GETTLER-RYAN INC.

December 20, 1999
G-R Job #180065

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

RE: Fourth Quarter 1999 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5043
449 Hegenberger Road
Oakland, California

Dear Mr. De Witt:

This report documents the monthly site visits and the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On August 23, and September 30, 1999, field personnel monitored one well (MW-6). On October 21, 1999, field personnel monitored six wells (MW-3, MW-6, MW-7, MW-8, MW-9, and MW-10) and sampled five wells (MW-3, MW-7, MW-8, MW-9 and MW-10) at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were present in one well (MW-6). Static water level data and groundwater elevations are summarized in Table 1. Product Thickness/Removal Data is summarized in Table 2. A Potentiometric Map is included as Figure 1.

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

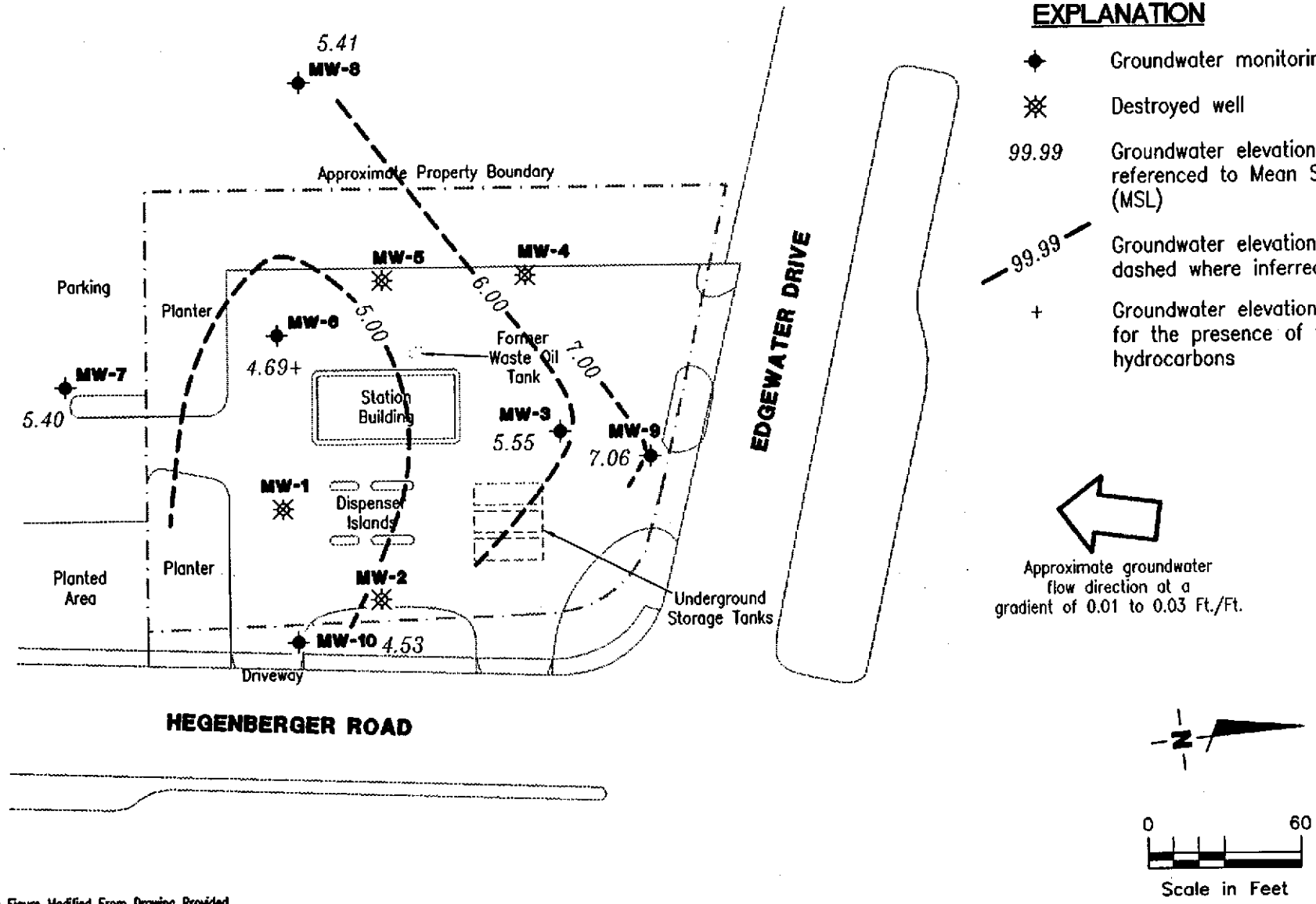
Sincerely,

Deanna L. Harding
Project Coordinator

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

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

Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Product Thickness/Removal Data
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
5043.qml Chain of Custody Document and Laboratory Analytical Reports



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

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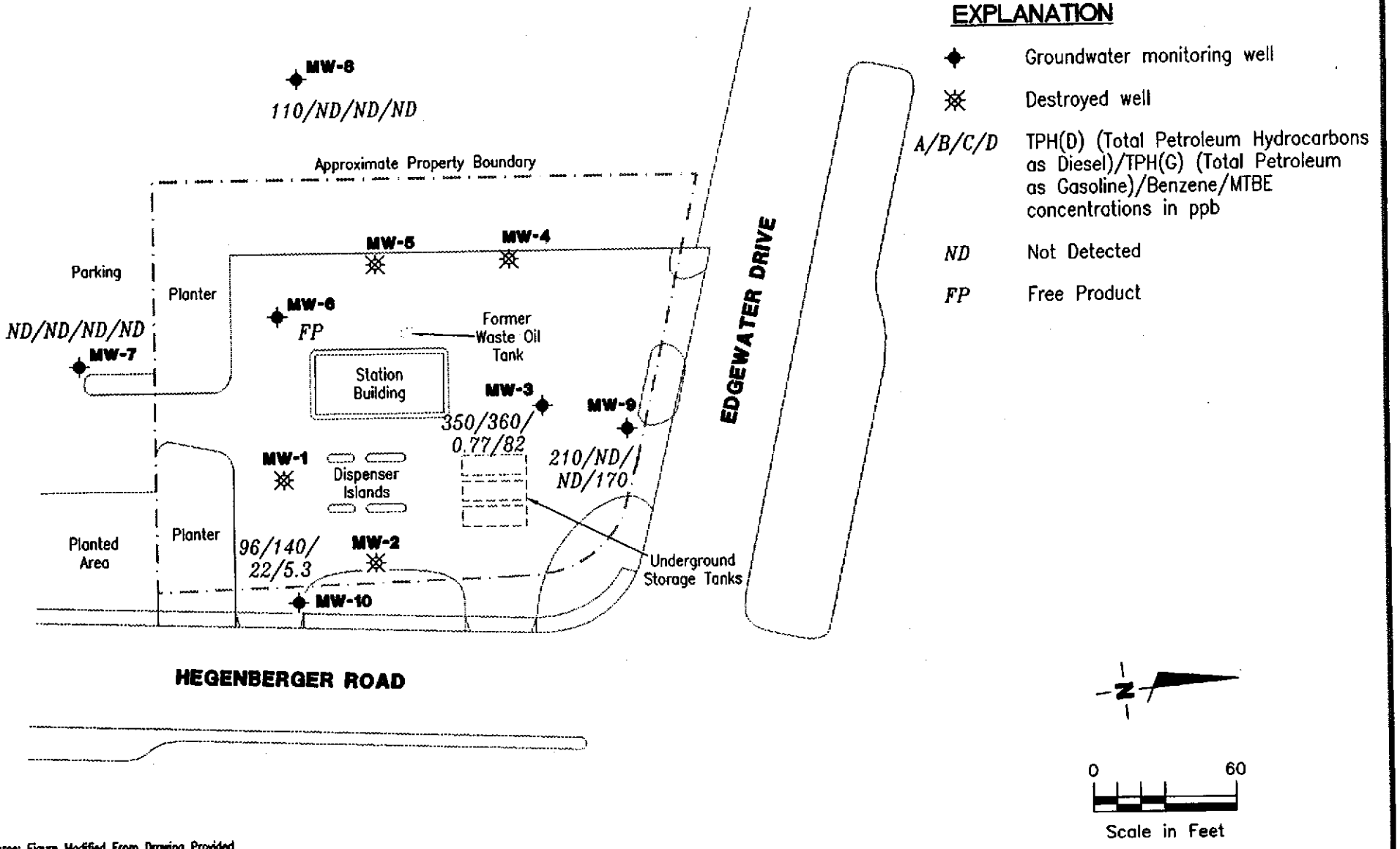
Dublin, CA 94568

POTENTIOMETRIC MAP
Tosco (Unocal) Service Station No. 5043
449 Hegenberger Road
Oakland, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180065		October 21, 1999	



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

FIGURE

2

Gettler - Ryan Inc.

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Dublin, CA 94568
(925) 551-7555

CONCENTRATION MAP
Tosco (Unocal) Service Station No. 5043
449 Hegenberger Road
Oakland, California

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180065		October 21, 1999	

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043

449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	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					--	--
	05/18/95	DESTROYED (3/95)	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--
	08/15/94	3.25	5.33	0.00	2,800[2]	35,000	2,400	850	1,700	15,000	--
	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	--
	05/18/95	DESTROYED (3/95)	--	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043

449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	02/18/92	--	--	--	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
	01/14/98	2.16	5.88	0.00	340[7]	310	ND	ND	0.62	0.65	140
	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**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043

449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
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	--	--	--	--	--	--	--
	08/15/94	4.27	4.14	0.00	72[2]	59[4]	ND	0.6	ND	ND	--
	11/14/94	4.05	4.36	0.00	ND	130[4]	ND	ND	ND	ND	--
	02/21/95	DESTROYED (1/95)	--	--	--	--	--	--	--	--	--
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	--
	02/21/95	DESTROYED (1/95)	--	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043

449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6	08/31/92	--	--	--	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	--
	05/18/95	INACCESSIBLE	--	--	--	--	--	--	--	--	--
	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	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043

449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6	07/15/97	4.63	4.56**	0.42	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT					--	--
(cont)	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					--	--
	02/12/98	3.35	6.01**	0.64	--	--	--	--	--	--	--
	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**					--	--
MW-7	05/27/97	4.50	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

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Groundwater Monitoring Data and Analytical Results

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449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-7	01/14/98	2.88	5.95	0.00	65[7]	ND	ND	ND	ND	ND	36
(cont)	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**
MW-8	05/27/97	3.42	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**
MW-9	02/21/95	1.98	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.)	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	7.44	0.00	110[7]	ND	ND	ND	ND	ND	ND
(cont)	07/15/98	1.52	6.77	0.00	200[12]	ND	ND	ND	ND	ND	ND
	10/16/98	0.81	7.48	0.00	ND	ND	ND	ND	ND	ND	ND
	01/25/99	0.92	7.37	0.00	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**
MW-10	02/21/95	4.69	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
	10/16/98	4.11	4.51	0.00	ND	160[16]	44	0.96	2.5	10	17
	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**
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

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5043

449 Hegenberger Road

Oakland, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
TB-LB	01/25/99	--	--	--	--	ND	ND	ND	ND	ND	ND
(cont)	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**

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

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

ppb = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed
TOG = Total Oil and Grease

* TOC elevations are relative to msl, per the City of Oakland Benchmark #3880 (Elevation = 20.37 feet msl).

** Groundwater elevation corrected for the presence of free product [(TOC-DTW)+(Product Thickness x 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 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.

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.

Table 2

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
	04/15/99[1]	4.23	0.95	1.0 product

Table 2

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	05/28/99[1]	4.38	0.39	0.141 product/1.0 water
(cont)	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**

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.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

After water levels are collected and prior to sampling, 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 Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

TOSCO (UNOCAL) SS#5043
OAKLAND, CA

MONITORING
EVENT OF AUGUST 23, 1999

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # 5043 Job#: _____

Address: 449 Hegenberger Rd. Date: 8-23-99

City: Oakland Sampler: Joe

Well ID MW-6 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0.24 (feet) Amount Bailed (product/water): 12 ounces FP & 9. water (Gallons)

Total Depth 12.75 ft.

Depth to Water 4.51 ft.

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

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

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

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

Starting Time: _____ Weather Conditions: _____

Sampling Time: _____ Water Color: _____ Odor: _____

Purging Flow Rate: _____ gpm. Sediment Description: _____

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
		Y		~~SEQUOIA~~	~~TPH(G)/btex/mtbe~~

COMMENTS: Approximately 12 ounces of FP removed from skimmer and well.

TOSCO (UNOCAL) SS#5043
OAKLAND, CA

MONITORING
EVENT OF SEPTEMBER 30, 1999

WELL MONITORING/SAMPLING

FIELD DATA SHEET

Client/ Facility #5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 9-30-99

City: Oakland Sampler: Joe

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

Well Diameter 2 in. Hydrocarbon Thickness: 0.17 (feet) Amount Bailed (product/water): 16 ounces - skimmer 2 ounces - well 1 g. water (Gallons)

Total Depth 12.75 ft.

Depth to Water 4.17 ft.

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

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

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

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

Starting Time: _____ Weather Conditions: _____

Sampling Time: _____ Water Color: _____ Odor: _____

Purging Flow Rate: _____ gpm. Sediment Description: _____

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
		✓		~~SEQUOIA~~	~~TPH(G)/btex/mtbe~~

COMMENTS: A total of 18 ounces of FP removed from well.

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TOSCO (UNOCAL) SS#5043
OAKLAND, CA

MONITORING & SAMPLING
EVENT OF OCTOBER 21, 1999

WELL MONITORING/SAMPLING

FIELD DATA SHEET

Client/ Facility #5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 10-21-99

City: Oakland, CA. Sampler: Joe

Well ID MW-3 Well Condition: O.K.

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

Total Depth 14.07 ft.

Depth to Water 2.49 ft.

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

11.58 x VF 0.17 = 1.97 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: 8:48 Weather Conditions: Hot

Sampling Time: 9:08 A.m Water Color: clear Odor: yes

Purging Flow Rate: 0.5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:55	2	7.53	3.07	65.9			
8:51	4	7.17	3.14	66.3			
8:59	6	7.14	3.17	66.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
	1 Amb	"	"	"	TPHD

COMMENTS: _____

FIELD DATA SHEET

Client/
Facility # 5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 10-21-99

City: Oakland, CA. Sampler: Joe

Well ID MW-6 Well Condition: O.K.

Well Diameter 2 in. Hydrocarbon Thickness: 0.12 (feet) Amount Bailed (product/water): 7 ounces - skimmer, 2 ounces - well, 19. water (Gallons)

Total Depth 12.75 ft.

Depth to Water 4.27 ft.

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

_____ X VF 0.17 = _____ 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: Hot

Sampling Time: _____ Water Color: clear Odor: _____

Purging Flow Rate: _____ gpm. Sediment Description: none

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
"	1 Amb	"	"	"	TPHD

COMMENTS: A total of 9 g. of product removed from well. Put product/w. water into dedicated drum on site.

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FIELD DATA SHEET

Client/
Facility # 5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 10-21-99

City: Oakland, CA. Sampler: Joe

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

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

Total Depth 13.15 ft.

Depth to Water 3.43 ft.

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

9.72 x VF 0.17 = 1.65 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: 7:10 Weather Conditions: Hot

Sampling Time: 9:30 a.m. Water Color: clear Odor: none

Purging Flow Rate: 0.5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 10^0	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
7:16	1.5	7.51	6.77	66.5			
7:18	3	7.46	6.80	66.2			
7:20	5	7.49	6.81	66.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
	1 Amb	"	—	"	TPHD

COMMENTS: _____

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FIELD DATA SHEET

Client/
Facility #5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 10-21-99

City: Oakland, CA. Sampler: Joe

Well ID MW-8 Well Condition: O.K.

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

Total Depth 14.82 ft.

Depth to Water 3.11 ft.

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

11.71 x VF 0.17 = 2.00 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: 7:42 Weather Conditions: Hot

Sampling Time: 8:05AM Water Color: clear Odor: none

Purging Flow Rate: @ 5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
7:50	2	7.51	8.14	66.5			
7:52	4	7.42	8.12	66.2			
7:54	6	7.45	8.16	66.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
	1 Amb	"	—	"	TPHD

COMMENTS: _____

FIELD DATA SHEET

Client/
Facility # 5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 10-21-99

City: Oakland, CA. Sampler: Joe

Well ID MW-9 Well Condition: O.K.

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

Total Depth 11.98 ft.

Depth to Water 1.23 ft.

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

10.75 x VF 0.17 = 1.83 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: 8:15 Weather Conditions: Hot

Sampling Time: 8:36 Am Water Color: clear Odor: none

Purging Flow Rate: 0.5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
8:22	1.5	7.69	7.50	66.3			
8:24	3	7.22	7.60	66.0			
8:26	5.5	2.26	7.64	66.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
	1 Amb	"	"	"	TPHD

COMMENTS: _____

9/97-fieldat.frm

FIELD DATA SHEET

Client/
Facility # 5043 Job#: 180065

Address: 449 Hegenberger Rd. Date: 10-21-99

City: Oakland, CA. Sampler: Joe

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

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

Total Depth 12.80 ft.

Depth to Water 4.09 ft.

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

8.71 X VF 0.17 = 1.48 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: 9:15 Weather Conditions: Hot

Sampling Time: 9:35 A.m Water Color: clear Odor: none

Purging Flow Rate: 0.5 gpm. Sediment Description: none

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

Time	Volume (gal.)	pH	Conductivity µmhos/cm X 100	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
9:25	1.5	7.41	5.60	65.9			
9:27	3	7.43	5.66	66.1			
9:28	4.5	7.47	5.68	66.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	3 VOA	Y	HCL	SEQUOIA	TPH(G)/btex/mtbe
	1 Amb	"	"	"	TPHD

COMMENTS: _____

TOSCO

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

Facility Number: UNOCAL SS# 5043
Facility Address: 449 Hegenberger Road, Oakland, CA
Consultant Project Number: 180065.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone): 510-551-7555 (Fax Number): 510-551-7888

Contact (Name):
(Phone): 925-277-2384
Laboratory Name: Sequoia Analytical
Laboratory Release Number: W910484
Samples Collected by (Name): JOE KJEMIAN
Collection Date: 10-21-99
Signature:

DO NOT BILL TB-LB ANALYSIS

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab Composite C = Discrete D	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8020)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
TB-LB	01A	3VOA	W	G	-	HCl	Y	✓								
MW-3	02A-D	3VOA 1AMB	"	"	9:08 A.M	"	"	✓	✓							
MW-7	03	"	"	"	7:30 A.M	"	"	✓	✓							
MW-8	04	"	"	"	8:05 A.M	"	"	✓	✓							
MW-9	05	"	"	"	8:36 A.M	"	✓	✓	✓							
MW-10	06	"	"	"	9:35 A.M	"	"	✓	✓							

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	10-21-99 3:30 P.M.	Melissa D. Guillen		1530 10-21-99
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	SEQ	10/22/99		CBC	10-22-1300
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
	CBC	1022			10/22 16:30

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

Sequoia Analytical

404 N. Wiget Lane
Walnut Creek, CA 94598
(925) 988-9600
FAX (925) 988-9673

Gettler Ryan, Inc. - Dublin	Project: Unocal	
6747 Sierra Court Suite J	Project Number: Unocal # 5043	**Reported:**
Dublin CA, 94568	Project Manager: Deanna L. Harding	16-Nov-99 08:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W910484-01	Water	21-Oct-99 00:00	21-Oct-99 15:30
MW-3	W910484-02	Water	21-Oct-99 09:08	21-Oct-99 15:30
MW-7	W910484-03	Water	21-Oct-99 07:30	21-Oct-99 15:30
MW-8	W910484-04	Water	21-Oct-99 08:05	21-Oct-99 15:30
MW-9	W910484-05	Water	21-Oct-99 08:36	21-Oct-99 15:30
MW-10	W910484-06	Water	21-Oct-99 09:35	21-Oct-99 15:30

Julianne Fegley, Project Manager

Sequoia Analytical

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Gettler Ryan, Inc. - Dublin	Project: Unocal	
6747 Sierra Court Suite J	Project Number: Unocal # 5043	**Reported:**
Dublin CA, 94568	Project Manager: Deanna L. Harding	16-Nov-99 08:52

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (W910484-01) Water Sampled: 21-Oct-99 00:00 Received: 21-Oct-99 15:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	9J29003	29-Oct-99	29-Oct-99	EPA 8015M/8020	
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		*90.0 %*		*70-130*	"	"	"	"	
MW-3 (W910484-02) Water Sampled: 21-Oct-99 09:08 Received: 21-Oct-99 15:30									**P-01**
Purgeable Hydrocarbons	**360**	50	ug/l	1	9K03001	03-Nov-99	03-Nov-99	EPA 8015M/8020	
Benzene	**0.77**	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**82**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*110 %*		*70-130*	"	"	"	"	
MW-7 (W910484-03) Water Sampled: 21-Oct-99 07:30 Received: 21-Oct-99 15:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	9J29003	29-Oct-99	29-Oct-99	EPA 8015M/8020	
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		*86.7 %*		*70-130*	"	"	"	"	

Julianne Fegley, Project Manager

Sequoia Analytical

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Gettler Ryan, Inc. - Dublin	Project: Unocal	
6747 Sierra Court Suite J	Project Number: Unocal # 5043	**Reported:**
Dublin CA, 94568	Project Manager: Deanna L. Harding	16-Nov-99 08:52

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 (W910484-04) Water Sampled: 21-Oct-99 08:05 Received: 21-Oct-99 15:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	9J29003	29-Oct-99	29-Oct-99	EPA	
Benzene	ND	0.50	"	"	"	"	"	8015M/8020	
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		*83.3 %*		*70-130*	"	"	"	"	
MW-9 (W910484-05) Water Sampled: 21-Oct-99 08:36 Received: 21-Oct-99 15:30									
Purgeable Hydrocarbons	ND	50	ug/l	1	9J29003	29-Oct-99	29-Oct-99	EPA	
Benzene	ND	0.50	"	"	"	"	"	8015M/8020	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**170**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*96.7 %*		*70-130*	"	"	"	"	
MW-10 (W910484-06) Water Sampled: 21-Oct-99 09:35 Received: 21-Oct-99 15:30									**P-01**
Purgeable Hydrocarbons	**140**	50	ug/l	1	9J29003	29-Oct-99	29-Oct-99	EPA	
Benzene	**22**	0.50	"	"	"	"	"	8015M/8020	
Toluene	**0.59**	0.50	"	"	"	"	"	"	
Ethylbenzene	**1.7**	0.50	"	"	"	"	"	"	
Xylenes (total)	**7.7**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**5.3**	2.5	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*83.3 %*		*70-130*	"	"	"	"	

Julianne Fegley, Project Manager

Sequoia Analytical

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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Unocal Project Number: Unocal # 5043 Project Manager: Deanna L. Harding	**Reported:** 16-Nov-99 08:52

Diesel Hydrocarbons (C9-C24) by DHS LUFT

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (W910484-02) Water	**Sampled: 21-Oct-99 09:08**	**Received: 21-Oct-99 15:30**							
Diesel Range Hydrocarbons	**350**	63	ug/l	1	9K01009	01-Nov-99	05-Nov-99	EPA 8015M	D-14
Surrogate: n-Pentacosane		*106 %*	*50-150*		"	"	"	"	
MW-7 (W910484-03) Water	**Sampled: 21-Oct-99 07:30**	**Received: 21-Oct-99 15:30**							
Diesel Range Hydrocarbons	ND	63	ug/l	1	9K01009	01-Nov-99	05-Nov-99	EPA 8015M	
Surrogate: n-Pentacosane		*72.1 %*	*50-150*		"	"	"	"	
MW-8 (W910484-04) Water	**Sampled: 21-Oct-99 08:05**	**Received: 21-Oct-99 15:30**							
Diesel Range Hydrocarbons	**110**	63	ug/l	1	9K01009	01-Nov-99	05-Nov-99	EPA 8015M	D-12
Surrogate: n-Pentacosane		*84.1 %*	*50-150*		"	"	"	"	
MW-9 (W910484-05) Water	**Sampled: 21-Oct-99 08:36**	**Received: 21-Oct-99 15:30**							
Diesel Range Hydrocarbons	**210**	63	ug/l	1	9K01009	01-Nov-99	06-Nov-99	EPA 8015M	D-12
Surrogate: n-Pentacosane		*200 %*	*50-150*		"	"	"	"	*S-04*
MW-10 (W910484-06) Water	**Sampled: 21-Oct-99 09:35**	**Received: 21-Oct-99 15:30**							
Diesel Range Hydrocarbons	**96**	63	ug/l	1	9K01009	01-Nov-99	05-Nov-99	EPA 8015M	D-14
Surrogate: n-Pentacosane		*84.1 %*	*50-150*		"	"	"	"	

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Sequoia Analytical

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Gettler Ryan, Inc. - Dublin	Project: Unocal	
6747 Sierra Court Suite J	Project Number: Unocal # 5043	**Reported:**
Dublin CA, 94568	Project Manager: Deanna L. Harding	16-Nov-99 08:52

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9J29003: Prepared 29-Oct-99 Using EPA 5030B [P/T]										
Blank (9J29003-BLK1)										
Purgeable Hydrocarbons	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	*31.4*		"	*30.0*		*105*	*70-130*			
LCS (9J29003-BS1)										
Benzene	22.3	0.50	ug/l	20.0		111	70-130			
Toluene	23.0	0.50	"	20.0		115	70-130			
Ethylbenzene	23.7	0.50	"	20.0		119	70-130			
Xylenes (total)	72.5	0.50	"	60.0		121	70-130			
Surrogate: a,a,a-Trifluorotoluene	*30.6*		"	*30.0*		*102*	*70-130*			
LCS Dup (9J29003-BSD1)										
Benzene	21.6	0.50	ug/l	20.0		108	70-130	3.19	20	
Toluene	22.1	0.50	"	20.0		111	70-130	3.99	20	
Ethylbenzene	22.2	0.50	"	20.0		111	70-130	6.54	20	
Xylenes (total)	68.8	0.50	"	60.0		115	70-130	5.24	20	
Surrogate: a,a,a-Trifluorotoluene	*27.3*		"	*30.0*		*91.0*	*70-130*			
Matrix Spike (9J29003-MS1)					**Source: W910461-01**					
Benzene	15.4	0.50	ug/l	20.0	ND	77.0	70-130			
Toluene	13.2	0.50	"	20.0	ND	66.0	70-130			
Ethylbenzene	12.0	0.50	"	20.0	ND	60.0	70-130			
Xylenes (total)	66.0	0.50	"	60.0	ND	110	70-130			
Surrogate: a,a,a-Trifluorotoluene	*25.9*		"	*30.0*		*86.3*	*70-130*			

Julianne Fegley, Project Manager

Sequoia Analytical

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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568	Project: Unocal Project Number: Unocal # 5043 Project Manager: Deanna L. Harding	**Reported:** 16-Nov-99 08:52

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9J29003: Prepared 29-Oct-99 Using EPA 5030B [P/T]										
Matrix Spike Dup (9J29003-MSD1)					**Source: W910461-01**					
Benzene	17.4	0.50	ug/l	20.0	ND	87.0	70-130	12.2	20	
Toluene	16.9	0.50	"	20.0	ND	84.5	70-130	24.6	20	
Ethylbenzene	17.1	0.50	"	20.0	ND	85.5	70-130	35.1	20	
Xylenes (total)	61.0	0.50	"	60.0	ND	102	70-130	7.87	20	
Surrogate: a,a,a-Trifluorotoluene	*26.5*		"	*30.0*		*88.3*	*70-130*			
Batch 9K03001: Prepared 03-Nov-99 Using EPA 5030B [P/T]										
Blank (9K03001-BLK1)										
Purgeable Hydrocarbons	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	*27.7*		"	*30.0*		*92.3*	*70-130*			
LCS (9K03001-BS1)										
Benzene	22.7	0.50	ug/l	20.0		114	70-130			
Toluene	20.8	0.50	"	20.0		104	70-130			
Ethylbenzene	23.0	0.50	"	20.0		115	70-130			
Xylenes (total)	74.0	0.50	"	60.0		123	70-130			
Surrogate: a,a,a-Trifluorotoluene	*26.1*		"	*30.0*		*87.0*	*70-130*			
LCS Dup (9K03001-BSD1)										
Benzene	22.3	0.50	ug/l	20.0		111	70-130	1.78	20	
Toluene	20.4	0.50	"	20.0		102	70-130	1.94	20	
Ethylbenzene	22.5	0.50	"	20.0		113	70-130	2.20	20	
Xylenes (total)	73.0	0.50	"	60.0		122	70-130	1.36	20	
Surrogate: a,a,a-Trifluorotoluene	*25.8*		"	*30.0*		*86.0*	*70-130*			

Julianne Fegley, Project Manager

Sequoia Analytical

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Gettler Ryan, Inc. - Dublin	Project: Unocal	
6747 Sierra Court Suite J	Project Number: Unocal # 5043	**Reported:**
Dublin CA, 94568	Project Manager: Deanna L. Harding	16-Nov-99 08:52

Diesel Hydrocarbons (C9-C24) by DHS LUFT - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9K01009: Prepared 01-Nov-99 Using EPA 3510B										
Blank (9K01009-BLK1)										
Diesel Range Hydrocarbons	ND	50	ug/l							
Surrogate: n-Pentacosane	*18.3*		"	*33.3*		*55.0*	*50-150*			
LCS (9K01009-BS1)										
Diesel Range Hydrocarbons	378	50	ug/l	500		75.6	60-140			
Surrogate: n-Pentacosane	*24.7*		"	*33.3*		*74.2*	*50-150*			
LCS Dup (9K01009-BSD1)										
Diesel Range Hydrocarbons	373	50	ug/l	500		74.6	60-140	1.33	50	
Surrogate: n-Pentacosane	*22.0*		"	*33.3*		*66.1*	*50-150*			

Julianne Fegley, Project Manager

Sequoia Analytical

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Gettler Ryan, Inc. - Dublin	Project: Unocal	
6747 Sierra Court Suite J	Project Number: Unocal # 5043	**Reported:**
Dublin CA, 94568	Project Manager: Deanna L. Harding	16-Nov-99 08:52

Notes and Definitions

D-12	Chromatogram Pattern: Unidentified Hydrocarbons > C16
D-14	Chromatogram Pattern: Unidentified Hydrocarbons C9-C24
P-01	Chromatogram Pattern: Gasoline C6-C12
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

Marian Fegley
: Fegley, Project Manager