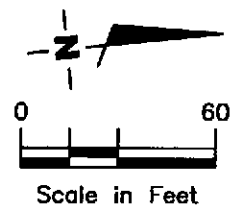
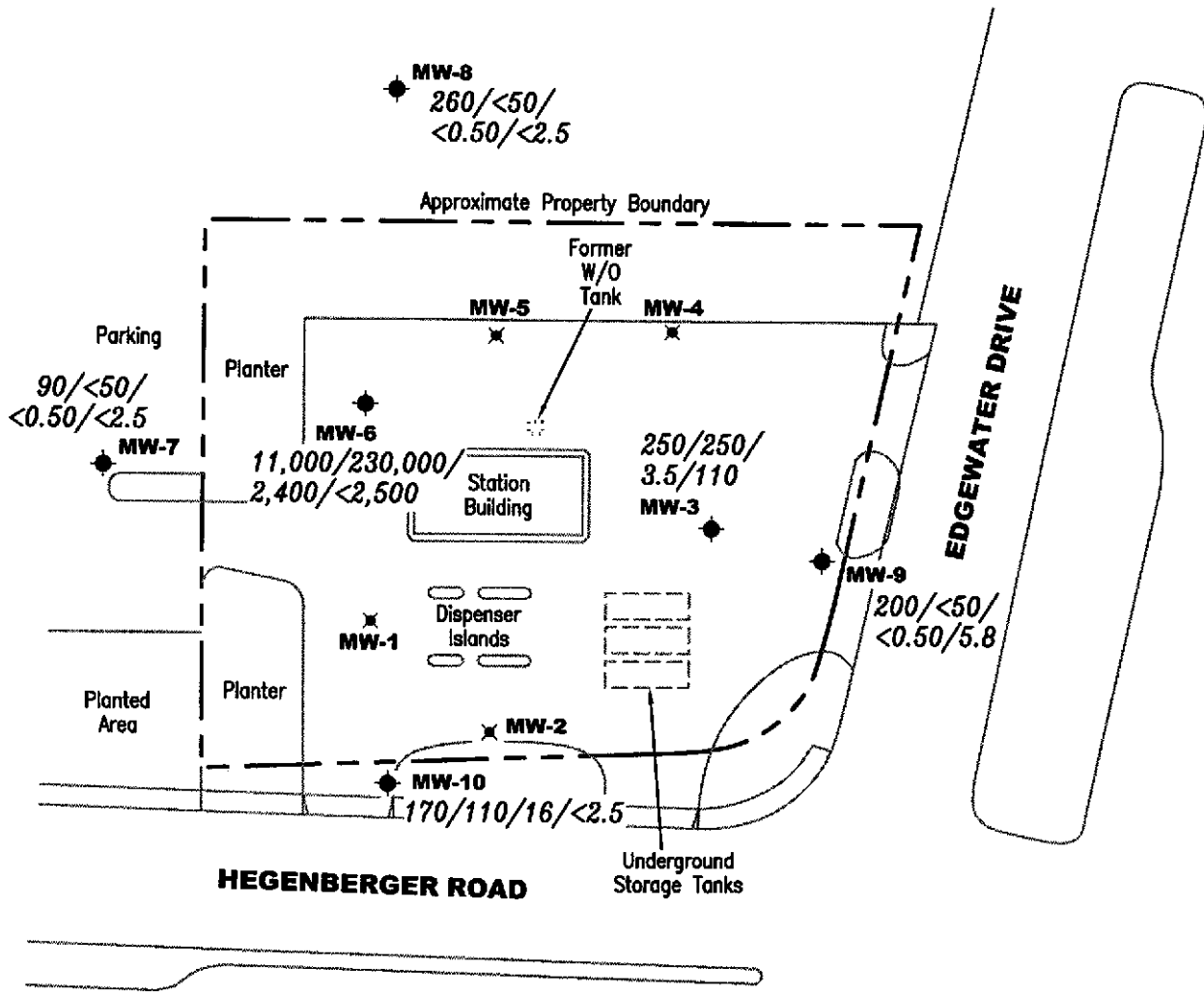
FIGURE

1

PROJECT NUMBER 180065	REVIEWED BY	DATE January 31, 2002	REVISED DATE
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EXPLANATION

- ◆ Groundwater monitoring well
- ✕ Destroyed well
- A/B/C/D Total Petroleum Hydrocarbons (TPH) as Diesel/TPH as Gasoline/Benzene/MTBE concentrations in ppb



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 #5043
 449 Hegenberger Road
 Oakland, California

FIGURE
2

PROJECT NUMBER 180065	REVIEWED BY	DATE January 31, 2002	REVISED DATE
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Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.L. (ft.bgs)	GWE (msl)	Product							
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	02/18/92	--	--	--	--	13,000	150,000	17,000	26,000	5,200	26,000	--
	05/20/92	--	--	--	--	--	--	--	--	--	--	--
	08/31/92	--	--	--	--	8,900 ¹	64,000	13,000	12,000	2,500	22,000	--
	11/30/92	--	--	--	--	--	--	--	--	--	--	--
	02/04/93	--	--	--	--	--	--	--	--	--	--	--
8.96*	05/04/93	2.13		5.73**	0.10	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	08/04/93	2.92		4.88**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
7.38	11/03/93	3.04		4.74	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	02/07/94	2.55		4.85**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	05/19/94	2.23		5.16**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	06/25/94	2.49		4.90**	0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	07/27/94	3.10		4.28	0.00	--	--	--	--	--	--	--
	08/15/94	2.85		4.61**	0.11	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	11/14/94	2.97		4.50**	0.12	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	02/21/95	1.53		5.87**	0.02	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	DESTROYED											
MW-2	02/18/92	--	--	--	--	4,300	29,000	1,000	5,300	260	7,900	--
	05/20/92	--	--	--	--	4,300 ¹	24,000	2,200	7,600	630	11,000	--
	08/31/92	--	--	--	--	1,600 ¹	9,000	1,800	640	140	2,000	--
	11/30/92	--	--	--	--	5,700 ¹	29,000	2,000	3,400	1,200	6,900	--
	02/04/93	--	--	--	--	6,100 ¹	18,000	1,600	3,000	ND	6,900	--
8.96*	05/04/93	2.48		6.48	0.00	7,100 ¹	63,000	3,200	17,000	470	17,000	--
	08/04/93	3.20		5.76	0.00	1,800 ²	45,000	2,100	6,600	1,400	12,000	--
8.58	11/03/93	3.37		5.21	0.00	2,600 ²	72,000	3,700	16,000	3,700	20,000	--
	02/07/94	2.40		6.18	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
	05/19/94	2.13		6.45	0.00	3,000 ²	42,000	2,500	1,300	2,300	13,000	--
	06/25/94	2.65		5.93	0.00	--	--	--	--	--	--	--
	07/27/94	3.44		5.14	0.00	--	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product		TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
					Thickness (ft.)								
MW-2	08/15/94	3.25	--	5.33	0.00		2,800 ²	35,000	2,400	850	1,700	15,000	--
(cont)	11/14/94	2.13		6.45	0.00		10,000 ¹	43,000	2,200	6,500	1,800	14,000	--
	02/21/95	1.65		6.93	0.00		2,000 ²	44,000	2,200	3,200	1,300	1,500	--
DESTROYED													
MW-3	02/18/92	--	2.5-14.0	--	--		ND	230	4.8	22	1.8	33	--
	05/20/92	INACCESSIBLE		--	--		--	--	--	--	--	--	--
	08/31/92	--		--	--		92 ²	210 ⁴	1	ND	ND	ND	--
	11/30/92	--		--	--		94	790 ⁴	ND	ND	ND	ND	--
	02/04/93	--		--	--		550 ²	3,300	320	ND	96	6.1	--
7.84*	05/04/93	4.32		3.52	0.00		250 ²	1,800 ³	95	ND	ND	ND	--
	08/04/93	4.94		2.90	0.00		100	210 ⁴	ND	ND	ND	ND	--
7.42	11/03/93	4.53		2.89	0.00		160	640 ⁴	ND	ND	ND	ND	--
	02/07/94	2.40		5.02	0.00		620 ²	2,700	110	ND	17	ND	--
	05/19/94	3.60		3.82	0.00		480 ²	1,800	83	ND	6.2	9.1	--
	06/25/94	4.58		2.84	0.00		--	--	--	--	--	--	--
	07/27/94	4.58		2.84	0.00		--	--	--	--	--	--	--
	08/15/94	4.65		2.77	0.00		110 ²	130	1.1	0.54	ND	0.97	--
	11/14/94	3.18		4.24	0.00		150 ²	1,600 ⁴	ND	ND	ND	ND	--
	02/21/95	1.81		5.61	0.00		850 ²	3,800	350	ND	130	22	--
	05/18/95	4.56		2.86	0.00		150 ¹	1,300 ³	42	ND	ND	ND	--
	08/17/95	INACCESSIBLE		--	--		--	--	--	--	--	--	--
	07/26/96	INACCESSIBLE		--	--		--	--	--	--	--	--	--
	10/28/96 ⁶	INACCESSIBLE		--	--		--	--	--	--	--	--	--
	01/29/97	INACCESSIBLE		--	--		--	--	--	--	--	--	--
	04/15/97	INACCESSIBLE		--	--		--	--	--	--	--	--	--
	05/27/97	3.45		4.59	0.00		--	670	6.5	ND	ND	ND	250
	06/01/97	3.50		4.54	0.00		610 ²	--	--	--	--	--	--
8.04	07/15/97	3.71		4.33	0.00		240 ²	240	ND	ND	ND	ND	490
	10/09/97	3.70		4.34	0.00		500 ²	270	1.1	ND	2.4	1.4	910

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WELL ID/ TOC*	DATE	DTW (ft.)	S.L. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	01/14/98	2.16	2.5-14.0	5.88	0.00	340 ⁷	310	ND	ND	0.62	0.65	140
(cont)	04/01/98	2.20		5.84	0.00	320 ⁷	370	5.7	ND ⁹	ND ⁹	ND ⁹	93
	07/15/98	3.38		4.66	0.00	510 ¹⁰	460 ¹¹	ND ⁹	ND ⁹	ND ⁹	ND ⁹	230
	10/16/98	2.30		5.74	0.00	67 ¹³	330 ¹⁴	4.7	ND ⁹	ND ⁹	ND ⁹	60
	01/25/99	2.42		5.62	0.00	120 ⁷	420 ¹⁴	1.5	ND ⁹	ND ⁹	ND ⁹	180
	04/15/99	2.16		5.88	0.00	170 ¹⁷	290	0.54	ND	ND	ND	160
	07/14/99	2.35		5.69	0.00	420 ¹⁹	290	3.2	ND	ND	ND	160
	10/21/99	2.49		5.55	0.00	350 ⁷	360 ²³	0.77	ND	ND	ND	82
	01/20/00	2.38		5.66	0.00	2,060 ¹	ND	0.81	ND	ND	ND	54
	04/13/00	2.76		5.28	0.00	200 ²¹	250 ²³	0.69	ND	ND	ND	91/150 ²⁶
	07/14/00	3.26		4.78	0.00	423 ⁷	345 ²⁷	ND	ND	ND	ND	94.7
	10/26/00	3.12		4.92	0.00	330 ²⁹	480 ²³	6.0	ND ⁹	ND ⁹	ND ⁹	120
	01/03/01	3.65		4.39	0.00	287 ⁷	364 ²⁷	1.59	ND	ND	ND	118
	04/04/01	3.98		4.06	0.00	360 ⁷	417 ²⁷	1.24	ND	ND	0.802	237
	07/17/01	3.12		4.92	0.00	270 ²⁸	480 ²⁷	ND	ND	ND	ND	150
	10/01/01	3.25		4.79	0.00	270 ⁷	310 ²⁷	1.0	<0.50	<0.50	<0.50	53
	01/31/02	2.27		5.77	0.00	250³⁴	250³²	3.5	<1.0	<1.0	<1.0	110
MW-4	08/31/92	--	--	--	--	90 ²	240 ⁴	ND	ND	ND	0.54	--
	11/30/92	--	--	--	--	61	420 ⁴	ND	ND	ND	ND	--
	02/04/93	--	--	--	--	ND	ND	ND	ND	ND	ND	--
9.00*	05/04/93	4.09		4.91	0.00	ND	110 ³	0.95	ND	ND	ND	--
	08/04/93	5.01		3.99	0.00	81	250 ⁴	ND	3.5	ND	4.1	--
8.41	11/03/93	4.23		4.18	0.00	68	130 ⁴	ND	ND	ND	ND	--
	02/07/94	3.35		5.06	0.00	ND	56 ⁴	ND	ND	ND	ND	--
	05/19/94	3.92		4.49	0.00	90 ²	140 ⁴	ND	ND	ND	ND	--
	06/25/94	4.35		4.06	0.00	--	--	--	--	--	--	--
	07/27/94	4.28		4.13	0.00	--	--	--	--	--	--	--

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 449 Hegenberger Road
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WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product							
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4	08/15/94	4.27	--	4.14	0.00	72 ²	59 ⁴	ND	0.6	ND	ND	--
(cont)	11/14/94	4.05		4.36	0.00	ND	130 ⁴	ND	ND	ND	ND	--
	DESTROYED											
MW-5	08/31/92	--	--	--	--	690 ¹	78	0.89	ND	ND	13	--
	11/30/92 ⁵	--		--	--	470 ²	930	70	290	0.79	14	--
	02/04/93 ⁵	--		--	--	5,500 ²	5,700	38	ND	620	170	--
	05/04/93 ⁵	4.37		4.90	0.00	4,600 ¹	7,400	41	ND	1,000	35	--
	08/04/93 ⁵	5.81		3.46	0.00	970 ²	1,500	130	1	460	11	--
8.95	11/03/93	5.68		3.27	0.00	2,100 ²	13,000	350	ND	3,500	530	--
	02/07/94	5.11		3.84	0.00	830 ²	2,000	87	ND	370	110	--
	05/19/94	5.09		3.86	0.00	600 ²	260	44	ND	32	4.1	--
	06/25/94	4.55		4.40	0.00	--	--	--	--	--	--	--
	07/27/94	5.72		3.23	0.00	--	--	--	--	--	--	--
	08/15/94	5.68		3.27	0.00	860 ²	1,600	110	ND	340	72	--
	11/14/94	5.63		3.32	0.00	290 ¹	250	40	ND	ND	5	--
	DESTROYED											
MW-6	08/31/92	--	2.5-13.5	--	--	750 ²	ND	ND	ND	ND	ND	--
	11/30/92	--		--	--	1,400 ¹	9,200	550	ND	740	1,600	--
	02/04/93	--		--	--	890 ²	3,600	340	ND	290	550	--
9.12*	05/04/93	3.72		5.40	0.00	1,800 ¹	4,900	360	18	450	430	--
	08/04/93	5.15		3.97	0.00	1,100 ²	3,400	390	ND	440	190	--
8.87	11/03/93	5.25		3.62	0.00	390 ²	1,400	320	ND	200	7.7	--
	02/07/94	4.55		4.32	0.00	970 ²	4,900	650	ND	250	35	--
	05/19/94	4.62		4.25	0.00	1,400 ²	3,600	300	1.7	210	41	--
	08/15/94	5.08		3.79	0.00	790 ²	1,300	130	6.7	54	57	--
	11/14/94	5.30		3.57	0.00	800 ²	730	50	ND	ND	39	--
	02/21/95	5.37		3.50	0.00	730 ²	2,000	250	4.6	25	30	--

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043
449 Hegenberger Road
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-6	05/18/95	--	2.5-13.5	INACCESSIBLE		--	--	--	--	--	--	--	
(cont)	08/17/95	--		INACCESSIBLE		--	--	--	--	--	--	--	
	07/26/96	6.40		5.03**	3.33	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	10/28/96	4.10		4.93**	0.21	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	11/13/96	4.02		5.04**	0.25	--	--	--	--	--	--	--	
	11/25/96	4.01		5.44**	0.75	--	--	--	--	--	--	--	
	12/04/96	3.65		5.61**	0.50	--	--	--	--	--	--	--	
	12/19/96	4.80		5.76**	2.20	--	--	--	--	--	--	--	
	01/08/97	4.84		5.38**	1.75	--	--	--	--	--	--	--	
	01/14/97	4.51		5.25**	1.15	--	--	--	--	--	--	--	
	01/27/97	4.00		6.22**	1.75	--	--	--	--	--	--	--	
	01/29/97	3.24		5.87**	0.31	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	02/11/97	4.65		5.14**	1.20	--	--	--	--	--	--	--	
	02/24/97	4.81		4.91**	1.10	--	--	--	--	--	--	--	
	03/10/97	4.60		5.00**	0.95	--	--	--	--	--	--	--	
	03/17/97	4.50		5.06**	0.89	--	--	--	--	--	--	--	
	03/31/97	4.65		4.99**	1.00	--	--	--	--	--	--	--	
	04/15/97	4.90		4.76**	1.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	04/28/97	4.78		4.11**	0.03	--	--	--	--	--	--	--	
	05/15/97	4.60		4.46**	0.25	--	--	--	--	--	--	--	
	05/27/97	4.50		4.56**	0.25	--	--	--	--	--	--	--	
	06/09/97	4.60		4.42**	0.20	--	--	--	--	--	--	--	
	06/24/97	4.50		4.56**	0.25	--	--	--	--	--	--	--	
	07/09/97	4.80		4.53**	0.60	--	--	--	--	--	--	--	
	07/15/97	4.63		4.56**	0.42	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	07/21/97	4.75		4.31**	0.25	--	--	--	--	--	--	--	
	08/06/97	4.50		4.45**	0.10	--	--	--	--	--	--	--	
	08/20/97	4.55		4.40**	0.10	--	--	--	--	--	--	--	
	09/02/97	4.75		4.16**	0.05	--	--	--	--	--	--	--	
	10/09/97	4.84		4.06**	0.04	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	01/14/98	3.90		5.69**	0.94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product								
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-6	02/12/98	3.35	2.5-13.5	6.01**	0.64	--	--	--	--	--	--	--	--
(cont)	03/03/98	4.51		4.38**	0.02	--	--	--	--	--	--	--	--
	04/01/98	3.67		6.43**	1.60	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	05/26/98	4.11		5.15**	0.50	--	--	--	--	--	--	--	--
	06/15/98	5.03		4.07**	0.30	--	--	--	--	--	--	--	--
	07/15/98	4.56		4.35**	0.05	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	08/21/98	4.77		4.12**	0.02	--	--	--	--	--	--	--	--
	09/30/98	5.08		3.81**	0.03	--	--	--	--	--	--	--	--
	10/16/98	4.31		6.41**	2.40	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	11/06/98	3.98		5.02**	0.17	--	--	--	--	--	--	--	--
	11/25/98	3.92		5.03**	0.10	--	--	--	--	--	--	--	--
	12/28/98	3.90		5.12**	0.20	--	--	--	--	--	--	--	--
	01/25/99	4.18		5.15**	0.60	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	02/22/99	4.07		4.97**	0.22	--	--	--	--	--	--	--	--
	03/22/99	4.32		4.67**	0.15	--	--	--	--	--	--	--	--
	04/15/99	4.23		5.37**	0.95	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	05/28/99	4.38		4.79**	0.39	--	--	--	--	--	--	--	--
	06/29/99	4.12		4.77**	0.02	--	--	--	--	--	--	--	--
	07/14/99	4.20		4.69**	0.03	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	08/23/99	4.51		4.54**	0.24	--	--	--	--	--	--	--	--
	09/30/99	4.17		4.83**	0.17	--	--	--	--	--	--	--	--
	10/21/99	4.27		4.69**	0.12	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	11/29/99	4.18		4.69	<0.01	--	--	--	--	--	--	--	--
	12/20/99	4.26		4.62**	0.01	--	--	--	--	--	--	--	--
	01/20/00	4.31		4.56	<0.01	67,600 ¹	130,000 ²³	2,900	8,600	2,000	16,000	ND ⁹	
	02/26/00	3.98		4.89	0.00	--	--	--	--	--	--	--	--
	03/31/00	4.14		4.73	0.00	--	--	--	--	--	--	--	--
	04/13/00	4.04		4.83	0.00	8,700 ⁷	140,000 ²³	5,000	14,000	3,600	27,000	7,700	
	05/26/00	4.41		4.46	0.00	--	--	--	--	--	--	--	--
	06/17/00	4.35		4.52	0.00	--	--	--	--	--	--	--	--
	07/14/00	4.47		4.40	<0.01	133,000 ⁷	259,000 ²³	7,670	13,700	6,860	40,700	⁹ ND/ND ^{9,26}	

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043
449 Hegenberger Road
Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTRE (ppb)
MW-6	08/24/00	3.71	2.5-13.5	5.16	0.00	--	--	--	--	--	--	--
(cont)	09/27/00	4.33		4.54	0.00	--	--	--	--	--	--	--
	10/26/00	4.32		4.55	0.00	61,000 ²⁸	110,000 ²³	7,000	6,200	3,700	12,000	670/43 ³⁰
	01/03/01	4.52		4.35	0.00	929 ⁷	84,700 ²³	3,950	4,130	3,650	11,800	⁹ ND/ND ^{9,26}
	04/04/01	4.29		4.58	0.00	18,000 ²⁸	69,800 ²³	2,060	2,840	3,650	10,900	⁹ ND/47.8 ²⁶
	07/17/01	4.37		4.50	0.00	20,000 ³¹	100,000 ²³	3,200	3,300	3,400	12,000	ND ⁹
	10/01/01	4.45		4.42	0.00	24,000 ⁷	110,000 ²³	3,200	2,400	4,500	13,000	<1,000
	01/31/02	4.03		4.84	0.00	11,000 ³⁴	230,000 ³²	2,400	1,800	5,400	16,000	<2,500
MW-7	05/27/97	4.50	3.0-13.0	4.33	0.00	--	68	ND	ND	ND	ND	ND
8.83	06/01/97	4.54		4.29	0.00	69 ²	--	--	--	--	--	--
	07/15/97	4.70		4.13	0.00	ND	ND	ND	ND	ND	ND	ND
	10/09/97	4.30		4.53	0.00	190 ¹	ND	ND	ND	ND	ND	ND
	01/14/98	2.88		5.95	0.00	65 ⁷	ND	ND	ND	ND	ND	36
	04/01/98	3.13		5.70	0.00	ND	ND	ND	ND	ND	ND	ND
	07/15/98	4.45		4.38	0.00	74 ¹²	ND	ND	ND	ND	ND	ND
	10/16/98	3.45		5.38	0.00	ND	ND	ND	ND	ND	ND	ND
	01/25/99	3.22		5.61	0.00	ND	ND	ND	ND	ND	ND	ND
	04/15/99	3.11		5.72	0.00	ND	ND	ND	ND	ND	ND	ND
	07/14/99	3.34		5.49	0.00	69 ²⁰	ND	ND	ND	ND	ND	ND
	10/21/99	3.43		5.40	0.00	ND	ND	ND	ND	ND	ND	ND
	01/20/00	3.29		5.54	0.00	ND	ND	ND	ND	ND	ND	4.2
	04/13/00	3.39		5.44	0.00	ND ⁹	ND	ND	ND	ND	ND	ND
	07/14/00	4.42		4.41	0.00	68.0 ⁷	ND	ND	ND	ND	ND	7.83
	07/17/01	5.06		3.77	0.00	ND	ND	ND	ND	ND	ND	ND
	10/01/01	4.98		3.85	0.00	<51	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	01/31/02	3.88		4.95	0.00	90 ³⁴	<50	<0.50	<0.50	<0.50	<0.50	<2.5

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product								
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-8	05/27/97	3.42	3.0-15.0	5.10	0.00	--	310	0.88	0.67	15	70	ND	
8.52	06/01/97	3.46		5.06	0.00	320 ²	--	--	--	--	--	--	
	07/15/97	3.49		5.03	0.00	ND	ND	ND	ND	2.7	3.8	ND	
	10/09/97	3.73		4.79	0.00	390 ¹	590	1.4	ND	32	4.1	ND	
	01/14/98	1.92		6.60	0.00	230 ⁷	ND	ND	ND	ND	ND	ND	
	04/01/98	2.38		6.14	0.00	510 ⁷	ND	ND	ND	ND	ND	4.7	
	07/15/98	3.53		4.99	0.00	140 ¹²	ND	ND	ND	0.56	1.1	ND	
	10/16/98	3.04		5.48	0.00	170 ¹⁵	ND	ND	ND	ND	ND	ND	
	01/25/99	2.92		5.60	0.00	ND ⁹	ND	ND	ND	ND	ND	ND	
	04/15/99	2.40		6.12	0.00	91 ¹²	ND	ND	ND	ND	ND	ND	
	07/14/99	3.03		5.49	0.00	120 ²¹	ND	ND	ND	ND	ND	ND	
	10/21/99	3.11		5.41	0.00	110 ²⁴	ND	ND	ND	ND	ND	ND	
	01/20/00	3.06		5.46	0.00	583 ¹	ND	ND	ND	ND	ND	ND	
	04/13/00	2.84		5.68	0.00	80 ²⁴	ND	ND	ND	ND	ND	ND	
	07/14/00	3.39		5.13	0.00	113 ⁷	ND	ND	ND	ND	ND	ND	
	07/17/01	3.46		5.06	0.00	ND	ND	ND	ND	ND	ND	ND	
	10/01/01	3.51		5.01	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	
	01/31/02	2.75		5.77	0.00	260 ³⁴	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
MW-9	02/21/95	1.98		3.0-13.0	6.31	0.00	71 ²	70 ⁴	ND	ND	ND	ND	--
8.29	05/18/95	3.47			4.82	0.00	ND	52	ND	1.1	ND	1.9	--
	08/17/95	1.49	6.80		0.00	ND	ND	ND	ND	ND	ND	--	
	07/26/96	0.28	8.01		0.00	98	ND	ND	ND	ND	ND	ND	
	10/28/96	1.15	7.14		0.00	99 ¹	ND	ND	ND	ND	ND	7.6	
	01/29/97	1.05	7.24		0.00	54	ND	ND	ND	ND	ND	5.4	
	04/15/97	1.88	6.41		0.00	94 ¹	ND	ND	ND	ND	ND	5.4	
	05/27/97	1.05	7.24		0.00	--	--	--	--	--	--	--	
	07/15/97	1.90	6.39		0.00	ND	ND	ND	ND	ND	ND	ND	
	10/09/97	1.76	6.53		0.00	160 ¹	ND	ND	ND	ND	ND	ND	
	01/14/98	1.26	7.03		0.00	110 ⁷	ND	ND	ND	ND	ND	3.0	

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product								
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-9	04/01/98	0.85	3.0-13.0	7.44	0.00	110 ⁷	ND	ND	ND	ND	ND	ND	ND
(cont)	07/15/98	1.52		6.77	0.00	200 ¹²	ND	ND	ND	ND	ND	ND	ND
	10/16/98	0.81		7.48	0.00	ND	ND	ND	ND	ND	ND	ND	ND
	01/25/99	0.92		7.37	0.00	ND	ND	ND	ND	ND	ND	ND	ND
	04/15/99	0.90		7.39	0.00	ND	75 ¹⁸	21	ND	ND	1.1	680	
	07/14/99	1.04		7.25	0.00	140 ²¹	ND	1.9	ND	ND	ND	260	
	10/21/99	1.23		7.06	0.00	210 ²⁴	ND	ND	ND	ND	ND	170	
	01/20/00	1.18		7.11	0.00	519 ¹	ND	1.1	ND	ND	ND	35	
	04/13/00	1.08		7.21	0.00	81 ²⁵	160 ²³	0.64	ND	ND	ND	53	
	07/14/00	1.43		6.86	0.00	107 ⁷	ND	ND	ND	ND	ND	20.2	
	10/26/00	1.38		6.91	0.00	240 ⁷	240 ²³	2.9	ND	ND	ND	56	
	01/03/01	1.66		6.63	0.00	164 ⁷	166 ²⁷	0.763	0.776	ND	1.28	50.2	
	04/04/01	1.27		7.02	0.00	240 ⁷	296 ²⁷	0.738	ND	ND	0.907	135	
	07/17/01	1.38		6.91	0.00	ND	ND	ND	ND	ND	ND	13	
	10/01/01	1.93		6.36	0.00	<52	51 ¹⁸	<0.50	<0.50	<0.50	<0.50	5.0	
	01/31/02	2.08		6.21	0.00	200³⁴	<50	<0.50	<0.50	<0.50	<0.50	5.8	
MW-10	02/21/95	4.69	3.0-13.0	3.93	0.00	270 ²	1,500	250	26	9.1	160	--	
8.62	05/18/95	4.92		3.70	0.00	75 ¹	810	520	ND	18	23	--	
	08/17/95	4.05		4.57	0.00	ND	67	25	ND	2.4	ND	--	
	07/26/96	4.08		4.54	0.00	ND	ND	3.7	ND	ND	ND	ND	
	10/28/96	4.09		4.53	0.00	ND	ND	1.1	ND	ND	ND	ND	
	01/29/97	2.94		5.68	0.00	ND	210	41	0.67	7.2	4.8	11	
	04/15/97	4.07		4.55	0.00	ND	110	12	ND	0.77	ND	9.7	
	05/27/97	4.40		4.22	0.00	--	--	--	--	--	--	--	
	07/15/97	4.19		4.43	0.00	ND	ND	2.1	ND	0.67	0.73	ND	
	10/09/97	4.75		3.87	0.00	ND	190	38	0.92	6.6	7.6	ND	
	01/14/98	2.66		5.96	0.00	-- ⁸	59	9.5	0.85	1.2	1.7	4.5	
	04/01/98	3.45		5.17	0.00	62 ⁷	230	66	1.7	12	17	6.4	
	07/15/98	4.21		4.41	0.00	78 ¹²	290	98	45	21	38	21	

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product							
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-10	10/16/98	4.11	3.0-13.0	4.51	0.00	ND	160 ¹⁶	44	0.96	2.5	10	17
(cont)	01/25/99	3.26		5.36	0.00	ND	140	27	ND	2.8	6.8	23
	04/15/99	3.63		4.99	0.00	ND	120	18	ND	1.8	5.1	14
	07/14/99	3.89		4.73	0.00	180 ²²	280	55	3.2	11	31	6.1
	10/21/99	4.09		4.53	0.00	96 ⁷	140 ²³	22	0.59	1.7	7.7	5.3
	01/20/00	3.92		4.70	0.00	252 ¹	ND	0.73	0.86	ND	ND	5.2
	04/13/00	3.85		4.77	0.00	69 ²⁴	67 ²³	54	ND	2.6	ND	3.8
	07/14/00	4.18		4.44	0.00	149 ⁷	ND	0.547	ND	ND	ND	ND
	10/26/00	3.96		4.66	0.00	83 ²⁴	ND	3.3	ND	0.83	1.5	ND
	01/03/01	4.14		4.48	0.00	126 ⁷	52.7 ²³	5.15	ND	0.823	1.57	ND
	04/04/01	3.88		4.74	0.00	75 ²⁴	129 ²³	28.1	1.67	4.97	10.1	ND
	07/17/01	4.08		4.54	0.00	ND	ND	4.1	ND	1.0	1.8	ND
	10/01/01	4.22		4.40	0.00	100 ⁷	140 ²³	30	0.51	4.0	12	<5.0
	01/31/02	3.68		4.94	0.00	170 ³⁴	110 ³³	16	<0.50	2.3	5.6	<2.5
Trip Blank												
TB-LB	01/14/98	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	04/01/98	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	07/15/98	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	10/16/98	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	01/25/99	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	04/15/99	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	07/14/99	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	10/21/99	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	01/20/00	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	04/13/00	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	07/14/00	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	10/26/00	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	01/03/01	--	--	--	--	--	ND	ND	ND	ND	ND	ND
	04/04/01	--	--	--	--	--	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
TB-LB	07/17/01	--	--	--	--	--	ND	ND	ND	ND	ND	ND
(cont)	10/01/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	01/31/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 14, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing	TPH-D = Total Petroleum Hydrocarbons as Diesel	(ppb) = Parts per billion
DTW = Depth to Water	TPH-G = Total Petroleum Hydrocarbons as Gasoline	ND = Not Detected
(ft.) = Feet	B = Benzene	-- = Not Measured/Not Analyzed
S. I. = Screen Interval	T = Toluene	
(ft.bgs) = Feet Below Ground Surface	E = Ethylbenzene	
GWE = Groundwater Elevation	X = Xylenes	
(msl) = Mean sea level	MTBE = Methyl tertiary butyl ether	

- * TOC elevations are relative to msl, per the City of Oakland Benchmark #3880, (Elevation = 20.37 feet, msl).
- ** GWE corrected for the presence of free product; correction factor: $[(TOC - DTW) + (Product\ Thickness \times 0.77)]$.
- Elevations were based on the top of the well covers and were surveyed relative to msl, per the City of Oakland Benchmark #3880, (Elevation = 20.37 feet).

- 1 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 2 Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- 3 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 4 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 5 Total Oil and Grease (TOG) was ND.
- 6 The well was obstructed with debris at 0.55 feet. A water sample was collected but was not analyzed as it was considered not representative of groundwater in this well.
- 7 Laboratory report indicates unidentified hydrocarbons C9-C24.
- 8 Sample bottle broken at laboratory.
- 9 Detection limit raised. Refer to analytical reports.
- 10 Laboratory report indicates unidentified hydrocarbons >C14 and <C12.
- 11 Laboratory report indicates gasoline and unidentified hydrocarbons >C8.
- 12 Laboratory report indicates unidentified hydrocarbons >C14.
- 13 Laboratory report indicates non diesel mix >C14.
- 14 Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.
- 15 Laboratory report indicates non diesel mix C9-C27.
- 16 Laboratory report indicates unidentified hydrocarbons <C7.
- 17 Laboratory report indicates unidentified hydrocarbons >C10.
- 18 Laboratory report indicates unidentified hydrocarbons C6-C12.
- 19 Laboratory report indicates unidentified hydrocarbons >C9.
- 20 Laboratory report indicates discrete peaks and unidentified hydrocarbons >C20.

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5043
449 Hegenberger Road
Oakland, California

EXPLANATIONS: (cont)

- 21 Laboratory report indicates discrete peaks and unidentified hydrocarbons >C16.
- 22 Laboratory report indicates unidentified hydrocarbons <C14 and >C16.
- 23 Laboratory report indicates gasoline C6-C12.
- 24 Laboratory report indicates unidentified hydrocarbons >C16.
- 25 Laboratory report indicates discrete peaks.
- 26 MTBE by EPA Method 8260.
- 27 Laboratory report indicates weathered gasoline C6-C12.
- 28 Laboratory report indicates unidentified hydrocarbons <C16.
- 29 Laboratory report indicates unidentified hydrocarbons C9-C40.
- 30 MTBE by EPA Method 8260 was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.
- 31 Laboratory report indicates diesel C9-C24.
- 32 Laboratory report indicates unidentified hydrocarbons C6-C10.
- 33 Laboratory report indicates gasoline C6-C10.
- 34 Laboratory report indicates unidentified hydrocarbons C10-C28.

Table 2
Groundwater Analytical Results - Oxygenate Compounds
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-3	04/13/00	ND	ND	150	ND	ND	ND	ND	ND
MW-6	07/14/00	--	--	ND ¹	--	--	--	--	--
	10/26/00	--	--	43 ²	--	--	--	--	--
	01/03/01	--	--	ND ¹	--	--	--	--	--
	04/04/01	ND ¹	ND ¹	47.8	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹

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 = Ethylene dibromide/1,2-Dibromoethane
 (ppb) = Parts per billion
 ND = Not Detected
 -- = Not Analyzed

¹ Detection limit raised. Refer to analytical reports.

² Laboratory report indicates sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3
Product Thickness/Removal Data
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID	DATE	DTW (ft.)	Product Thickness (ft.)	Amount Bailed (Product + Water) (gallons)
MW-6	07/26/96	6.40	3.33	2.10
	10/28/96	4.10	0.21	0.14
	11/13/96	4.02	0.25	0.09
	11/25/96	4.01	0.75	0.47
	12/04/96	3.65	0.50	0.43
	12/19/96	4.80	2.20	1.02
	01/08/97	4.84	1.75	0.59
	01/14/97	4.51	1.15	0.66
	01/27/97	4.00	1.75	0.78
	01/29/97	3.24	0.31	0.25
	02/11/97	4.65	1.20	0.62
	02/24/97	4.81	1.10	0.50
	03/10/97	4.60	0.95	0.47
	03/17/97	4.50	0.89	0.35
	03/31/97	4.65	1.00	0.50
	04/15/97	4.90	1.03	0.51
	04/28/97	4.78	0.03	0.20
	05/15/97	4.60	0.25	0.20
	05/27/97	4.50	0.25	0.00
	06/09/97	4.60	0.20	0.23
	06/24/97	4.50	0.25	0.25
	07/09/97	4.80	0.60	0.25
	07/15/97	4.63	0.42	0.20
	07/21/97	4.75	0.25	0.27
	08/06/97	4.50	0.10	0.16
	08/20/97	4.55	0.10	0.20
	09/02/97	4.75	0.05	0.12
	10/09/97	4.84	0.04	0.12
	01/14/98 ¹	3.90	0.94	1.50
	02/12/98 ¹	3.35	0.64	0.32
	03/03/98 ¹	4.51	0.02	2.00
	04/01/98 ¹	3.67	1.60	0.50
	05/26/98 ¹	4.11	0.50	0.08
	06/15/98 ¹	5.03	0.30	0.060
	07/15/98 ¹	4.56	0.05	0.10
	08/21/98 ¹	4.77	0.02	0.040
	09/30/98 ¹	5.08	0.03	0.027
	10/16/98 ¹	4.32	2.40	0.98
	11/06/98 ¹	3.98	0.17	0.16
	11/25/98 ¹	3.92	0.10	0.12
	12/28/98 ¹	3.90	0.20	0.14
	01/25/99 ¹	4.18	0.60	0.27
	02/22/99 ¹	4.07	0.22	0.078 product/3.0 water
	03/22/99 ¹	4.32	0.15	0.039 product/5.0 water

Table 3
Product Thickness/Removal Data
 Tosco (Unocal) Service Station #5043
 449 Hegenberger Road
 Oakland, California

WELL ID	DATE	DTW (ft.)	Product Thickness (ft.)	Amount Bailed (Product + Water) (gallons)
MW-6	04/15/99 ¹	4.23	0.95	1.0 product
(cont)	05/28/99 ¹	4.38	0.39	0.141 product/1.0 water
	06/29/99 ¹	4.12	0.02	0.054 product/8.0 water
	07/14/99 ¹	4.20	0.03	0.039 product/2.0 water
	08/23/99 ¹	4.51	0.24	0.094 product/1.0 water
	09/30/99 ¹	4.17	0.17	0.141 product/1.0 water
	10/21/99 ¹	4.27	0.12	0.070 product/1.0 water
	11/29/99 ²	4.18	<0.01	0.0078 product/1.0 water
	12/20/99 ²	4.26	0.01	0.0156 product/1.0 water
	01/20/00 ²	4.31	<0.01	0.00
	02/26/00	3.98	0.00	0.00
	03/31/00	4.14	0.00	0.00
	04/13/00	4.04	0.00	0.00
	05/26/00	4.41	0.00	0.00
	06/17/00	4.35	0.00	0.00
	07/14/00	4.47	<0.01	<1 ounce
	08/24/00	3.71	0.00	0.00
	09/27/00	4.33	0.00	0.00
	10/26/00	4.32	0.00	0.00
	01/03/01	4.52	0.00	0.00
	04/04/01	4.29	0.00	0.00
	07/17/01	4.37	0.00	0.00
	10/01/01	4.45	0.00	0.00
	01/31/02	4.03	0.00	0.00

EXPLANATIONS:

Product Thickness/Removal Data prior to January 14, 1998, were compiled from reports prepared by MPDS Services, Inc.

DTW = Depth to Water

(ft.) = Feet

¹ Skimmer present in well.

² No skimmer found in well.

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.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5043
Address: 449 Heegenberger Rd.
City: Oakland

Job#: 180065
Date: 1-31-02
Sampler: Joe

Well ID MW-3
Well Diameter 2 in.
Total Depth 13.95 ft.
Depth to Water 2.27 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

11.68 x VF 0.17 = 1.99 x 3 (case volume) = Estimated Purge Volume: 6 (gal.)

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

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

Starting Time: 9:15
Sampling Time: 9:40 AM (0940)
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear/cold
Water Color: clear Odor: mild
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)
9:24	2	7.27	3.66	65.0			
9:27	4	7.37	3.61	65.0			
9:31	6	7.34	3.58	64.7			

LABORATORY INFORMATION

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

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5043
Address: 449 Heegenberger Rd.
City: Oakland

Job#: 180065
Date: 1-31-02
Sampler: Joe

Well ID MW-6
Well Diameter 2 in.
Total Depth 12.70 ft.
Depth to Water 4.03 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

8.67 x VF 0.17 = 1.47 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: 7:00
Sampling Time: 7:14 AM (0714)
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear/cold
Water Color: clear Odor: yes
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^0$	Temperature $^{\circ}\text{C}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>7:06</u>	<u>1</u>	<u>6.65</u>	<u>1.51</u>	<u>65.1</u>	_____	_____	_____
<u>7:10</u>	<u>3</u>	<u>6.62</u>	<u>1.42</u>	<u>65.4</u>	_____	_____	_____
<u>7:12</u>	<u>4.5</u>	<u>6.71</u>	<u>1.44</u>	<u>65.3</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>1 Amb</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5043 Job#: 180065
Address: 449 Heegenberger Rd. Date: 1-31-02
City: Oakland Sampler: Joe

Well ID MW-7 Well Condition: O.K.
Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)
Total Depth 13.18 ft.
Depth to Water 3.88 ft.

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

9.3 X VF 0.17 = 1.58 X 3 (case volume) = Estimated Purge Volume: 5 (gal.)

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

Starting Time: 2:10 Weather Conditions: clear/cold
Sampling Time: 8:25 AM (0825) Water Color: clear Odor: none
Purging Flow Rate: 0.3 gpm Sediment Description: _____
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>8:10</u>	<u>1.5</u>	<u>7.76</u>	<u>11.95</u>	<u>67.0</u>			
<u>8:12</u>	<u>3</u>	<u>7.41</u>	<u>11.20</u>	<u>65.8</u>			
<u>8:15</u>	<u>5</u>	<u>7.38</u>	<u>11.27</u>	<u>65.2</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>3YOA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>1 Amb</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5043
Address: 449 Heegenberger Rd.
City: Oakland

Job#: 180065
Date: 1-31-02
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 14.82 ft.

Depth to Water 2.75 ft.

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

12.07 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: 7:17
Sampling Time: 7:42 AM (0742)
Purging Flow Rate: 0.3 gpm
Did well de-water? _____

Weather Conditions: clear/cold
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>7:25</u>	<u>2</u>	<u>7.40</u>	<u>9.22</u>	<u>64.4</u>	_____	_____	_____
<u>7:28</u>	<u>4</u>	<u>7.32</u>	<u>9.17</u>	<u>64.8</u>	_____	_____	_____
<u>7:31</u>	<u>6.5</u>	<u>7.31</u>	<u>9.25</u>	<u>64.9</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-8</u>	<u>3Yok</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>1 Amb</u>	<u>"</u>	<u>←</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility # 5043 Job#: 180065
 Address: 449 Heegenberger Rd. Date: 1-31-02
 City: Oakland Sampler: Joe

Well ID MW-9 Well Condition: O.K.
 Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)
 Total Depth 12.48 ft.
 Depth to Water 2.08 ft.

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

10.4 X VF 0.17 = 1.77 X 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

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

Starting Time: 8:42 Weather Conditions: clear/cold
 Sampling Time: 9:06 AM (0906) Water Color: clear Odor: none
 Purging Flow Rate: _____ 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)
<u>8:50</u>	<u>1.5</u>	<u>7.63</u>	<u>6.59</u>	<u>64.6</u>			
<u>8:52</u>	<u>3</u>	<u>7.60</u>	<u>6.64</u>	<u>65.0</u>			
<u>8:55</u>	<u>5.5</u>	<u>7.57</u>	<u>6.72</u>	<u>65.2</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>3YOA</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>1 Amb.</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5043
Address: 449 Hegenberger Rd.
City: Oakland

Job#: 180065
Date: 1-31-02
Sampler: Joe

Well ID: MW-10
Well Diameter: 2 in.
Total Depth: 1277 ft.
Depth to Water: 3.68 ft.

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

9.09 x VF 0.17 = 1.55 x 3 (case volume) = Estimated Purge Volume: 5 (gal.)

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

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

Starting Time: 9:47
Sampling Time: 10:05 AM (1005)
Purging Flow Rate: 4.5 gpm.
Did well de-water? _____

Weather Conditions: clear/cold
Water Color: clear Odor: yes
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:53</u>	<u>1.5</u>	<u>7.21</u>	<u>4.40</u>	<u>65.7</u>	_____	_____	_____
<u>9:55</u>	<u>3</u>	<u>7.25</u>	<u>4.94</u>	<u>65.2</u>	_____	_____	_____
<u>9:58</u>	<u>5</u>	<u>7.18</u>	<u>4.96</u>	<u>65.6</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-10</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE</u>
	<u>1 Amb</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>TPHD</u>

COMMENTS: _____



**Sequoia
Analytical**

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

19 February, 2002

Deanna Harding
Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin, CA 94568

RECEIVED

FEB 21 2002

GETTLER-RYAN INC.
GENERAL CONTRACTORS

RE: Tosco #5043, Oakland, Ca
Sequoia Report: MLB0034

Enclosed are the results of analyses for samples received by the laboratory on 01/31/02 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210



Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin CA, 94568

Project: Tosco #5043, Oakland, Ca
Project Number: 449 Hegenberger Rd.
Project Manager: Deanna Harding

Reported:
02/19/02 09:06

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	MLB0034-01	Water	01/31/02 00:00	01/31/02 18:00
MW-3	MLB0034-02	Water	01/31/02 09:40	01/31/02 18:00
MW-6	MLB0034-03	Water	01/31/02 07:14	01/31/02 18:00
MW-7	MLB0034-04	Water	01/31/02 08:25	01/31/02 18:00
MW-8	MLB0034-05	Water	01/31/02 07:42	01/31/02 18:00
MW-9	MLB0034-06	Water	01/31/02 09:06	01/31/02 18:00
MW-10	MLB0034-07	Water	01/31/02 10:05	01/31/02 18:00

Sequoia Analytical - Morgan Hill

James Hartley, Project Manager

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.



Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin CA, 94568

Project: Tosco #5043, Oakland, Ca
Project Number: 449 Hegenberger Rd.
Project Manager: Deanna Harding

Reported:
02/19/02 09:06

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (MLB0034-01) Water Sampled: 01/31/02 00:00 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2B12002	02/12/02	02/12/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	70-130		"	"	"	"	
MW-3 (MLB0034-02) Water Sampled: 01/31/02 09:40 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	250	100	ug/l	2	2B14003	02/14/02	02/14/02	8015Bm/8021B	P-03
Benzene	3.5	1.0	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	110	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.1 %	70-130		"	"	"	"	
MW-6 (MLB0034-03) Water Sampled: 01/31/02 07:14 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	230000	50000	ug/l	1000	2B12002	02/12/02	02/12/02	8015Bm/8021B	P-03
Benzene	2400	500	"	"	"	"	"	"	
Toluene	1800	500	"	"	"	"	"	"	
Ethylbenzene	5400	500	"	"	"	"	"	"	
Xylenes (total)	16000	500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2500	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.2 %	70-130		"	"	"	"	



Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin CA, 94568

Project: Tosco #5043, Oakland, Ca
Project Number: 449 Hegenberger Rd.
Project Manager: Deanna Harding

Reported:
02/19/02 09:06

Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (MLB0034-04) Water Sampled: 01/31/02 08:25 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2B12002	02/12/02	02/12/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.4 %	70-130		"	"	"	"	
MW-8 (MLB0034-05) Water Sampled: 01/31/02 07:42 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2B12002	02/12/02	02/12/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.0 %	70-130		"	"	"	"	
MW-9 (MLB0034-06) Water Sampled: 01/31/02 09:06 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	2B12002	02/12/02	02/12/02	8015Bm/8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	5.8	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		98.4 %	70-130		"	"	"	"	



Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin CA, 94568

Project: Tosco #5043, Oakland, Ca
Project Number: 449 Hegenberger Rd.
Project Manager: Deanna Harding

Reported:
02/19/02 09:06

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-10 (MLB0034-07) Water Sampled: 01/31/02 10:05 Received: 01/31/02 18:00									
Gasoline Range Organics (C6-C10)	110	50	ug/l	1	2B12002	02/12/02	02/12/02	8015Bm/8021B	P-01
Benzene	16	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	2.3	0.50	"	"	"	"	"	"	
Xylenes (total)	5.6	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		<i>101 %</i>	<i>70-130</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	

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Reported:
 02/19/02 09:06

Diesel Hydrocarbons (C10-C28) by 8015B modified Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MLB0034-02) Water Sampled: 01/31/02 09:40 Received: 01/31/02 18:00									
Diesel Range Organics (C10-C28)	250	51	ug/l	1	2B07022	02/07/02	02/08/02	8015Bm	D-15
<i>Surrogate: n-Octacosane</i>		103 %	50-150		"	"	"	"	
MW-6 (MLB0034-03) Water Sampled: 01/31/02 07:14 Received: 01/31/02 18:00									
Diesel Range Organics (C10-C28)	11000	1000	ug/l	20	2B07022	02/07/02	02/09/02	8015Bm	D-15
<i>Surrogate: n-Octacosane</i>		194 %	50-150		"	"	"	"	S-06
MW-7 (MLB0034-04) Water Sampled: 01/31/02 08:25 Received: 01/31/02 18:00									
Diesel Range Organics (C10-C28)	90	53	ug/l	1	2B08013	02/08/02	02/09/02	8015Bm	D-15
<i>Surrogate: n-Octacosane</i>		94.1 %	50-150		"	"	"	"	HT-08
MW-8 (MLB0034-05) Water Sampled: 01/31/02 07:42 Received: 01/31/02 18:00									
Diesel Range Organics (C10-C28)	260	53	ug/l	1	2B08013	02/08/02	02/09/02	8015Bm	D-15
<i>Surrogate: n-Octacosane</i>		105 %	50-150		"	"	"	"	HT-08
MW-9 (MLB0034-06) Water Sampled: 01/31/02 09:06 Received: 01/31/02 18:00									
Diesel Range Organics (C10-C28)	200	51	ug/l	1	2B08013	02/08/02	02/09/02	8015Bm	D-15
<i>Surrogate: n-Octacosane</i>		104 %	50-150		"	"	"	"	HT-08
MW-10 (MLB0034-07) Water Sampled: 01/31/02 10:05 Received: 01/31/02 18:00									
Diesel Range Organics (C10-C28)	170	52	ug/l	1	2B08013	02/08/02	02/09/02	8015Bm	D-15
<i>Surrogate: n-Octacosane</i>		101 %	50-150		"	"	"	"	



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Reported:
02/19/02 09:06

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2B12002 - EPA 5030B [P/T]

Blank (2B12002-BLK1)

Prepared & Analyzed: 02/12/02

Gasoline Range Organics (C6-C10)	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	2.5	"							
Surrogate: a,a,a-Trifluorotoluene	9.84		"	10.0		98.4	70-130			

LCS (2B12002-BS1)

Prepared & Analyzed: 02/12/02

Benzene	10.5	0.50	ug/l	10.0		105	70-130			
Toluene	10.7	0.50	"	10.0		107	70-130			
Ethylbenzene	10.9	0.50	"	10.0		109	70-130			
Xylenes (total)	32.7	0.50	"	30.0		109	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.98		"	10.0		99.8	70-130			

LCS (2B12002-BS2)

Prepared & Analyzed: 02/12/02

Gasoline Range Organics (C6-C10)	265	50	ug/l	250		106	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.55		"	10.0		95.5	70-130			

Matrix Spike (2B12002-MS1)

Source: MLB0034-06

Prepared & Analyzed: 02/12/02

Gasoline Range Organics (C6-C10)	548	50	ug/l	550	ND	99.6	60-140			
Benzene	11.1	0.50	"	6.60	ND	168	60-140			QM-07
Toluene	40.9	0.50	"	39.7	ND	103	60-140			
Ethylbenzene	9.92	0.50	"	9.20	ND	108	60-140			
Xylenes (total)	47.7	0.50	"	46.1	ND	103	60-140			
Surrogate: a,a,a-Trifluorotoluene	10.4		"	10.0		104	70-130			

Matrix Spike Dup (2B12002-MSD1)

Source: MLB0034-06

Prepared & Analyzed: 02/12/02

Gasoline Range Organics (C6-C10)	570	50	ug/l	550	ND	104	60-140	3.94	25	
Benzene	11.6	0.50	"	6.60	ND	176	60-140	4.41	25	QM-07
Toluene	42.4	0.50	"	39.7	ND	107	60-140	3.60	25	
Ethylbenzene	10.4	0.50	"	9.20	ND	113	60-140	4.72	25	
Xylenes (total)	49.6	0.50	"	46.1	ND	108	60-140	3.91	25	
Surrogate: a,a,a-Trifluorotoluene	10.3		"	10.0		103	70-130			

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Reported:
 02/19/02 09:06

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEXM by EPA 8021B - Quality Control
 Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 2B14003 - EPA 5030B [P/T]
Blank (2B14003-BLK1)

Prepared & Analyzed: 02/14/02

Gasoline Range Organics (C6-C10)	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	2.5	"							

Surrogate: a,a,a-Trifluorotoluene

9.78

"

10.0

97.8

70-130

LCS (2B14003-BS1)

Prepared & Analyzed: 02/14/02

Benzene	10.4	0.50	ug/l	10.0		104	70-130			
Toluene	9.86	0.50	"	10.0		98.6	70-130			
Ethylbenzene	9.20	0.50	"	10.0		92.0	70-130			
Xylenes (total)	28.1	0.50	"	30.0		93.7	70-130			

Surrogate: a,a,a-Trifluorotoluene

10.0

"

10.0

100

70-130

LCS (2B14003-BS2)

Prepared & Analyzed: 02/14/02

Gasoline Range Organics (C6-C10)	273	50	ug/l	250		109	70-130			
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Surrogate: a,a,a-Trifluorotoluene

11.6

"

10.0

116

70-130

Matrix Spike (2B14003-MS1)

Source: MLB0181-01

Prepared & Analyzed: 02/14/02

Gasoline Range Organics (C6-C10)	591	50	ug/l	550	ND	107	60-140			
Benzene	8.57	0.50	"	6.60	ND	130	60-140			
Toluene	34.6	0.50	"	39.7	ND	87.2	60-140			
Ethylbenzene	7.78	0.50	"	9.20	ND	84.6	60-140			
Xylenes (total)	38.6	0.50	"	46.1	ND	83.7	60-140			

Surrogate: a,a,a-Trifluorotoluene

12.6

"

10.0

126

70-130

Matrix Spike Dup (2B14003-MSD1)

Source: MLB0181-01

Prepared & Analyzed: 02/14/02

Gasoline Range Organics (C6-C10)	614	50	ug/l	550	ND	112	60-140	3.82	25	
Benzene	9.03	0.50	"	6.60	ND	137	60-140	5.23	25	
Toluene	37.0	0.50	"	39.7	ND	93.2	60-140	6.70	25	
Ethylbenzene	8.25	0.50	"	9.20	ND	89.7	60-140	5.86	25	
Xylenes (total)	40.7	0.50	"	46.1	ND	88.3	60-140	5.30	25	

Surrogate: a,a,a-Trifluorotoluene

12.3

"

10.0

123

70-130



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Project Manager: Deanna Harding

Reported:
02/19/02 09:06

**Diesel Hydrocarbons (C10-C28) by 8015B modified - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2B07022 - EPA 3510B										
Blank (2B07022-BLK1) Prepared: 02/07/02 Analyzed: 02/08/02										
Diesel Range Organics (C10-C28)	ND	50	ug/l							
Surrogate: n-Octacosane	37.1		"	50.0		74.2	50-150			
LCS (2B07022-BS1) Prepared: 02/07/02 Analyzed: 02/08/02										
Diesel Range Organics (C10-C28)	430	50	ug/l	500		86.0	60-140			
Surrogate: n-Octacosane	38.1		"	50.0		76.2	50-150			
LCS Dup (2B07022-BSD1) Prepared: 02/07/02 Analyzed: 02/08/02										
Diesel Range Organics (C10-C28)	392	50	ug/l	500		78.4	60-140	9.25	50	
Surrogate: n-Octacosane	36.1		"	50.0		72.2	50-150			
Batch 2B08013 - EPA 3510B										
Blank (2B08013-BLK1) Prepared & Analyzed: 02/08/02										
Diesel Range Organics (C10-C28)	ND	50	ug/l							
Surrogate: n-Octacosane	41.3		"	50.0		82.6	50-150			
LCS (2B08013-BS1) Prepared: 02/08/02 Analyzed: 02/09/02										
Diesel Range Organics (C10-C28)	546	50	ug/l	500		109	60-140			
Surrogate: n-Octacosane	43.6		"	50.0		87.2	50-150			
LCS Dup (2B08013-BSD1) Prepared: 02/08/02 Analyzed: 02/09/02										
Diesel Range Organics (C10-C28)	387	50	ug/l	500		77.4	60-140	34.1	50	
Surrogate: n-Octacosane	34.3		"	50.0		68.6	50-150			



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Reported:
02/19/02 09:06

Notes and Definitions

- D-15 Chromatogram Pattern: Unidentified Hydrocarbons C10-C28
- HT-08 EPA 8015B recommends a 7 day holding time. However, according to the 14 day holding time referenced in the California LUFT manual, the results are valid and useful for their intended purpose.
- P-01 Chromatogram Pattern: Gasoline C6-C10
- P-03 Chromatogram Pattern: Unidentified Hydrocarbons C6-C10
- QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- S-06 The recovery of this surrogate is outside control limits due to sample dilution which was required by high analyte concentration in the sample and/or matrix interference.
- 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