



GETTLER-RYAN INC.

TRANSMITTAL

February 19, 1999

G-R #:180105

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

CC: Mr. Doug Lee
Gettler-Ryan Inc.
Dublin, California

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

RE: Tosco (Unocal) SS #3292
15008 East 14th Street
San Leandro, California

RECEIVED
FEBRUARY 23 1999
11:30 AM
TOSCO - UNOCAL

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 11, 1999	Groundwater Monitoring and Sampling Report Fourth Quarter 1998 - Event of November 12, 1998

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 **March 4, 1999**, this report will be distributed to the following:

Enclosure

cc: Mr. Scott Seery Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, California 94501

agency/3292dbd.qnt



GETTLER-RYAN INC.

February 11, 1999
G-R Job #180105

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

RE: Fourth Quarter 1998 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On November 12, 1998, field personnel monitored and sampled thirteen wells (MW-1 through MW-11, MW-2(SP) and MW-3(SP)) at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations for the referenced site are summarized in Table 1 and Dissolved Oxygen Concentrations are summarized in Table 2. Joint Groundwater Monitoring Data are summarized in Tables 3 and 4. 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
Deanna L. Harding
Project Coordinator

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



- Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Dissolved Oxygen Concentrations
Table 3: Joint Groundwater Monitoring Data - Former Mobil Facility
Table 4: Joint Groundwater Monitoring Data - Chevron Facility
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

3292.qml

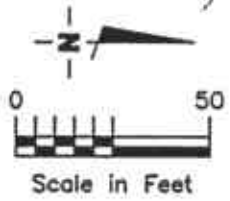
HESPERIAN BOULEVARD

150TH AVENUE

EAST 14TH STREET

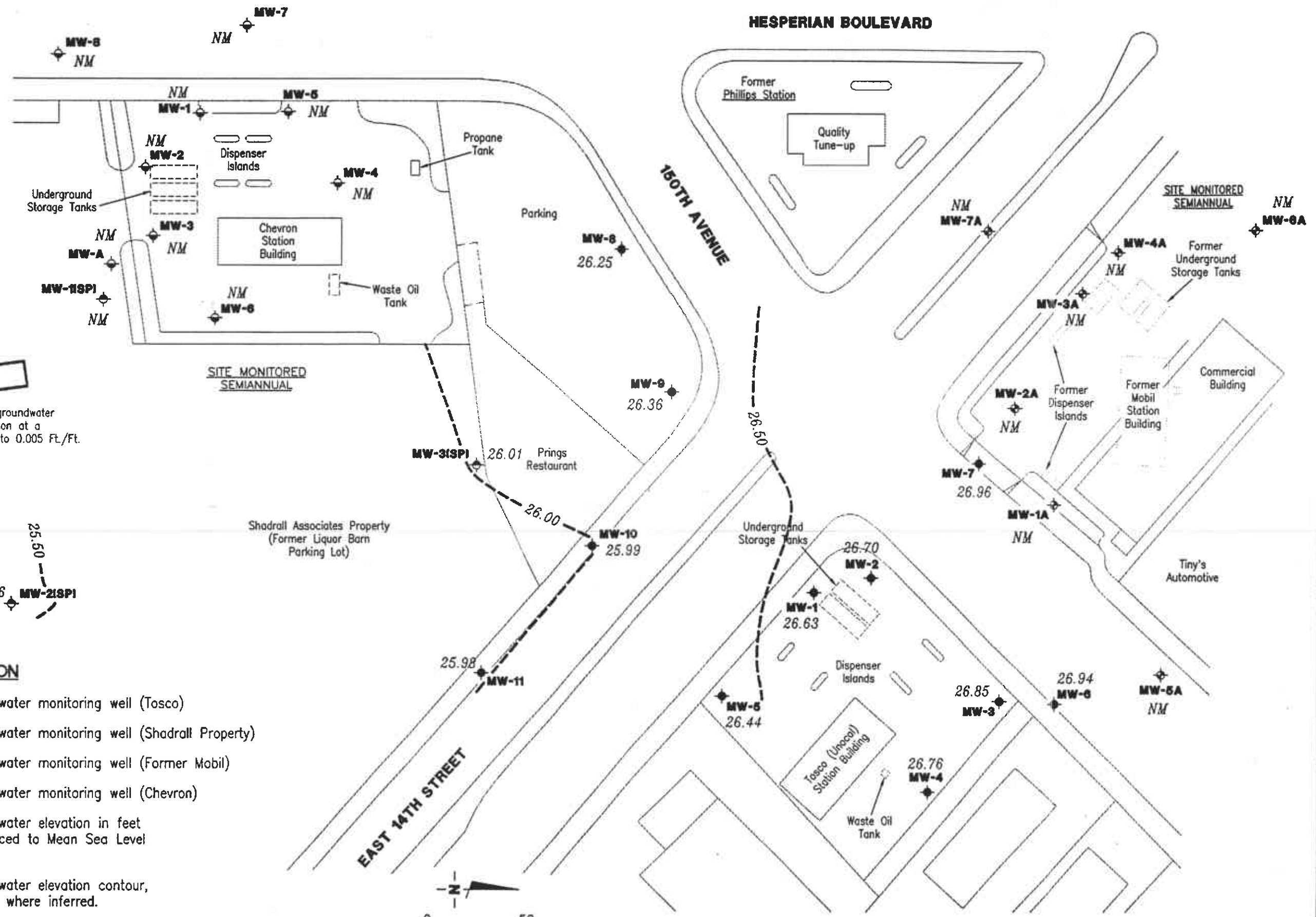
EXPLANATION

- ◆ Groundwater monitoring well (Tosco)
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- - - 99.99 Groundwater elevation contour, dashed where inferred.
- NM Not Monitored



←

Approximate groundwater flow direction at a gradient of 0.002 to 0.005 Ft./Ft.



POTENTIOMETRIC MAP
 Tosco (Unocal) Service Station No. 3292
 15008 East 14th Street
 San Leandro, California

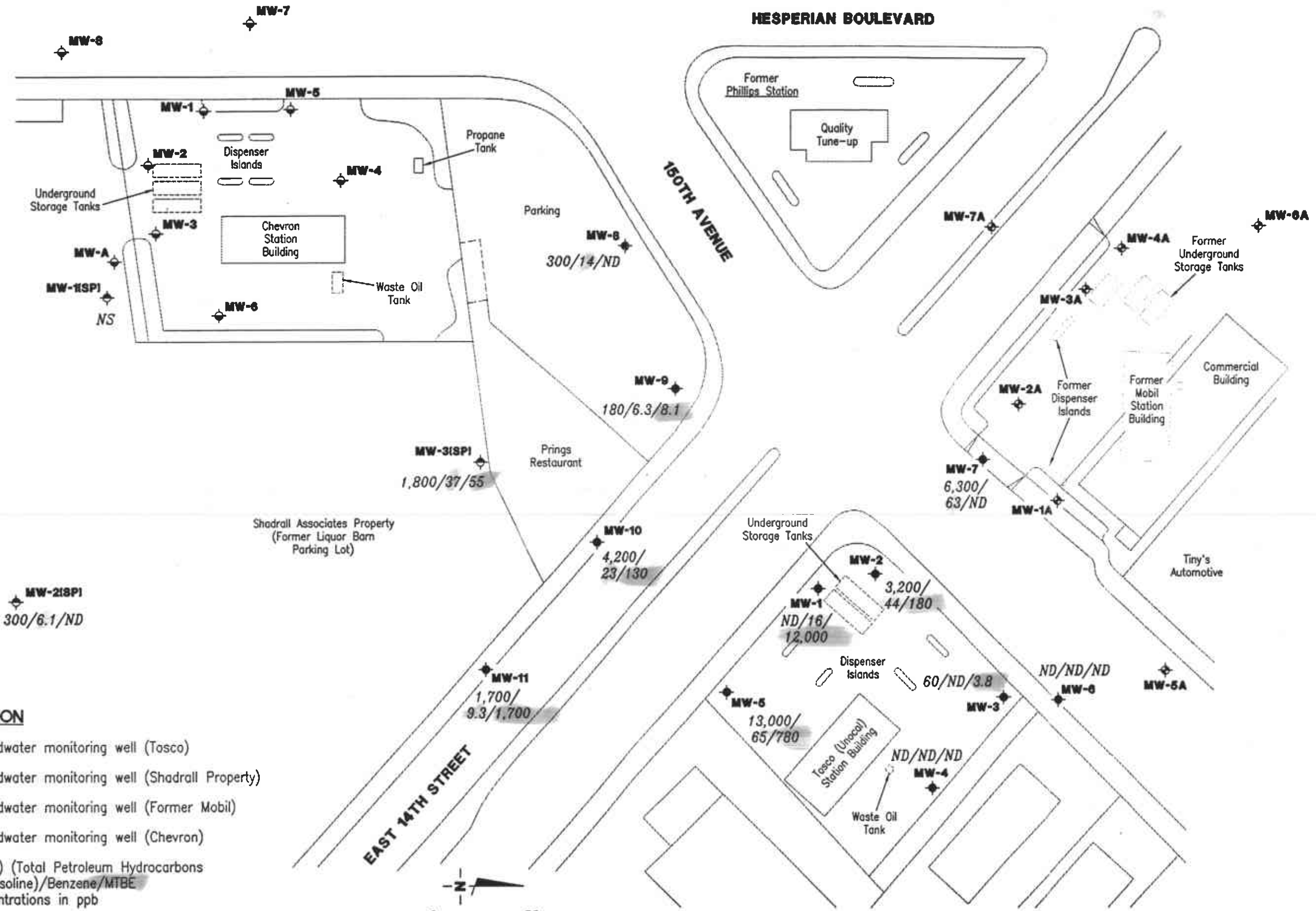
Gottler - Ryan Inc.
 6747 Sierra Ct., Suite J
 Dublin, CA 94568
 (925) 551-7555



REVIEWED BY: DATE: November 12, 1998

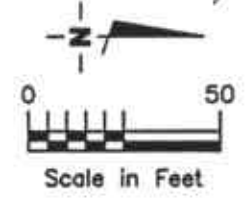
JOB NUMBER: 180105

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



EXPLANATION

- ◆ Groundwater monitoring well (Tosco)
- ◆ Groundwater monitoring well (Shadrall Property)
- ◆ Groundwater monitoring well (Former Mobil)
- ◆ Groundwater monitoring well (Chevron)
- A/B/C TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/Benzene/MTBE concentrations in ppb
- ND Not Detected
- NS Not Sampled



CONCENTRATION MAP
 Tosco (Unocal) Service Station No. 3292
 15008 East 14th Street
 San Leandro, California

Gettler - Ryan Inc.
 6747 Sierra Ct., Suite J
 Dublin, CA 94568
 (925) 551-7555



DATE: November 12, 1998
 REVISION DATE: November 12, 1998
 JOB NUMBER: 180105

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

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-1	05/04/91	--	--	31,000	74	20	920	1,500	--	
	09/19/91	--	--	26,000	130	16	1,300	1,800	--	
	12/18/91	--	--	17,000	160	20	1,400	1,600	--	
	03/17/92	--	--	23,000	320	19	1,000	940	--	
	05/19/92	--	--	29,000	650	370	1,100	1,200	--	
	08/20/92	--	--	18,000	230	22	640	950	--	
36.72	09/16/92	13.67	23.05	--	--	--	--	--	--	
	10/12/92	14.07	22.65	--	--	--	--	--	--	
	11/10/92	13.96	22.76	18,000	220	ND	690	830	--	
	12/10/92	13.15	23.57	--	--	--	--	--	--	
	01/15/93	10.02	26.70	--	--	--	--	--	--	
	02/20/93	9.01	27.71	19,000	190	ND	880	620	--	
	03/18/93	9.48	27.24	--	--	--	--	--	--	
	04/20/93	9.15	27.57	--	--	--	--	--	--	
	05/21/93	9.80	26.92	27,000	150	200	1,200	950	--	
	06/22/93	10.33	26.39	--	--	--	--	--	--	
	07/23/93	10.79	25.93	--	--	--	--	--	--	
	08/23/93	11.27	25.45	24,000	160	110	840	810	--	
	36.37	09/24/93	11.35	25.02	--	--	--	--	--	--
		11/23/93	11.84	24.53	18,000	210	63	900	620	--
02/24/94		9.45	26.92	18,000	74	30	940	480	--	
05/25/94 ³		10.45	25.92	6,400	72	ND	170	67	--	
08/23/94		11.98	24.39	24,000	130	57	970	320	--	
11/23/94		11.17	25.20	23,000	180	44	970	270	--	
02/03/95		8.01	28.36	20,000	77	17	950	390	--	
05/10/95		8.51	27.86	16,000	230	27	880	630	--	
08/02/95		10.00	26.37	18,000	190	ND	860	590	--	
11/02/95		11.11	25.26	--	--	--	--	--	--	
11/20/95 ⁴		11.19	25.18	20,000	180	ND	960	450	970	
02/08/96		7.74	28.63	15,000	43	16	940	410	5,200	
05/08/96		8.50	27.87	16,000	37	16	930	410	1,600	
08/09/96		9.72	26.65	2,300	25	ND	77	39	1,200	
11/07/96	10.74	25.63	38,000	140	ND	1,900	5,600	ND		
02/10-11/97	7.92	28.45	7,300	91	ND	170	68	1,700		
05/07/97	9.24	27.13	11,000	120	ND	470	110	1,200		
08/05/97	10.20	26.17	530 ¹	5.9	ND	5.6	ND	430		

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Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	11/04/97	10.71	25.66	4,100	50	7.0	64	14	97
(cont)	02/12/98	6.27	30.10	8,500	160	ND ⁷	550	ND ⁷	1,900
36.34	05/15/98	7.62	28.72	5,600	57	ND ⁷	290	ND ⁷	1,500
	08/12/98	8.85	27.49	ND ⁷	ND ⁷	ND ⁷	ND ⁷	ND ⁷	5,800
	11/12/98	9.71	26.63	ND ⁷	16	ND ⁷	ND ⁷	ND ⁷	12,000/13,000 ¹²
MW-2	05/04/91	--	--	19,000	6.6	1.4	460	630	--
	09/19/91	--	--	19,000	100	6.8	790	310	--
	12/18/91	--	--	10,000	110	5.1	420	96	--
	03/17/92	--	--	16,000	110	ND	730	220	--
	05/19/92	--	--	17,000	140	87	680	170	--
	08/20/92	--	--	13,000	52	ND	660	70	--
36.89	09/16/92	13.80	23.09	--	--	--	--	--	--
	10/12/92	14.19	22.70	--	--	--	--	--	--
	11/10/92	14.06	22.83	11,000	36	7.2	570	45	--
	12/10/92	13.21	23.68	--	--	--	--	--	--
	01/15/93	10.12	26.77	--	--	--	--	--	--
	02/20/93	9.07	27.82	1,500	2.9	3.8	9.1	ND	--
	03/18/93	9.55	27.34	--	--	--	--	--	--
	04/20/93	9.19	27.70	--	--	--	--	--	--
	05/21/93	9.84	27.05	9,500	37	ND	470	62	--
	06/22/93	10.37	26.52	--	--	--	--	--	--
	07/23/93	10.83	26.06	--	--	--	--	--	--
	08/23/93	11.30	25.59	15,000	110	ND	590	64	--
36.34	09/24/93	11.14	25.20	--	--	--	--	--	--
	11/23/93	11.69	24.65	11,000	80	10	480	20	--
	02/24/94 ⁵	9.27	27.07	11,000	44	ND	580	32	--
	05/25/94	10.30	26.04	11,000	50	ND	400	22	--
	08/23/94	11.82	24.52	12,000	45	10	360	20	--
	11/23/94	10.97	25.37	15,000	61	24	440	ND	--
	02/03/95	7.87	28.47	9,700	5.7	ND	250	10	--
	05/10/95	8.38	27.96	7,500	56	4.7	310	33	--
	08/02/95	9.36	26.98	8,200	53	22	220	25	--
	11/02/95	10.95	25.39	5,000	56	4.5	170	7.7	110
	02/08/96	7.52	28.82	7,200	ND	ND	170	ND	ND

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Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-2 (cont)	05/08/96	8.21	28.13	8,400	5.6	9.0	170	10	130	
	08/09/96	9.54	26.80	3,100	24	ND	80	ND	64	
	11/07/96	10.69	25.65	36,000	140	ND	1,900	5,600	ND	
	02/10-11/97	7.75	28.59	4,600	27	ND	53	ND	ND	
	05/07/97	9.14	27.20	5,300	61	ND	78	20	180	
	08/05/97	10.23	26.11	3,100	35	ND	13	ND	58	
	11/04/97	10.65	25.69	1,200	16	ND	11	25	53	
	02/12/98	6.20	30.14	630	12	ND ⁷	7.3	ND ⁷	48	
	36.30	05/15/98	7.50	28.80	3,600	19	ND ⁷	33	ND ⁷	72
08/12/98		8.82	27.48	3,100	44	6.1	15	5.7	270	
11/12/98		9.60	26.70	3,200 ¹³	44	ND ⁷	15	ND ⁷	180	
MW-3	05/04/91	--	--	9,100	2.0	ND	55	180	--	
	09/19/91	--	--	7,600	ND	13	190	170	--	
	12/18/91	--	--	5,900	54	6.4	110	64	--	
	03/17/92	--	--	5,800	66	7.5	100	58	--	
	05/19/92	--	--	3,400	25	3.6	66	41	--	
	08/20/92	--	--	4,500	58	ND	65	35	--	
	36.84	09/16/92	13.74	23.10	--	--	--	--	--	--
		10/12/92	14.13	22.71	--	--	--	--	--	--
		11/10/92	14.03	22.81	3,400	37	ND	85	34	--
12/10/92		13.15	23.69	--	--	--	--	--	--	
01/15/93		10.07	26.77	--	--	--	--	--	--	
02/20/93		9.02	27.82	1,600	12	18	8.9	12	--	
03/18/93		9.50	27.34	--	--	--	--	--	--	
04/20/93		9.02	27.82	--	--	--	--	--	--	
05/21/93		9.70	27.14	2,600	42	ND	43	15	--	
36.42	06/22/93	10.28	26.56	--	--	--	--	--	--	
	07/23/93	10.74	26.10	--	--	--	--	--	--	
	08/23/93	11.24	25.60	2,900	25	ND	50	18	--	
	09/24/93	11.20	25.22	--	--	--	--	--	--	
	11/23/93	11.78	24.64	2,300	34	ND	24	5.6	--	
	02/24/94	9.21	27.21	3,400	46	ND	53	11	--	
	05/25/94	10.34	26.08	1,400	20	ND	ND	ND	--	
	08/23/94	11.88	24.54	2,900	37	49	14	2.9	--	

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Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-3 (cont)	11/23/94	10.98	25.44	3,200	48	ND	22	ND	--	
	02/03/95	7.82	28.60	780	13	ND	2.1	ND	--	
	05/10/95	8.38	28.04	1,300	ND	ND	ND	ND	--	
	08/02/95	9.49	26.93	1,500	6.3	ND	16	2.1	--	
	11/02/95	11.00	25.42	1,100	5.2	2.1	7.4	0.5	15	
	02/08/96	7.41	29.01	450	ND	ND	ND	ND	ND	
	05/08/96	8.20	28.22	590	ND	11	10	ND	ND	
	08/09/96	9.53	26.89	ND	ND	ND	ND	ND	ND	
	11/07/96	10.96	25.46	140	1.2	ND	ND	ND	5.6	
	02/10-11/97	7.71	28.71	89	1.8	ND	ND	ND	ND	
	05/07/97	9.17	27.25	52 ²	ND	ND	ND	5.1	5.1	
	08/05/97	10.27	26.15	ND	ND	ND	ND	ND	ND	
	11/04/97	10.83	25.59	93	1.8	ND	ND	ND	6.2	
	02/12/98	6.00	30.42	56	0.59	ND	ND	ND	2.7	
	36.42	05/15/98	7.42	29.00	130 ⁸	0.68	ND	ND	0.63	10
08/12/98		8.84	27.58	50	ND	ND	ND	ND	ND	
11/12/98		9.57	26.85	60 ¹³	ND	ND	ND	ND	3.8	
MW-4	05/04/91	--	--	6,300	ND	ND	2.8	61	--	
	09/19/91	--	--	1,800	0.83	ND	54	46	--	
	12/18/91	--	--	2,500	28	2.5	54	22	--	
	03/17/92	--	--	1,800	3.7	1.4	90	21	--	
	05/19/92	--	--	2,000	20	3.5	42	8.3	--	
	08/20/92	--	--	1,000	15	ND	11	3.0	--	
	37.40	09/16/92	14.31	23.09	--	--	--	--	--	--
		10/12/92	14.72	22.68	--	--	--	--	--	--
		11/10/92	14.57	22.83	690	9.1	ND	16	2.8	--
		12/10/92	13.67	23.73	--	--	--	--	--	--
		01/15/93	10.62	26.78	--	--	--	--	--	--
		02/20/93	9.59	27.81	2,400	40	2.1	33	ND	--
		03/18/93	9.97	27.43	--	--	--	--	--	--
		04/20/93	9.67	27.73	--	--	--	--	--	--
		05/21/93	10.32	27.08	1,900	31	ND	20	4.5	--
06/22/93	10.91	26.49	--	--	--	--	--	--		

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4	07/23/93	11.38	26.02	--	--	--	--	--	--
(cont)	08/23/93	11.86	25.54	1,200	5.0	ND	16	ND	--
37.04	09/24/93	11.85	25.19	--	--	--	--	--	--
	11/23/93	12.44	24.60	720	10	ND	8.7	ND	--
	02/24/94	9.89	27.15	1,300	8.9	ND	20	ND	--
	05/25/94	11.02	26.02	1,700	22	ND	4.5	ND	--
	08/23/94	12.57	24.47	690	9.2	1.3	7.1	1.9	--
	11/23/94	11.65	25.39	420	5.0	1.1	4.2	1.2	--
	02/03/95	8.52	28.52	620	6.4	ND	9.3	ND	--
	05/10/95	9.97	27.07	280	2.8	ND	2.7	2.4	--
	08/02/95	10.18	26.86	290	3.6	ND	2.8	ND	--
	11/02/95	11.67	25.37	42,000	390	210	2,800	6,300	270
	02/08/96	8.15	28.89	130	2.1	ND	1.5	0.69	ND
	05/08/96	INACCESSIBLE	--	--	--	--	--	--	--
	08/09/96	10.24	26.80	ND	ND	ND	ND	ND	ND
	11/07/96	11.58	25.46	ND	ND	ND	ND	ND	ND
	02/10-11/97	8.45	28.59	ND	ND	ND	ND	ND	ND
	05/07/97	9.85	27.19	ND	ND	ND	ND	ND	ND
	08/05/97	11.04	26.00	50	0.76	ND	ND	ND	ND
	11/04/97	11.46	25.58	ND	ND	ND	ND	ND	ND
	02/12/98	5.75	31.29	ND	ND	ND	ND	ND	ND
37.04	05/15/98	7.28	29.76	ND	ND	ND	ND	ND	ND
	08/12/98	9.85	27.19	ND	ND	ND	ND	ND	ND
	11/12/98	10.28	26.76	ND	ND	ND	ND	ND	ND
MW-5	05/04/91	--	--	69,000	1,400	2,500	3,500	15,000	--
	09/19/91	--	--	57,000	1,600	2,700	5,200	20,000	--
	12/18/91	--	--	31,000	1,600	3,100	4,800	19,000	--
	03/17/92	--	--	81,000	850	1,600	4,800	18,000	--
	05/19/92	--	--	84,000	760	1,500	4,000	17,000	--
	08/20/92	--	--	58,000	660	1,700	4,200	19,000	--
36.40	09/16/92	13.37	23.03	--	--	--	--	--	--
	10/12/92	13.75	22.65	--	--	--	--	--	--
	11/10/92	13.68	22.72	57,000	800	1,800	4,400	18,000	--
	12/10/92	12.58	23.82	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5 (cont)	01/15/93	9.71	26.69	--	--	--	--	--	--
	02/20/93	8.69	27.71	17,000	75	ND	1,000	620	--
	03/18/93	9.16	27.24	--	--	--	--	--	--
	04/20/93	8.88	27.52	--	--	--	--	--	--
	05/21/93	9.56	26.84	55,000	ND	160	3,500	12,000	--
	06/22/93	10.05	26.35	--	--	--	--	--	--
	07/23/93	10.53	25.87	--	--	--	--	--	--
	08/23/93	10.98	25.42	61,000	340	380	3,600	14,000	--
35.94	09/24/93	10.94	25.00	--	--	--	--	--	--
	11/23/93	11.45	24.49	46,000	290	310	4,100	15,000	--
	02/24/94	9.02	26.92	57,000	140	400	4,400	16,000	--
	05/25/94	10.03	25.91	53,000	ND	ND	4,000	14,000	--
	08/23/94	11.57	24.37	61,000	360	380	4,800	17,000	--
	11/23/94	10.71	25.23	46,000	230	260	3,900	14,000	--
	02/03/95	7.69	28.25	56,000	140	330	3,500	13,000	--
	05/10/95	8.20	27.74	27,000	160	170	2,200	5,200	--
	08/02/95	9.23	26.71	65,000	260	300	3,500	12,000	--
	11/02/95	10.70	25.24	240	0.76	ND	1.1	ND	ND
	02/08/96	7.36	28.58	54,000	210	150	3,400	12,000	170
	05/08/96	8.25	27.69	52,000	170	200	3,600	11,000	170
	08/09/96	9.37	26.57	25,000	54	16	1,700	4,700	ND
	11/07/96	10.65	25.29	2,100	42	ND	9.3	ND	2,300
	02/10-11/97	7.63	28.31	15,000	46	29	1,400	4,100	ND
	05/07/97	8.98	26.96	38,000	120	ND	2,000	5,100	380
	08/05/97	11.08	24.86	310	1.0	ND	17	40	ND
	11/04/97	10.72	25.22	20,000	ND	ND	1,500	2,800	280
	02/12/98	6.08	29.86	33,000	120	ND ⁷	1,700	3,800	ND ⁷
35.92	05/15/98	7.40	28.52	30,000	ND ⁷	ND ⁷	2,200	4,900	ND ⁷
	08/12/98	8.69	27.23	24,000	100	ND ⁷	ND ⁷	3,400	1,000
	11/12/98	9.48	26.44	13,000 ¹³	65	ND ⁷	1,100	1,400	780
MW-6	05/19/92	--	--	1,300	2.0	2.1	ND	2.7	--
	08/20/92	--	--	280	8.4	ND	0.51	0.84	--
36.03	09/16/92	12.91	23.12	--	--	--	--	--	--
	10/12/92	13.28	22.75	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6	11/10/92	13.18	22.85	490	7.0	1.2	1.7	ND	--
(cont)	12/10/92	12.33	23.70	--	--	--	--	--	--
	01/15/93	9.25	26.78	--	--	--	--	--	--
	02/20/93	8.24	27.79	2,400	43	ND	33	2.0	--
	03/18/93	8.74	27.29	--	--	--	--	--	--
	04/20/93	8.12	27.91	--	--	--	--	--	--
	05/21/93	8.83	27.20	940	18	1.0	7.1	2.7	--
	06/22/93	9.38	26.65	--	--	--	--	--	--
	07/23/93	9.87	26.16	--	--	--	--	--	--
	08/23/93	10.35	25.68	1,000	9.4	2.3	5.0	2.3	--
35.67	09/24/93	10.34	25.33	--	--	--	--	--	--
	11/23/93	10.96	24.71	520	ND	1.7	1.9	0.82	--
	02/24/94 ⁵	8.39	27.28	810	12	ND	2.6	0.77	--
	05/25/94	9.55	26.12	500	11	ND	ND	0.73	--
	08/23/94	10.97	24.70	570	8.8	2.5	3.2	2.6	--
	11/23/94	10.21	25.46	460	6.4	1.1	1.9	1.1	--
	02/03/95	6.99	28.68	660	4.8	13	1.4	ND	--
	05/10/95	7.53	28.14	470	ND	0.65	1.4	0.67	--
	08/02/95	8.68	26.99	360	3.2	ND	1.6	ND	--
	11/02/95	10.20	25.47	470	ND	0.92	0.89	0.58	5.5
	02/08/96	6.66	29.01	450	3.1	ND	1.1	0.68	ND
	05/08/96	7.40	28.27	ND	ND	ND	ND	ND	ND
	08/09/96	8.72	26.95	ND	ND	ND	ND	ND	ND
	11/07/96	10.12	25.55	ND	ND	ND	ND	ND	ND
	02/10-11/97	6.88	28.79	ND	ND	ND	ND	ND	ND
	05/07/97	8.32	27.35	ND	ND	1.1	ND	ND	ND
	08/05/97	9.64	26.03	55	0.79	ND	ND	ND	ND
	11/04/97	10.30	25.37	ND	ND	ND	ND	ND	ND
	02/12/98	5.10	30.57	ND	ND	ND	ND	ND	ND
35.68	05/15/98	6.61	29.07	ND	ND	ND	ND	ND	ND
	08/12/98	8.02	27.66	ND	ND	ND	ND	ND	ND
	11/12/98	8.74	26.94	ND	ND	ND	ND	ND	ND

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Groundwater Monitoring Data and Analytical Results
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 15008 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-7	05/19/92	--	--	17,000	540	90	1,200	1,900	--
	08/20/92	--	--	13,000	460	54	ND	3,100	--
36.40	09/16/92	13.23	23.17	--	--	--	--	--	--
	10/12/92	13.65	22.75	--	--	--	--	--	--
	11/10/92	13.54	22.86	1,800	74	ND	230	350	--
	12/10/92	12.52	23.88	--	--	--	--	--	--
	01/15/93	9.59	26.81	--	--	--	--	--	--
	02/20/93	8.55	27.85	1,800	37	4.6	11	7.7	--
	03/18/93	8.98	27.42	--	--	--	--	--	--
	04/20/93	8.52	27.88	--	--	--	--	--	--
	05/21/93	9.16	27.24	22,000	330	37	2,100	2,900	--
	06/22/93	9.66	26.74	--	--	--	--	--	--
	07/23/93	10.15	26.25	--	--	--	--	--	--
	08/23/93	10.65	25.75	33,000	360	ND	2,500	4,300	--
	36.09	09/24/93	10.77	25.32	--	--	--	--	--
11/23/93		11.28	24.81	19,000	310	30	2,500	2,300	--
02/24/94 ⁵		8.95	27.14	16,000	220	19	2,400	3,200	--
05/25/94		10.00	26.09	14,000	200	ND	1,500	1,800	--
08/23/94		11.43	24.66	19,000	210	50	2,000	2,800	--
11/23/94		10.69	25.40	10,000	220	ND	1,000	730	--
02/03/95		7.49	28.60	26,000	170	ND	2,300	3,700	--
05/10/95		7.88	28.21	1,300	13	1.5	170	230	--
08/02/95		9.02	27.07	15,000	200	ND	2,200	2,000	--
11/02/95		10.55	25.54	18,000	190	9.4	2,100	2,200	72
02/08/96		7.13	28.96	19,000	150	ND	2,100	3,000	ND
05/08/96		7.11	28.98	13,000	130	18	1,900	1,600	85
08/09/96		9.07	27.02	11,000	67	ND	1,700	1,800	ND
11/07/96	10.76	25.33	32,000	160	ND	3,300	8,400	570	
02/10-11/97	7.22	28.87	7,100	55	ND	ND	620	ND	
05/07/97	8.47	27.62	6,000	74	ND	560	330	250	
08/05/97	10.25	25.84	5,000	66	ND	420	240	ND	
11/04/97	10.69	25.40	20,000	67	ND	2,300	4,300	430	
02/12/98	5.02	31.07	5,500	95	ND ⁷	150	110	ND ⁷	
36.06	05/15/98	6.98	29.08	1,300	ND ⁷	ND ⁷	69	64	88
	08/12/98	8.42	27.64	1,400	12	2.3	67	ND ⁷	30
	11/12/98	9.10	26.96	6,300 ¹³	63	ND ⁷	230	100	ND ⁷

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 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
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Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-8	05/19/92	--	--	5,300	28	3.3	2.6	2.1	--	
	08/20/92	--	--	3,500 ¹	67	11	ND	ND	--	
37.14	09/16/92	14.13	23.01	--	--	--	--	--	--	
	10/12/92	14.51	22.63	--	--	--	--	--	--	
	11/10/92	14.46	22.68	1,800	20	ND	ND	ND	--	
	12/10/92	13.51	23.63	--	--	--	--	--	--	
	01/15/93	10.50	26.64	--	--	--	--	--	--	
	02/20/93	9.50	27.64	2,200	32	ND	42	5.0	--	
	03/18/93	9.89	27.25	--	--	--	--	--	--	
	04/20/93	9.91	27.23	--	--	--	--	--	--	
	05/21/93	10.40	26.74	2,500	44	ND	ND	ND	--	
	06/22/93	10.86	26.28	--	--	--	--	--	--	
	07/23/93	11.29	25.85	--	--	--	--	--	--	
	08/23/93	11.76	25.38	280 ¹	49	4.5	ND	ND	--	
	36.89	09/24/93	12.00	24.89	--	--	--	--	--	--
		11/23/93	12.38	24.51	1,800	ND	3.4	ND	ND	--
02/24/94		10.44	26.45	1,200	10	2.3	ND	3.2	--	
05/25/94		11.12	25.77	14,000	29	ND	ND	ND	--	
08/23/94		12.61	24.28	3,200	46	18	2.0	7.2	--	
11/23/94		11.98	24.91	1,700	34	ND	ND	3.1	--	
02/03/95		9.16	27.73	800	6.1	ND	ND	ND	--	
05/10/95		9.35	27.54	1,400	15	1.5	0.65	0.84	--	
08/02/95		10.40	26.49	690	8.3	1.9	ND	ND	--	
11/02/95		11.80	25.09	1,200	ND	1.9	0.56	ND	6.4	
02/08/96		8.98	27.91	--	--	--	--	--	--	
02/14/96 ⁶		9.24	27.65	650	9.0	1.2	ND	0.52	ND	
05/08/96		9.46	27.43	1,200	0.7	35	2.2	3.0	ND	
08/09/96		10.47	26.42	350	ND	12	0.81	0.95	ND	
11/07/96	11.71	25.18	1,000	23	ND	ND	ND	ND		
02/10-11/97	8.84	28.05	630	13	ND	ND	8.1	ND		
05/07/97	10.12	26.77	1,200 ¹	26	3.4	ND	20	20		
08/05/97	11.26	25.63	590 ¹	9.8	ND	ND	ND	ND		
11/04/97	11.58	25.31	640	14	1.9	5.7	11	ND		
02/12/98	7.34	29.55	770 ⁸	20	3.0	ND ⁷	ND ⁷	ND ⁷		
36.87	05/15/98	8.67	28.20	840 ⁸	10	ND ⁷	ND ⁷	3.1	ND ⁷	

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MW-8	08/12/98	9.78	27.09	240 ¹⁰	0.75	ND	ND	ND	ND
(cont)	11/12/98	10.62	26.25	300	14	2.0	ND ⁷	ND ⁷	ND ⁷
MW-9	05/19/92	--	--	8,100	11	ND	25	5.8	--
	08/20/92	--	--	3,800 ¹	37	ND	ND	ND	--
36.92	09/16/92	13.90	23.02	--	--	--	--	--	--
	10/12/92	14.28	22.64	--	--	--	--	--	--
	11/10/92	14.22	22.70	4,200	ND	ND	21	23	--
	12/10/92	13.40	23.52	--	--	--	--	--	--
	01/15/93	10.24	26.68	--	--	--	--	--	--
	02/20/93	9.22	27.70	2,300	47	ND	32	ND	--
	03/18/93	9.55	27.37	--	--	--	--	--	--
	04/20/93	9.62	27.30	--	--	--	--	--	--
	05/21/93	10.16	26.76	3,200	32	ND	8.1	ND	--
	06/22/93	10.62	26.30	--	--	--	--	--	--
	07/23/93	11.07	25.85	--	--	--	--	--	--
	08/23/93	11.54	25.38	3,000	29	ND	ND	ND	--
36.29	09/24/93	11.18	25.11	--	--	--	--	--	--
	11/23/93	11.80	24.49	2,500	23	2.1	ND	ND	--
	02/24/94	9.74	26.55	2,900	35	ND	ND	ND	--
	05/25/94	10.48	25.81	ND	ND	ND	ND	ND	--
	08/23/94	11.99	24.30	2,800	28	32	ND	ND	--
	11/23/94	11.31	24.98	2,000	24	2.2	2.2	2.5	--
	02/03/95	8.45	27.84	2,100	26	2.5	ND	ND	--
	05/10/95	8.70	27.59	1,700	0.81	2.2	1.0	1.4	--
	08/02/95	9.75	26.54	1,900	26	6.6	ND	3.9	--
	11/02/95	11.16	25.13	1,600	ND	1.3	ND	ND	11
	02/08/96	8.15	28.14	1,900	ND	ND	ND	ND	ND
	05/08/96	8.75	27.54	1,700	1.9	22	1.7	2.7	ND
	08/09/96	9.84	26.45	200	ND	4.5	ND	0.58	ND
	11/07/96	11.10	25.19	920	24	ND	ND	ND	ND
	02/10-11/97	8.15	28.14	580	14	2.4	ND	ND	16
	05/07/97	9.45	26.84	810	11	3.9	1.7	9.9	13
	08/05/97	10.70	25.59	850 ¹	21	ND	ND	ND	33

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MW-9	11/04/97	11.05	25.24	730	11	ND	5.1	11	ND
(cont)	02/12/98	6.60	29.69	820 ⁸	23	3.2	ND ⁷	ND ⁷	18
36.27	05/15/98	8.01	28.26	390	5.5	1.2	ND	13	13
	08/12/98	9.18	27.09	780	14	ND	0.52	ND	12
	11/12/98	9.91	26.36	180	6.3	ND	ND	0.62	8.1
MW-10	08/20/92	--	--	15,000	230	ND	1,000	350	--
36.26	09/16/92	13.28	22.98	--	--	--	--	--	--
	10/12/92	13.67	22.59	--	--	--	--	--	--
	11/10/92	13.59	22.67	15,000	300	42	3,500	330	--
	12/10/92	12.53	23.73	--	--	--	--	--	--
	01/15/93	9.60	26.66	--	--	--	--	--	--
	02/20/93	8.57	27.69	17,000	74	ND	1,000	620	--
	03/18/93	9.03	27.23	--	--	--	--	--	--
	04/20/93	9.09	27.17	--	--	--	--	--	--
	05/21/93	9.63	26.63	23,000	250	ND	3,000	240	--
	06/22/93	10.12	26.14	--	--	--	--	--	--
	07/23/93	10.54	25.72	--	--	--	--	--	--
	08/23/93	10.99	25.27	20,000	230	13	3,200	140	--
36.04	09/24/93	11.17	24.87	--	--	--	--	--	--
	11/23/93	11.67	24.37	18,000	300	10	2,800	110	--
	02/24/94	9.57	26.47	15,000	330	19	2,000	83	--
	05/25/94	10.32	25.72	14,000	240	ND	230	62	--
	08/23/94	11.81	24.23	16,000	250	41	1,800	74	--
	11/23/94	11.10	24.94	16,000	260	ND	1,600	49	--
	02/03/95	8.32	27.72	17,000	310	ND	1,500	93	--
	05/10/95	8.70	27.34	12,000	260	16	1,200	54	--
	08/02/95	9.55	26.49	8,900	240	ND	780	40	--
	11/02/95	11.03	25.01	9,300	190	ND	470	1.7	110
	02/08/96	8.05	27.99	9,700	170	ND	440	ND	ND
	05/08/96	8.70	27.34	7,100	100	ND	240	ND	43
	08/09/96	9.76	26.28	4,400	59	7.5	110	6.5	73
	11/07/96	10.92	25.12	6,300	65	ND	110	ND	130
	02/10-11/97	8.10	27.94	6,800	91	ND	100	ND	210
	05/07/97	9.28	26.76	4,800	76	ND	50	ND	160

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MW-10	08/05/97	10.51	25.53	4,200	52	ND	40	ND	81
(cont)	11/04/97	11.02	25.02	4,500	49	ND	63	ND	84
	02/12/98	6.85	29.19	6,200	98	ND ⁷	91	ND ⁷	420
36.02	05/15/98	8.05	27.97	7,200	84	ND ⁷	84	ND ⁷	260
	08/12/98	9.27	26.75	7,500	6.9	11	47	ND ⁷	130
	11/12/98	10.03	25.99	4,200 ¹³	23	ND ⁷	24	ND ⁷	130
MW-11	08/20/92	--	--	4,600 ¹	62	ND	ND	54	--
35.83	09/16/92	12.93	22.90	--	--	--	--	--	--
	10/12/92	13.30	22.53	--	--	--	--	--	--
	11/10/92	13.20	22.63	5,800	130	ND	260	42	--
	12/10/92	12.24	23.59	--	--	--	--	--	--
	01/15/93	9.23	26.60	--	--	--	--	--	--
	02/20/93	8.20	27.63	18,000	76	ND	1,000	630	--
	03/18/93	8.77	27.06	--	--	--	--	--	--
	04/20/93	8.86	26.97	--	--	--	--	--	--
	05/21/93	9.40	26.43	7,100	64	ND	340	120	--
	06/22/93	9.87	25.96	--	--	--	--	--	--
	07/23/93	10.29	25.54	--	--	--	--	--	--
	08/23/93	10.73	25.10	5,400	68	ND	230	43	--
35.50	09/24/93	10.83	24.67	--	--	--	--	--	--
	11/23/93	11.28	24.22	3,400	105	ND	120	43	--
	02/24/94	9.20	26.30	4,600	170	ND	140	36	--
	05/25/94	9.94	25.56	1,400	49	ND	26	ND	--
	08/23/94	11.39	24.11	7,300	250	13	150	42	--
	11/23/94	10.67	24.83	5,800	250	10	120	22	--
	02/03/95	8.02	27.48	4,400	110	ND	150	37	--
	05/10/95	8.36	27.14	4,200	120	ND	170	38	--
	08/02/95	9.31	26.19	4,200	110	ND	110	22	--
	11/02/95	10.85	24.65	6,100	150	ND	78	6.8	6,200
	02/08/96	7.76	27.74	--	--	--	--	--	--
	02/14/96 ⁶	8.18	27.32	3,100	60	ND	98	ND	4,000
	05/08/96	8.50	27.00	3,500	120	ND	160	ND	6,400
	08/09/96	9.46	26.04	1,100	42	ND	15	ND	4,300

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MW-11	11/07/96	10.58	24.92	2,900	57	ND	13	ND	3,400
(cont)	02/10-11/97	7.88	27.62	600	9.5	ND	ND	ND	3,100
	05/07/97	9.07	26.43	1,900	45	ND	31	ND	2,400
	08/05/97	10.23	25.27	2,100	35	ND	24	ND	1,800
	11/04/97	10.51	24.99	98	1.6	ND	ND	ND	ND
	02/12/98	6.59	28.91	670	12	ND ⁷	ND ⁷	ND ⁷	1,400
35.50	05/15/98	7.73	27.77	1,200 ⁹	7.9	ND ⁷	30	ND ⁷	1,600
	08/12/98	8.85	26.65	1,600 ¹¹	ND ⁷	ND ⁷	ND ⁷	ND ⁷	2,000
	11/12/98	9.52	25.98	1,700 ¹³	9.3	ND ⁷	ND ⁷	ND ⁷	1,700
MW-2(SP)									
35.44	05/08/96	9.12	26.32	540	0.68	21	1.0	1.7	ND
	08/09/96	9.98	25.46	170	ND	7.8	ND	ND	ND
	11/07/96	10.98	24.46	430	8.9	1.5	ND	ND	10
	02/10-11/97	8.63	26.81	230 ²	4.6	1.0	ND	ND	10
	05/07/97	9.58	25.86	ND	ND	ND	ND	ND	14
	08/05/97	10.62	24.82	360	5.5	50	ND	ND	ND
	11/04/97	11.06	24.38	280	2.9	13	ND	0.54	ND
	02/12/98	7.71	27.73	440 ⁸	10	1.6	ND	0.69	13
	05/15/98	8.50	26.94	540 ⁸	10	1.1	ND	1.1	15
	08/12/98	9.43	26.01	ND	ND	ND	ND	ND	ND
	11/12/98	9.98	25.46	300 ¹⁴	6.1	ND ⁷	ND ⁷	4.0	ND ⁷
MW-3(SP)									
35.81	05/08/96	8.73	27.08	4,700	7.9	36	13	4.0	42
	08/09/96	9.73	26.08	2,000	ND	14	7.6	ND	ND
	11/07/96	10.88	24.93	1,800	29	ND	ND	ND	40
	02/10-11/97	8.16	27.65	3,500	70	14	ND	ND	150
	05/07/97	9.35	26.46	3,100	48	ND	ND	ND	110
	08/05/97	10.44	25.37	3,200	43	5.7	ND	ND	61
	11/04/97	10.90	24.91	2,600	34	ND	ND	ND	53
	02/12/98	6.77	29.04	3,200	62	ND ⁷	ND ⁷	ND ⁷	100
35.82	05/15/98	8.02	27.80	ND	ND	ND	ND	ND	2.5

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3(SP)	08/12/98	9.11	26.71	110	ND	4.1	ND	ND ⁷	ND
(cont)	11/12/98	9.81	26.01	1,800 ¹⁵	37	2.8	ND ⁷	ND ⁷	55
Trip Blank									
TB-LB	02/12/98	--	--	ND	ND	ND	ND	ND	ND
	05/15/98	--	--	ND	ND	ND	ND	ND	ND
	08/12/98	--	--	ND	ND	ND	ND	ND	ND
	11/12/98	--	--	ND	ND	0.68	ND	0.51	ND

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to February 12, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation	B = Benzene	ppb = Parts per billion
DTW = Depth to Water	T = Toluene	ND = Not Detected
(ft.) = Feet	E = Ethylbenzene	-- = Not Measured/Not Analyzed
GWE = Groundwater Elevation	X = Xylenes	(SP) = Shadrall Property wells
msl = Relative to mean sea level	MTBE = Methyl tertiary butyl ether	
TPH(G) = Total Petroleum Hydrocarbons as Gasoline		

* TOC elevations are relative to Mean Sea Level (msl), per a Benchmark located at the northwest corner of East 14th Street and 150th Avenue (Elevation = 36.88 feet msl). TOC elevations for MW-2(SP) and MW-3(SP) are relative to msl, per Chevron monitoring well MW-6 used as a benchmark (Elevation = 36.92 feet msl). On April 16, 1998, three wells were re-surveyed using City of San Leandro Benchmark being a cinch nail in the top of curb at a catch basin at the westerly corner of East 14th Street and 150th Avenue, Benchmark (Elevation = 36.883 feet, msl). Prior to September 24, 1993, DTW measurement were taken from the top of well covers.

- 1 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 2 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 3 The analytical results of the groundwater were inconsistent with the previous analytical results for this well. The laboratory re-analyzed the sample past hold time; therefore the results may be biased low.
- 4 The monitoring well was resampled on November 20, 1995. The vial containing the water sample collected from this well on November 2, 1995, was inadvertently broken by the laboratory.
- 5 All EPA Method 8010 constituents were ND.
- 6 The monitoring wells MW-8 and MW-11 were resampled on February 14, 1996. The vials containing the water samples collected from the wells on February 8, 1996, were inadvertently broken by the laboratory.
- 7 Detection limit raised. Refer to analytical results.
- 8 Laboratory report indicates gasoline and unidentified hydrocarbons < C7.
- 9 Laboratory report indicates gasoline and discrete peaks C6-C12.
- 10 Laboratory report indicates gasoline and unidentified hydrocarbons C6-C8.
- 11 Laboratory report indicates weathered gasoline C6-C12.
- 12 MTBE by EPA Method 8260.
- 13 Laboratory report indicates unidentified hydrocarbons > C8.
- 14 Laboratory report indicates unidentified hydrocarbons > C6.
- 15 Laboratory report indicates weathered gas and unidentified hydrocarbons > C6.

Table 2
Dissolved Oxygen Concentrations
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

Well ID	Date	@ Laboratory (mg/L)	Before Purging (mg/L) *	After Purging (mg/L) *
MW-1	11/02/95	1.80	2.83	--
	02/08/96	--	2.58	--
	05/08/96	--	--	1.92
	08/09/96	--	2.14	--
	11/07/96	--	2.11	2.18
	02/11/97	--	--	2.05
	08/05/97	--	--	1.88
	11/04/97	--	--	2.67
	02/12/98	--	2.38	--
	05/15/98	--	2.12	--
	08/12/98	--	1.77	--
	11/12/98	--	1.55	--
	MW-2	11/02/95	2.30	2.80
02/08/96		--	2.21	--
05/08/96		--	--	3.89
08/09/96		--	3.36	--
11/07/96		--	1.96	1.98
02/11/97		--	--	2.12
08/05/97		--	--	2.38
11/04/97		--	--	2.18
02/12/98		--	2.04	--
05/15/98		--	2.33	--
08/12/98		--	2.50	--
11/12/98		--	1.90	--
MW-3		11/02/95	2.20	4.98
	02/08/96	--	2.78	--
	05/08/96	--	--	3.73
	08/09/96	--	3.29	--
	11/07/96	--	3.15	3.98
	02/10/97	--	--	3.59
	08/05/97	--	--	2.86
	11/04/97	--	--	2.95
	02/12/98	--	3.12	--
	05/15/98	--	3.97	--
	08/12/98	--	4.21	--
	11/12/98	--	4.56	--
	MW-4	11/02/95	3.00	7.91
02/08/96		--	2.66	--
05/08/96		--	--	--
08/09/96		--	2.92	--
11/07/96		--	4.32	4.38
02/10/97		--	--	3.87
08/05/97		--	--	5.12
11/04/97		--	--	3.98
02/12/98		--	4.88	--

Table 2
Dissolved Oxygen Concentrations
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID	Date	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-4 (cont)	05/15/98	--	5.13	--
	08/12/98	--	5.62	--
	11/12/98	--	5.76	--
MW-5	11/02/95	3.00	2.30	--
	02/08/96	--	2.35	--
	05/08/96	--	--	1.29
	08/09/96	--	2.19	--
	11/07/96	--	1.84	1.82
	02/10/97	--	--	2.07
	08/05/97	--	--	2.36
	11/04/97	--	--	1.99
	02/12/98	--	1.79	--
	05/15/98	--	1.66	--
	08/12/98	--	1.71	--
	11/12/98	--	1.81	--
	MW-6	11/02/95	3.80	4.55
02/08/96		--	3.77	--
05/08/96		--	--	3.40
08/09/96		--	3.53	--
11/07/96		--	3.99	4.06
02/10/97		--	--	3.85
08/05/97		--	--	5.37
11/04/97		--	--	3.67
02/12/98		--	4.05	--
05/15/98		--	5.28	--
08/12/98		--	4.96	--
11/12/98		--	5.36	--
MW-7		11/02/95	--	--
	02/08/96	--	2.67	--
	05/08/96	--	--	2.20
	08/09/96	--	2.37	--
	11/07/96	--	2.22	2.28
	02/11/97	--	--	2.33
	08/05/97	--	--	2.69
	11/04/97	--	--	2.82
	02/12/98	--	3.24	--
	05/15/98	--	2.95	--
	08/12/98	--	3.19	--
	11/12/98	--	2.04	--
	MW-8	11/02/95	--	--
02/08/96		--	3.85	--
05/08/96		--	--	2.09

Table 2
Dissolved Oxygen Concentrations
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID	Date	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-8 (cont)	08/09/96	--	2.56	--
	11/07/96	--	1.67	1.84
	02/10/97	--	--	2.10
	08/05/97	--	--	3.04
	11/04/97	--	--	2.11
	02/12/98	--	1.98	--
	05/15/98	--	2.44	--
	08/12/98	--	2.83	--
	11/12/98	--	3.16	--
	MW-9	11/02/95	--	--
02/08/96		--	3.62	--
05/08/96		--	--	2.20
08/09/96		--	2.51	--
11/07/96		--	2.06	2.02
02/10/97		--	--	1.96
08/05/97		--	--	2.57
11/04/97		--	--	2.60
02/12/98		--	2.27	--
05/15/98		--	2.62	--
08/12/98		--	1.90	--
11/12/98		--	1.38	--
MW-10		11/02/95	3.10	3.96
	02/08/96	--	2.88	--
	05/08/96	--	--	2.71
	08/09/96	--	2.63	--
	11/07/96	--	1.81	1.84
	02/10/97	--	--	2.03
	08/05/97	--	--	2.78
	11/04/97	--	--	2.11
	02/12/98	--	2.63	--
	05/15/98	--	2.24	--
	08/12/98	--	2.43	--
	11/12/98	--	2.66	--
	MW-11	11/02/95	2.60	3.55
02/08/96		--	2.19	--
05/08/96		--	--	2.06
08/09/96		--	2.11	--
11/07/96		--	2.35	2.36
02/10/97		--	--	2.18
08/05/97		--	--	3.19
11/04/97		--	--	2.01
02/12/98		--	2.44	--
05/15/98		--	1.80	--

Table 2
Dissolved Oxygen Concentrations
 Tosco (Unocal) Service Station #3292
 15008 East 14th Street
 San Leandro, California

Well ID	Date	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-11	08/12/98	--	2.05	--
(cont)	11/12/98	--	1.67	--
MW-2 (SP) ¹	11/07/96	--	2.85	2.80
	02/11/97	--	--	2.73
	08/05/97	--	--	3.99
	11/04/97	--	--	3.06
	02/12/98	--	3.11	--
	05/15/98	--	3.97	--
	08/12/98	--	3.62	--
	11/12/98	--	4.19	--
MW-3 (SP) ¹	11/07/96	--	2.41	2.40
	02/11/97	--	--	2.55
	08/05/97	--	--	3.74
	11/04/97	--	--	2.95
	02/12/98	--	3.17	--
	05/15/98	--	4.06	--
	08/12/98	--	3.98	--
	11/12/98	--	3.39	--

EXPLANATIONS:

Dissolved oxygen concentrations prior to February 12, 1998, were compiled from reports prepared by MPDS Services, Inc.

♦ = Measurement taken in field

-- = Not Measured/Not Analyzed

SP = Shadrall Property wells

¹ Wells located on Shadrall Property.

Table 3
Joint Groundwater Monitoring Data
 Former Mobil Facility #04-FGN
 14994 East 14th Street
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft)	GWE (msl)
MW-1A 36.63	02/12/98	5.52	31.11
	08/12/98	8.80	27.83
MW-2A 36.62	02/12/98	5.59	31.03
	08/12/98	8.85	27.77
MW-3A 36.93	02/12/98	5.72	31.21
	08/12/98	9.05	27.88
MW-4A 37.18	02/12/98	5.90	31.28
	08/12/98	9.21	27.97
MW-5A 35.91	02/12/98	5.32	30.59
	08/12/98	8.19	27.72
MW-6A 37.10	02/12/98	5.52	31.58
	08/12/98	8.91	28.19
MW-7A 37.39	02/12/98	6.55	30.84
	08/12/98	9.65	27.74

EXPLANATIONS:

Groundwater monitoring data provided by Alton GeoScience. Site monitored on a semi-annual basis.

TOC = Top of Casing elevation

DTW = Depth to Water

(ft.) = Feet

GWE = Groundwater Elevation

msl = Relative to mean sea level

* TOC elevations have been surveyed relative to msl.

Table 4
Joint Groundwater Monitoring Data
 Chevron Facility #9-2013
 15002 Hesperian Boulevard
 San Leandro, California

Well ID/ TOC*	Date	DTW (ft)	GWE (msl)
MW-1 35.77	11/04/97	11.35	24.42
	05/15/98	8.11	27.66
	08/12/98	9.35	26.42
MW-2 35.00	11/04/97	10.70	24.30
	05/15/98	7.63	27.37
	08/12/98	8.75	26.25
MW-3 36.17	11/04/97	11.75	24.42
	05/15/98	8.75	27.42
	08/12/98	9.85	26.32
MW-4 36.05	11/04/97	11.47	24.58
	05/15/98	8.27	27.78
	08/12/98	9.40	26.65
MW-5 35.65	11/04/97	11.17	24.48
	05/15/98	7.92	27.73
	08/12/98	9.05	26.60
MW-6 36.92	11/04/97	12.42	24.50
	05/15/98	9.45	27.47
	08/12/98	10.60	26.32
MW-7 35.71	11/04/97	11.01	24.70
	05/15/98	8.11	27.60
	08/12/98	9.25	26.46
MW-8 35.28	11/04/97	10.63	24.65
	05/15/98	7.98	27.30
	08/12/98	9.00	26.28
MW-A	11/04/97	11.45	--
	05/15/98	8.51	--
	08/12/98	9.60	--

EXPLANATIONS:

Groundwater monitoring data provided by Blaine Tech Services, Inc. Site monitored on a semi-annual basis.

TOC = Top of Casing elevation

GWE = Groundwater Elevation

DTW = Depth to Water

msl = Relative to mean sea level

(ft.) = Feet

-- = Not Available

* TOC elevations have been surveyed relative to msl.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

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

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th st.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-1

Well Condition: O.K.

Well Diameter 2 in.

Hydrocarbon Thickness: 0 (feet) Amount Bailed (Gallons): 0

Total Depth 18.94 ft.

Depth to Water 9.71 ft.

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

9.23 x VF 0.17 = 1.57 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: 7:46
Sampling Time: 8:20 A.M.
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 100^0$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>8:05</u>	<u>1.5</u>	<u>7.18</u>	<u>1.31</u>	<u>65.1</u>	<u>1.55</u>		
<u>8:07</u>	<u>3</u>	<u>7.22</u>	<u>1.33</u>	<u>64.8</u>			
<u>8:09</u>	<u>5</u>	<u>7.24</u>	<u>1.36</u>	<u>64.9</u>			
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>mw-1</u>	<u>3 vial</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe-</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-2

Well Condition: O.K.

Well Diameter 2 in.

Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 19.10 ft.

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

Depth to Water 9.60 ft.

9.50 x VF 0.17 = 1.62 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: 8:36

Weather Conditions: clear

Sampling Time: 9:20 AM

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 $\mu\text{mhos/cm} \times 1000$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>8:45</u>	<u>1.5</u>	<u>7.15</u>	<u>1.36</u>	<u>64.6</u>	<u>1.90</u>		
<u>8:47</u>	<u>3</u>	<u>7.08</u>	<u>1.11</u>	<u>64.9</u>			
<u>8:50</u>	<u>5</u>	<u>6.92</u>	<u>1.14</u>	<u>65.0</u>			
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>3 VOL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility # 3292
 Address: 15008 E. 14th St.
 City: San Leandro

Job#: 180105
 Date: 11-12-98
 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 22.13 ft.

Depth to Water 9.57 ft.

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

12.56 x VF 0.17 = 2.14 x 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 9:13
 Sampling Time: 9:33 AM
 Purging Flow Rate: 1 gpm.
 Did well de-water? _____

Weather Conditions: clear
 Water Color: clear Odor: none
 Sediment Description: none
 If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:20</u>	<u>2.5</u>	<u>7.38</u>	<u>5.19</u>	<u>71.2</u>	<u>4.56</u>		
<u>9:22</u>	<u>5</u>	<u>7.30</u>	<u>4.88</u>	<u>71.6</u>			
<u>9:24</u>	<u>7</u>	<u>7.28</u>	<u>4.87</u>	<u>72.0</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>3 vial</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-4
Well Diameter 2 in.
Total Depth 19.63 ft.
Depth to Water 10.28 ft.

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

9.35 X VF 0.17 = 1.59 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: 11:35
Sampling Time: 12:02 PM
Purging Flow Rate: 1 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: none
Sediment Description: none
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>12:47</u>	<u>1.5</u>	<u>7.88</u>	<u>8.11</u>	<u>65.1</u>	<u>5.76</u>		
<u>11:50</u>	<u>3</u>	<u>7.61</u>	<u>7.38</u>	<u>65.0</u>			
<u>11:52</u>	<u>5</u>	<u>7.60</u>	<u>7.32</u>	<u>65.0</u>			
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>3V0A</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-5
Well Diameter 2 in.
Total Depth 22.07 ft.
Depth to Water 9.48 ft.

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

12.59 X VF 0.17 = 2.14 X 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 10:35
Sampling Time: 10:58 p.m.
Purging Flow Rate: 1 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^{100}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:45</u>	<u>2.5</u>	<u>6.86</u>	<u>0.85</u>	<u>65.0</u>	<u>1.81</u>		
<u>10:47</u>	<u>5</u>	<u>6.90</u>	<u>0.82</u>	<u>64.6</u>			
<u>10:50</u>	<u>7</u>	<u>6.93</u>	<u>0.88</u>	<u>64.7</u>			
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>3 vial</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btax/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/Facility # 3292

Job#: 180105

Address: 15008 E. 14th St.

Date: 11-12-98

City: San Leandro

Sampler: Joe

Well ID MW-6

Well Condition: O.K.

Well Diameter 2 in.

Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 20.10 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.90	

Depth to Water 8.74 ft.

11.36 X VF 0.17 = 1.93 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: 9:50

Weather Conditions: clear

Sampling Time: 10:20 A.M.

Water Color: clear Odor: none

Purging Flow Rate: 1.0 gpm.

Sediment Description: none

Did well de-water? _____

If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity, $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>10:00</u>	<u>2</u>	<u>7.68</u>	<u>7.91</u>	<u>71.7</u>	<u>5.36</u>		
<u>10:03</u>	<u>4</u>	<u>7.49</u>	<u>8.02</u>	<u>72.2</u>			
<u>10:05</u>	<u>6</u>	<u>7.52</u>	<u>7.83</u>	<u>72.4</u>			
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/bTEX/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-7
Well Diameter 2 in.
Total Depth 21.08 ft.
Depth to Water 9.10 ft.

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

11.98 x VF 0.17 = 2.04 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: 12:23 Weather Conditions: clear
Sampling Time: 12:44 PM Water Color: clear Odor: yes
Purging Flow Rate: 1 gpm. Sediment Description: none
Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>12:34</u>	<u>2</u>	<u>7.57</u>	<u>1.44</u>	<u>71.9</u>	<u>2.04</u>		
<u>12:36</u>	<u>4</u>	<u>7.53</u>	<u>1.42</u>	<u>72.2</u>			
<u>12:39</u>	<u>6.5</u>	<u>7.46</u>	<u>1.43</u>	<u>72.4</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>3 vial</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-8

Well Condition: O.K.

Well Diameter 2 in.

Hydrocarbon Amount Bailed
Thickness: 0 (feet) (product/water): 0 (Gallons)

Total Depth 19.00 ft.

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

Depth to Water 10.62 ft.

8.38 x VF 0.17 = 1.42 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: 1:50
Sampling Time: 2:12 P.M.
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1:57</u>	<u>1.5</u>	<u>7.31</u>	<u>3.86</u>	<u>65.2</u>	<u>3.16</u>		
<u>1:59</u>	<u>3</u>	<u>7.34</u>	<u>4.02</u>	<u>65.1</u>			
<u>2:01</u>	<u>5</u>	<u>7.27</u>	<u>3.95</u>	<u>65.3</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-8</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-9
Well Diameter 2 in.
Total Depth 19.03 ft.
Depth to Water 9.91 ft.

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

9.12 x VF 0.17 = 1.56 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: 1:11
Sampling Time: 1:31 P.M.
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:20	1.5	7.17	1.95	65.1	1.38		
1:23	3	7.10	1.85	64.6			
1:26	5	7.12	1.81	64.8			

LABORATORY INFORMATION

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

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-10

Well Condition: O.K.

Well Diameter 2 in.

Hydrocarbon Amount Bailed
Thickness: 0 (feet) (product/water): 0 (Gallons)

Total Depth 19.83 ft.

Volume	2" = 0.17	3" = 0.38	4" = 0.66
Factor (VF)	6" = 1.50	12" = 5.90	

Depth to Water 10.03 ft.

9.8 X VF 0.17 = 1.67 X 3 (case volume) = Estimated Purge Volume: 0.5 (gal.)

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

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

Starting Time: 2:45
Sampling Time: 3:10 P.M.
Purging Flow Rate: 2.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>2:53</u>	<u>2</u>	<u>7.27</u>	<u>3.89</u>	<u>64.7</u>	<u>2.66</u>		
<u>2:56</u>	<u>3.5</u>	<u>7.23</u>	<u>3.95</u>	<u>64.8</u>			
<u>3:59</u>	<u>5</u>	<u>7.20</u>	<u>4.03</u>	<u>64.9</u>			
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-10</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-11
Well Diameter 2 in.
Total Depth 18.90 ft.
Depth to Water 9.52 ft.

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

9.38 x VF 0.17 = 1.59 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: 3:31
Sampling Time: 3:55 P.M.
Purging Flow Rate: 1.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 1000$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>3:37</u>	<u>1.5</u>	<u>6.87</u>	<u>1.10</u>	<u>65.0</u>	<u>1.67</u>		
<u>3:40</u>	<u>3</u>	<u>6.99</u>	<u>1.15</u>	<u>65.0</u>			
<u>3:42</u>	<u>5</u>	<u>7.07</u>	<u>1.20</u>	<u>65.1</u>			
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-11</u>	<u>3 vials</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btax/mtbe</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th St.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-2(SP) Well Condition: O.K.

Well Diameter 2 in.

Hydrocarbon Thickness: 0 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 20.88 ft.

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

Depth to Water 9.98 ft.

10.9 X VF 0.17 = 1.85 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: 4:20
Sampling Time: 4:50 P.M.
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: none
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>4:32</u>	<u>2</u>	<u>7.59</u>	<u>6.12</u>	<u>65.3</u>	<u>4.19</u>		
<u>4:35</u>	<u>4</u>	<u>7.50</u>	<u>5.63</u>	<u>65.4</u>			
<u>4:37</u>	<u>6</u>	<u>7.57</u>	<u>5.61</u>	<u>65.5</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2(SP)</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 3292
Address: 15008 E. 14th st.
City: San Leandro

Job#: 180105
Date: 11-12-98
Sampler: Joe

Well ID MW-3(SP) Well Condition: O.K.

Well Diameter 2 in.
Total Depth 20.68 ft.
Depth to Water 9.81 ft.

Hydrocarbon Thickness:	Amount Bailed (Gallons)		
(feet)	product	water	
<u>2</u>	2" = 0.17	3" = 0.38	4" = 0.66
	6" = 1.50	12" = 5.80	

10.87 X VF 0.17 = 1.85 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: 5:07
Sampling Time: 5:30 PM
Purging Flow Rate: 0.5 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: none
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^3$	Temperature °F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>5:17</u>	<u>2</u>	<u>7.31</u>	<u>2.16</u>	<u>65.1</u>	<u>3.39</u>		
<u>5:20</u>	<u>4</u>	<u>7.37</u>	<u>2.20</u>	<u>64.9</u>			
<u>5:22</u>	<u>6</u>	<u>7.36</u>	<u>2.22</u>	<u>65.1</u>			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3(SP)</u>	<u>3 VOA</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btax/mtbe</u>

COMMENTS: _____



**Sequoia
Analytical**

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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: TB-LB Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-01	RECEIVED DEC 28 1998	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
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QC Batch Number: GC111898802002A
Instrument ID: HP-2

GETTLER-RYAN INC.

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	0.68
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	0.51
Chromatogram Pattern: Discrete Peak	

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	101

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

SEQUOIA ANALYTICAL - ELAP #1271



Todd Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-02	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
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QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	N.D.
Methyl t-Butyl Ether	50	12000
Benzene	10	16
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	10	N.D.
Chromatogram Pattern: Discrete Peak	
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	110

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292 Sample Descript: MW-1 Matrix: LIQUID Analysis Method: EPA 8260 Lab Number: 9811999-02	Sampled: 11/12/98 Received: 11/13/98 Analyzed: 12/28/98 Reported: 12/30/98
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QC Batch Number: MS122398MTBEH6A
Instrument ID: H6

Methyl t-Butyl Ether (MTBE)

Analyte	Detection Limit ug/L	Sample Results ug/L
Methyl t-Butyl Ether	200	13000
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	76	114

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

SEQUOIA ANALYTICAL - ELAP #1210



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-03	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
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QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	3200
Methyl t-Butyl Ether	50	180
Benzene	10	44
Toluene	10	N.D.
Ethyl Benzene	10	15
Xylenes (Total)	10	N.D.
Chromatogram Pattern:		Gas
Unidentified HC		> C8
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	120

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-3 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-04	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
Attention: Deanna Harding		

QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	60
Methyl t-Butyl Ether	2.5	3.8
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Unidentified HC		>C8
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	91

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granisber
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-06	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
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QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	13000
Methyl t-Butyl Ether	50	780
Benzene	10	65
Toluene	10	N.D.
Ethyl Benzene	10	1100
Xylenes (Total)	10	1400
Chromatogram Pattern: Unidentified HC		>C8
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	120

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-07	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
Attention: Deanna Harding		

QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-08	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
Attention: Deanna Harding		

QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	6300
Methyl t-Butyl Ether	250	N.D.
Benzene	50	63
Toluene	50	N.D.
Ethyl Benzene	50	230
Xylenes (Total)	50	100
Chromatogram Pattern:		Gas
Unidentified HC		> C8

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	107

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



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

Client Proj. ID: 180105.85/3292, 15008 East 14
Sample Descript: MW-8
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9811999-09

Sampled: 11/12/98
Received: 11/13/98
Extracted: 11/18/98
Analyzed: 11/18/98
Reported: 12/18/98

QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	300
Methyl t-Butyl Ether	5.0	N.D.
Benzene	1.0	14
Toluene	1.0	2.0
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	129

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568 Attention: Deanna Harding	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-9 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-10	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
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QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	180
Methyl t-Butyl Ether	2.5	8.1
Benzene	0.50	6.3
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	0.62
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	123

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

SEQUOIA ANALYTICAL - ELAP #1271


Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-10 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-11	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
Attention: Deanna Harding		

QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	4200
Methyl t-Butyl Ether	50	130
Benzene	10	23
Toluene	10	N.D.
Ethyl Benzene	10	24
Xylenes (Total)	10	N.D.
Chromatogram Pattern:		Gas
Unidentified HC		> C8

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	129

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

SEQUOIA ANALYTICAL - ELAP #1271



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Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-11 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-12	Sampled: 11/12/98 Received: 11/13/98 Extracted: 11/18/98 Analyzed: 11/18/98 Reported: 12/18/98
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QC Batch Number: GC111898802002A
Instrument ID: HP-2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1700
Methyl t-Butyl Ether	25	1700
Benzene	5.0	9.3
Toluene	5.0	N.D.
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	N.D.
Chromatogram Pattern:		Gas
Unidentified HC		>C8
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	114

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-2(SP) Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-13	Sampled: 11/12/98 Received: 11/13/98 Extracted: 12/19/98 Analyzed: 12/19/98 Reported: 12/18/98
Attention: Deanna Harding		

QC Batch Number: GC111998802004A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	300
Methyl t-Butyl Ether	10	N.D.
Benzene	2.0	6.1
Toluene	2.0	N.D.
Ethyl Benzene	2.0	N.D.
Xylenes (Total)	2.0	4.0
Chromatogram Pattern: Unidentified HC		>C6
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	97

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

SEQUOIA ANALYTICAL - ELAP #1271



Tod Granicher
Project Manager



Gettler Ryan/Geostrategies 6747 Sierra Court Suite J Dublin, CA 94568	Client Proj. ID: 180105.85/3292, 15008 East 14 Sample Descript: MW-3(SP) Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9811999-14	Sampled: 11/12/98 Received: 11/13/98 Extracted: 12/19/98 Analyzed: 12/19/98 Reported: 12/18/98
Attention: Deanna Harding		

QC Batch Number: GC111998802004A
Instrument ID: HP-4

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	1800
Methyl t-Butyl Ether	12	55
Benzene	2.5	37
Toluene	2.5	2.8
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		
Unidentified HC		>C6
Weathered Gas	
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	94

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

SEQUOIA ANALYTICAL - ELAP #1271



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

Client Project ID: 180105.85/3292, 15008 East 14
Matrix: Liquid

Work Order #: 9811999 13, 14

Reported: Dec 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	BTEX as TPH
QC Batch#:	GC11199880204A	GC11199880204A	GC11199880204A	GC11199880204A	GC11199880204A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8111299	8111299	8111299	8111299	8111299
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98
Analyzed Date:	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98
Instrument I.D.#:	HP4	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	340 µg/L
Result:	23	20	20	69	340
MS % Recovery:	115	100	100	115	100
Dup. Result:	22	17	16	58	250
MSD % Recov.:	110	85	80	97	74
RPD:	4.4	16.2	22.2	17.3	30.5
RPD Limit:	0-20	0-20	0-20	0-20	0-50

LCS #:	LCS111998	LCS111998	LCS111998	LCS111998	LCS111998
Prepared Date:	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98
Analyzed Date:	11/19/98	11/19/98	11/19/98	11/19/98	11/19/98
Instrument I.D.#:	HP4	HP4	HP4	HP4	HP4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	340 µg/L
LCS Result:	23	19	20	70	360
LCS % Recov.:	115	95	100	117	106

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140
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Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
ELAP #1271

Project Manager

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

9811999.GET <2>



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

Client Project ID: 180105.85/3292, 15008 East 14
Matrix: Liquid

Work Order #: 9812999 02

Reported: Dec 31, 1998

QUALITY CONTROL DATA REPORT

Analyte: MTBE

QC Batch#: MS122398MTBEH6A
Analy. Method: EPA 8260
Prep. Method:

Analyst: L. Duong
MS/MSD #: 981290203
Sample Conc.: 21
Prepared Date: 12/23/98
Analyzed Date: 12/23/98
Instrument I.D.#: H6
Conc. Spiked: 50 µg/L

Result: 62
MS % Recovery: 82

Dup. Result: 58
MSD % Recov.: 74

RPD: 6.7
RPD Limit: 0-25

LCS #: LCS122898

Prepared Date: 12/28/98
Analyzed Date: 12/28/98
Instrument I.D.#: H6
Conc. Spiked: 50 µg/L

LCS Result: 47
LCS % Recov.: 94

MS/MSD 60-140
LCS 70-130
Control Limits

SEQUOIA ANALYTICAL


Todd Granicher
Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

9811999.GET <3>