311-058.1

GETTLER-RYAN INC.

TRANSMITTAL

May 9, 2000
G-R #:180109

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

CC: Mr. Tim Ripp
IT Corporation
1921 Ringwood Avenue
San Jose, California 95131

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

RE: Tosco (Unocal) SS #5760
376 Lewelling Boulevard
San Lorenzo, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	May 3, 2000	Groundwater Monitoring and Sampling Report Semi-Annual 2000 - Event of March 21, 2000

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 ***May 22, 2000***, this report will be distributed to the following:

Enclosure

cc: Ms. Amy Leech, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94501

trans/5760dbd.qmt

ATTACHMENT A

GROUNDWATER MONITORING AND SAMPLING REPORT, GETTLER-RYAN, INC., MAY 9, 2000

GETTLER-RYAN INC.

May 3, 2000
G-R Job #180109

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

RE: Semi-Annual 2000 Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

Dear Mr. De Witt:

This report documents the semi-annual groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On March 21, 2000, field personnel monitored and sampled seven wells (U-1 through U-5, U-8, and U-9) at the above referenced site. Two wells (U-6 and U-7) were paved over.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are 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. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports is also attached.

Sincerely,

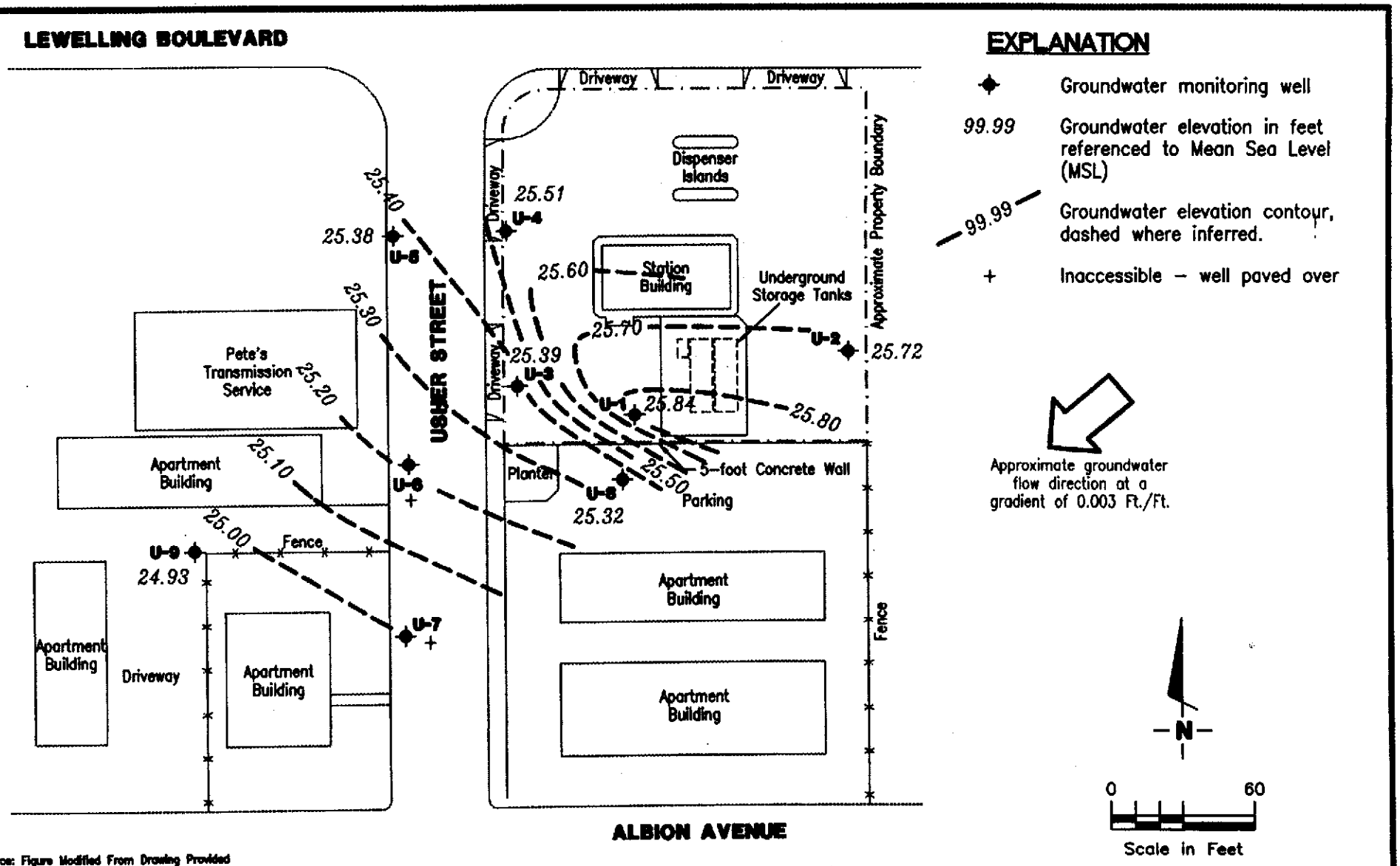
Deanna L. Harding
Project Coordinator

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

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

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

5760.qml



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

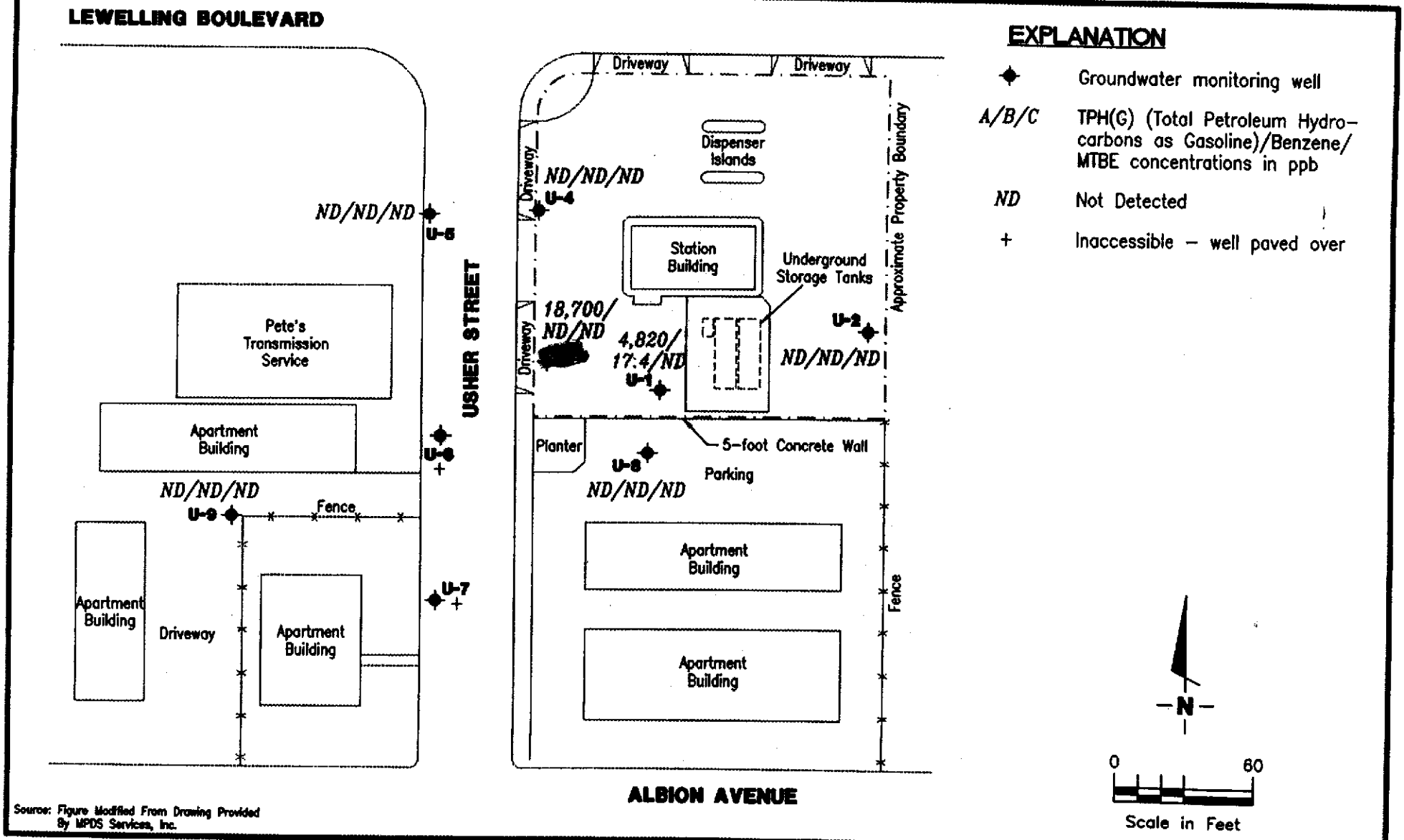
Gettler - Ryan Inc.

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

POTENTIOMETRIC MAP
Tosco (Unocal) Service Station No. 5760
376 Lewelling Boulevard
San Lorenzo, California

FIGURE 1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
180109		March 21, 2000	



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

Gettler - Ryan Inc.

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

CONCENTRATION MAP
Tosco (Unocal) Service Station No. 5760
376 Lewelling Boulevard
San Lorenzo, California

FIGURE
2

JOB NUMBER
180109

REVIEWED BY

DATE

REVISED DATE

Tab' 1

Groundwater Monitoring [illegible] and Analytical Results

Tosco (Unocal) Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-1	02/09/88	--	--	--	93,000	3,600	11,000	--[1]	20,000	--
	03/20/90	--	--	--	36,000	2,100	5,500	1,900	9,300	--
	06/05/90	--	--	--	46,000	2,300	5,500	2,500	11,000	--
	08/24/90	--	--	--	27,000	1,200	1,800	1,400	5,500	--
	12/05/90	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	03/04/91	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	06/03/91	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	09/19/91	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	12/04/91	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	03/05/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	04/07/92	--	--	--	NOT SAMPLED - PRODUCT SKIMMER INSTALLED IN WELL				--	--
	08/06/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	11/20/92	--	--	--	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	02/12/93	--	--	--	70,000	2,200	8,400	3,100	18,000	--
40.51	06/04/93	16.72	23.79	0.00	35,000	1,300	5,700	900	9,200	--
	09/09/93	17.77	22.74	0.00	67,000	2,900	18,000	6,200	32,000	--
40.20	12/02/93	18.36	21.84	<0.01	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--
	03/09/94	17.20	23.00	0.00	45,000	930	4,100	2,000	11,000	--
	06/09/94	17.42	22.78	0.00	59,000	5,200	1,300	5,200	15,000	--
	09/07/94	18.17	22.03	0.00	41,000	1,600	6,200	3,100	16,000	--
	12/05/94	16.67	23.53	0.00	1,300	55	20	16	330	--
	03/09/95	15.82	24.38	0.00	49,000	860	3,200	1,900	10,000	1,500
	06/13/95	14.70	25.50	0.00	53,000	1,400	5,000	2,500	14,000	2,800
40.01**	09/12/95	16.77	23.24	0.00	43,000	910	2,700	1,700	9,600	1,400
40.20	12/14/95	INACCESSIBLE - WELL CONNECTED TO REMEDIATION SYSTEM WHICH WAS NOT RUNNING							--	--
	03/20/96	INACCESSIBLE - WELL CONNECTED TO REMEDIATION SYSTEM WHICH WAS NOT RUNNING							--	--
	03/22/96	--	--	--	13,000	200	590	640	4,000	790
	09/24/96	INACCESSIBLE - WELL CONNECTED TO REMEDIATION SYSTEM WHICH WAS NOT RUNNING							--	--
	03/27/97	15.29	24.91	0.00	1,300	8.0	ND	ND	400	ND
	09/23/97	17.20	23.00	0.00	2,000	15	ND	ND	530	ND
	03/10/98	12.68	27.52	0.00	2,200[6]	19	4.8	ND[7]	980	38
	09/04/98	16.84	23.36	0.00	5,300[8]	53	ND[7]	410	620	ND[7]
	03/04/99	13.04	27.16	0.00	1,500	19	ND[7]	56	110	310
	09/13/99	17.14	23.06	0.00	5,850[8]	32.7	ND[7]	520	925	ND[7]
	03/21/00	**14.36**	**25.84**	**0.00**	**4,820[8]**	**17.4**	**7.74**	**297**	**1,370**	ND[7]

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-2	08/23/90	--	--	--	ND	ND	ND	ND	ND	--
	12/05/90	--	--	--	ND	ND	ND	ND	ND	--
	03/04/91	--	--	--	ND	ND	0.9	ND	2.6	--
	06/03/91	--	--	--	ND	ND	ND	ND	ND	--
	09/19/91	--	--	--	ND	ND	ND	ND	ND	--
	12/04/91	--	--	--	ND	ND	ND	ND	ND	--
	03/05/92	--	--	--	ND	ND	0.36	ND	ND	--
	04/07/92	--	--	--	ND	ND	ND	ND	ND	--
	08/06/92	--	--	--	ND	ND	ND	ND	ND	--
	11/20/92	--	--	--	ND	ND	ND	ND	ND	--
	02/12/93	--	--	--	ND	ND	ND	ND	ND	--
41.62	06/04/93	17.59	24.03	0.00	ND	ND	ND	ND	ND	--
	09/09/93	18.68	22.94	0.00	ND	ND	ND	ND	ND	--
41.26	12/02/93	19.23	22.03	0.00	ND	ND	ND	ND	ND	--
	03/09/94	18.05	23.21	0.00	62	1.1	5.4	1.1	9.7	--
	04/13/94	18.18	23.08	0.00	ND	ND	ND	ND	ND	--
	06/09/94	18.26	23.00	0.00	ND	ND	ND	ND	ND	--
	09/07/94	19.28	21.98	0.00	ND	ND	0.63	ND	0.61	--
	12/05/94	18.82	22.44	0.00	ND	ND	ND	ND	ND	--
	03/09/95	16.96	24.30	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	16.71	24.55	0.00	ND	ND	ND	ND	ND	ND
	09/12/95	17.80	23.46	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	18.18	23.08	0.00	ND	ND	ND	ND	ND	ND
	03/20/96	15.02	26.24	0.00	--	--	--	--	--	--
	09/24/96	17.90	23.36	0.00	--	--	--	--	--	--
	03/27/97	16.45	24.81	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	18.40	22.86	0.00	--	--	--	--	--	--
	03/10/98	13.79	27.47	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	17.98	23.28	0.00	--	--	--	--	--	--
	03/04/99	14.96	26.30	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	18.25	23.01	0.00	--	--	--	--	--	--
	03/21/00	**15.54**	**25.72**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-3	08/23/90	--	--	--	110,000	4,400	13,000	2,800	17,000	--
	12/05/90	--	--	--	69,000	1,900	3,500	1,600	9,800	--
	01/18/91	--	--	--	51,000	1,700	3,100	1,500	7,500	--
	03/04/91	--	--	--	84,000	1,400	10,000	2,900	17,000	--
	06/03/91	--	--	--	130,000	5,800	19,000	4,600	24,000	--
	09/19/91	--	--	--	61,000	3,300	9,700	2,800	15,000	--
	12/04/91	--	--	--	75,000	2,500	6,100	1,900	11,000	--
	03/05/92	--	--	--	160,000	5,300	15,000	5,400	26,000	--
	04/07/92	--	--	--	97,000	6,100	16,000	5,400	28,000	--
	08/06/92	--	--	--	140,000	5,100	13,000	5,000	23,000	--
	11/20/92	--	--	--	50,000	3,200	4,700	1,900	10,000	--
	02/12/93	--	--	--	80,000	3,700	9,400	3,700	18,000	--
39.64	06/04/93	15.48	24.16	0.00	92,000	2,900	8,700	4,300	20,000	--
	09/09/93	17.04	22.60	0.00	110,000	2,800	10,000	6,500	31,000	--
39.26	12/02/93	17.55	21.71	0.00	110,000	3,200	7,700	5,600	26,000	--
	03/09/94	16.35	22.91	0.00	120,000	4,500	8,300	5,600	28,000	--
	06/09/94	16.60	22.66	0.00	120,000[4]	3,300	6,100	5,200	26,000	--
	09/07/94	17.61	21.65	0.00	100,000	2,400	4,900	4,200	21,000	--
	12/05/94	17.08	22.18	0.00	140,000	3,100	5,100	4,900	21,000	--
	03/09/95	15.20	24.06	0.00	100,000	2,300	3,300	4,800	21,000	54,000
	06/13/95	15.11	24.15	0.00	64,000	1,700	1,500	3,800	18,000	900
39.26**	09/12/95	16.11	23.15	0.00	69,000	1,700	820	4,000	19,000	29,000
	12/14/95	INACCESSIBLE - WELL CONNECTED TO REMEDIATION SYSTEM WHICH WAS NOT RUNNING							--	--
	03/20/96	INACCESSIBLE - WELL CONNECTED TO REMEDIATION SYSTEM WHICH WAS NOT RUNNING							--	--
	03/22/96	--	--	--	15,000	150	490	480	3,100	400
	09/24/96	INACCESSIBLE - WELL CONNECTED TO REMEDIATION SYSTEM WHICH WAS NOT RUNNING							--	--
	03/27/97	14.77	24.49	0.00	110	ND	ND	ND	0.62	9.6
	09/23/97	16.74	22.52	0.00	ND	ND	ND	ND	ND	ND
	03/10/98	12.18	27.08	0.00	ND	ND	ND	ND	3.1	ND
	09/04/98	16.46	22.80	0.00	ND	ND	ND	1.2	2.3	ND
	03/04/99	13.48	25.78	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	16.71	22.55	0.00	ND	ND	1.77	ND	1.06	9.08
	03/21/00	**13.87**	**25.39**	**0.00**	**18,700[8]**	**ND[7]**	**ND[7]**	**1,290**	**4,770**	**ND[7]**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-4	08/23/90	--	--	--	ND	ND	1.0	ND	1.8	--
	12/05/90	--	--	--	ND	ND	ND	ND	ND	--
	01/18/91	--	--	--	ND	ND	ND	ND	ND	--
	03/04/91	--	--	--	ND	ND	ND	ND	ND	--
	06/03/91	--	--	--	ND	ND	ND	ND	ND	--
	09/19/91	--	--	--	ND	ND	ND	ND	ND	--
	12/04/91	--	--	--	ND	ND	ND	ND	ND	--
	03/05/92	--	--	--	ND	ND	ND	ND	ND	--
	04/07/92	--	--	--	ND	ND	ND	ND	ND	--
	08/06/92	--	--	--	ND	ND	ND	ND	ND	--
	11/20/92	--	--	--	ND	ND	2.5	ND	ND	--
	02/12/93	--	--	--	ND	ND	ND	ND	ND	--
40.53	06/04/93	16.73	23.80	0.00	ND	ND	ND	ND	ND	--
	09/09/93	16.89	23.64	0.00	ND	ND	ND	ND	ND	--
40.25	12/02/93	18.46	21.79	0.00	ND	ND	ND	ND	2.6	--
	03/09/94	17.30	22.95	0.00	ND	1.4	4.7	1.1	8.1	--
	04/13/94	17.44	22.81	0.00	ND	ND	ND	ND	ND	--
	06/09/94	17.53	22.72	0.00	ND	ND	ND	ND	ND	--
40.28	09/07/94	18.52	21.76	0.00	ND	ND	1.1	ND	1.0	--
	12/05/94	18.08	22.20	0.00	ND	ND	ND	ND	ND	--
	03/09/95	16.16	24.12	0.00	ND	ND	ND	ND	ND	ND
40.25	06/13/95	15.95	24.30	0.00	ND	ND	ND	ND	ND	2.7
	09/12/95	17.10	23.15	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	17.43	22.82	0.00	ND	ND	ND	ND	ND	1.3
	03/20/96	14.93	25.32	0.00	--	--	--	--	--	--
	09/24/96	17.19	23.06	0.00	--	--	--	--	--	--
	03/27/97	15.66	24.59	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	17.69	22.56	0.00	--	--	--	--	--	--
	03/10/98	12.99	27.26	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	17.28	22.97	0.00	--	--	--	--	--	--
	03/04/99	14.17	26.08	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	17.55	22.70	0.00	--	--	--	--	--	--
	03/21/00	**14.74**	**25.51**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-5	04/07/92	--	--	--	ND	ND	ND	ND	ND	--
	08/06/92	--	--	--	ND	ND	ND	ND	ND	--
	11/20/92	--	--	--	ND	ND	ND	ND	ND	--
	02/12/93	--	--	--	ND	ND	ND	ND	ND	--
39.61	06/04/93	16.05	23.56	0.00	ND	ND	ND	ND	ND	--
	09/09/93	16.90	22.71	0.00	ND	ND	ND	ND	ND	--
39.31	12/02/93	17.66	21.65	0.00	ND	ND	ND	ND	ND	--
	03/09/94	16.45	22.86	0.00	71	1.7	6.3	1.5	10	--
	04/13/94	16.64	22.67	0.00	ND	ND	ND	ND	ND	--
	06/09/94	16.70	22.61	0.00	ND	ND	ND	ND	ND	--
	09/07/94	17.73	21.58	0.00	ND	ND	0.73	ND	0.84	--
	12/05/94	17.23	22.08	0.00	ND	ND	ND	ND	ND	--
	03/09/95	15.35	23.96	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	15.16	24.15	0.00	ND	ND	ND	ND	ND	0.87
	09/12/95	16.30	23.01	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	16.56	22.75	0.00	ND	ND	ND	ND	ND	ND
	03/20/96	14.07	25.24	0.00	--	--	--	--	--	--
	09/24/96	16.55	22.76	0.00	--	--	--	--	--	--
	03/27/97	14.85	24.46	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	16.90	22.41	0.00	--	--	--	--	--	--
	03/10/98	12.21	27.10	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	16.57	22.74	0.00	--	--	--	--	--	--
	03/04/99	13.42	25.89	0.00	ND	ND	0.67	ND	ND	ND
	09/13/99	17.02	22.29	0.00	--	--	--	--	--	--
	03/21/00	**13.93**	**25.38**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
U-6	04/07/92	--	--	--	6,600	90	ND	820	1,200	--
	08/06/92	--	--	--	9,200	160	ND	360	150	--
	11/20/92	INACCESSIBLE	--	--	--	--	--	--	--	--
	02/12/93	--	--	--	2,600	27	ND	120	51	--
37.94	06/04/93	14.45	23.49	0.00	13,000	100	38	450	320	--
	09/09/93	15.56	22.38	0.00	6,300[3]	29	ND	120	34	--
37.68	12/02/93	16.08	21.60	0.00	2,100	12	1.6	21	1.1	--
	03/09/94	14.90	22.78	0.00	2,200	11	8.2	24	16	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-6	06/09/94	15.18	22.50	0.00	2,600[4]	16	ND	29	ND	--
(cont)	09/07/94	16.20	21.48	0.00	16,004	ND	ND	ND	ND	--
	12/05/94	15.60	22.08	0.00	450[5]	ND	ND	ND	ND	--
	03/09/95	13.74	23.94	0.00	2,500	29	ND	70	120	320
	06/13/95	13.73	23.95	0.00	1,300	ND	ND	20	46	5,400
	09/12/95	14.85	22.83	0.00	ND	ND	ND	ND	ND	6,600
	12/14/95	14.89	22.79	0.00	760	ND	ND	7.0	8.4	1,100
	03/20/96	12.41	25.27	0.00	52	1.1	0.98	ND	0.75	1,200
	09/24/96	15.06	22.62	0.00	ND	ND	ND	ND	ND	750
	03/27/97	13.48	24.20	0.00	ND	ND	ND	ND	ND	150
	09/23/97	15.36	22.32	0.00	66	0.81	ND	ND	ND	150
	03/10/98	10.90	26.78	0.00	ND	ND	ND	ND	ND	18
	09/04/98	14.85	22.83	0.00	ND	ND	ND	ND	ND	ND
	03/04/99	12.10	25.58	0.00	ND	ND	ND	ND	ND	6.5
	09/13/99	INACCESSIBLE - PAVED OVER			--	--	--	--	--	--
	03/21/00	**INACCESSIBLE - PAVED OVER**			--	--	--	--	--	--
U-7	04/07/92	--	--	--	ND	ND	ND	ND	ND	--
	08/06/92	--	--	--	ND	ND	ND	ND	ND	--
	11/20/92	--	--	--	ND	ND	ND	ND	ND	--
	02/12/93	--	--	--	ND	ND	ND	ND	ND	--
37.49	06/04/93	14.17	23.32	0.00	ND	ND	ND	ND	ND	--
	09/09/93	15.23	22.26	0.00	ND	ND	ND	ND	ND	--
37.11	12/02/93	15.61	21.50	0.00	ND	ND	ND	ND	ND	--
	03/09/94	14.45	22.66	0.00	ND	1.4	4.4	0.96	7.5	--
	04/13/94	14.63	22.48	0.00	ND	ND	ND	ND	ND	--
	06/09/94	14.70	22.41	0.00	ND	ND	ND	ND	ND	--
	09/07/94	15.72	21.39	0.00	ND	ND	ND	ND	ND	--
	12/05/94	15.10	22.01	0.00	ND	ND	ND	ND	ND	--
	03/09/95	13.36	23.75	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	13.33	23.78	0.00	ND	ND	ND	ND	ND	3.5
	09/12/95	14.40	22.71	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	14.39	22.72	0.00	ND	ND	ND	ND	ND	1.4
	03/20/96	11.96	25.15	0.00	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-7	09/24/96	14.59	22.52	0.00	--	--	--	--	--	--
(cont)	03/27/97	13.08	24.03	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	14.90	22.21	0.00	--	--	--	--	--	--
	03/10/98	10.46	26.65	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	14.42	22.69	0.00	--	--	--	--	--	--
	03/04/99	11.64	25.47	0.00	ND	ND	ND	ND	ND	6.6
	09/13/99	INACCESSIBLE - PAVED OVER			--	--	--	--	--	--
	03/21/00	**INACCESSIBLE - PAVED OVER**			--	--	--	--	--	--
U-8	04/07/92	--	--	--	ND	ND	ND	ND	ND	--
	08/06/92	--	--	--	ND	ND	ND	ND	ND	--
	02/12/93	--	--	--	ND	ND	ND	ND	ND	--
38.94	06/04/93	15.26	23.68	0.00	ND	ND	ND	ND	ND	--
	09/09/93	16.38	22.56	0.00	ND	ND	ND	ND	ND	--
38.57	12/02/93	16.80	21.77	0.00	ND	ND	ND	ND	ND	--
	03/09/94	15.62	22.95	0.00	ND	1.2	3.7	0.79	6.1	--
	04/13/94	15.80	22.77	0.00	ND	ND	0.78	ND	0.98	--
	06/09/94	15.86	22.71	0.00	ND	ND	ND	ND	ND	--
	09/07/94	16.87	21.70	0.00	ND	ND	ND	ND	ND	--
	12/05/94	16.32	22.25	0.00	ND	ND	ND	ND	ND	--
	03/09/95	14.56	24.01	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	14.40	24.17	0.00	ND	ND	ND	ND	ND	ND
	09/12/95	15.50	23.07	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	15.67	22.90	0.00	ND	ND	ND	ND	ND	ND
	03/20/96	13.25	25.32	0.00	--	--	--	--	--	--
	09/24/96	15.75	22.82	0.00	--	--	--	--	--	--
	03/27/97	14.18	24.39	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	16.05	22.52	0.00	--	--	--	--	--	--
	03/10/98	11.63	26.94	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	15.81	22.76	0.00	--	--	--	--	--	--
	03/04/99	12.81	25.76	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	16.37	22.20	0.00	--	--	--	--	--	--
	03/21/00	**13.25**	**25.32**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-9										
37.88	06/04/93	14.67	23.21	0.00	2,100[2]	ND	ND	ND	ND	--
	09/09/93	15.79	22.09	0.00	1,200[2]	ND	ND	ND	ND	--
37.31	12/02/93	15.93	21.38	0.00	ND	ND	ND	ND	ND	--
	03/09/94	14.74	22.57	0.00	5,700[4]	ND	ND	ND	ND	--
	04/13/94	14.96	22.35	0.00	ND	ND	ND	ND	ND	--
	06/09/94	15.05	22.26	0.00	2,900[5]	ND	ND	ND	ND	--
	09/07/94	16.06	21.25	0.00	2,700[5]	ND	ND	ND	ND	--
	12/05/94	15.43	21.88	0.00	3,700[5]	ND	ND	ND	ND	--
	03/09/95	13.50	23.81	0.00	2,500[5]	ND	ND	ND	ND	5,800
	06/13/95	13.63	23.68	0.00	ND	ND	ND	ND	ND	1,200
	09/12/95	14.73	22.58	0.00	ND	ND	ND	ND	ND	1,600
	12/14/95	14.67	22.64	0.00	ND	ND	ND	ND	ND	4,400
	03/20/96	12.27	25.04	0.00	ND	ND	ND	ND	ND	480
	09/24/96	14.92	22.39	0.00	ND	ND	ND	ND	ND	ND
	03/27/97	13.36	23.95	0.00	ND	ND	ND	ND	ND	42
	09/23/97	15.28	22.03	0.00	ND	ND	ND	ND	ND	ND
	03/10/98	10.86	26.45	0.00	ND	ND	ND	ND	3.1	ND
	09/04/98	15.03	22.28	0.00	ND	ND	ND	ND	ND	ND
	03/04/99	11.95	25.36	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	15.61	21.70	0.00	ND	ND	1.67	ND	1.01	7.85
	03/21/00	**12.38**	**24.93**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Trip Blank										
TB-LB	03/10/98	--	--		ND	ND	ND	ND	ND	ND
	09/04/98	--	--	--	ND	ND	ND	ND	ND	ND
	03/04/99	--	--	--	ND	ND	ND	ND	ND	ND
	09/13/99	--	--	--	ND	ND	ND	ND	ND	ND
	03/21/00	**--**	**--**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760
376 Lewelling Boulevard
San Lorenzo, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 10, 1998, were compiled from reports prepared by MPDS Services, Inc.

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

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

ppb = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed

* TOC elevations have been surveyed relative to mean sea level (msl). Prior to December 2, 1993, the DTW measurements were taken from the top of well covers.
** The P.V.C. well casing was shortened in September 1995.

1 Ethylbenzene and xylenes were combined prior to March 1990.
2 The concentration reported as gasoline is primarily due to the presence of a discrete hydrocarbon peak not indicative of standard gasoline
3 The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline
4 Laboratory report indicates the hydrocarbons detected appeared to be gasoline and non-gasoline mixture
5 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
6 Laboratory report indicates gasoline and unidentified hydrocarbons > C8.
7 Detection limit raised. Refer to analytical reports.
8 Laboratory report indicates gasoline C6-C12.

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID	Date	Before Purging (mg/L)	After Purging (mg/L)
U-1	03/27/97	2.41	2.35
U-2	03/27/97	4.36	4.49
U-3	03/27/97	3.18	3.32
U-4	03/27/97	3.32	3.26
U-5	03/27/97	3.74	3.77
U-6	03/20/96	3.85	3.89
	09/20/96	3.73	3.81
	03/27/97	4.43	4.36
	09/23/97	--	4.14
	03/10/98	--	3.95
U-7	03/27/97	3.29	3.38
U-8	03/27/97	3.04	3.11
U-9	03/20/96	4.02	4.00
	09/20/96	3.85	3.98
	03/27/97	3.65	3.57
	09/23/97	--	3.80
	03/10/98	--	3.62

EXPLANATIONS:

Dissolved oxygen concentrations prior to March 10, 1998, were compiled from reports prepared by MPDS Services, Inc.

mg/L = milligrams per liter

-- = Not Measured

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

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard

San Lorenzo, California

Well ID	Date	Before Purging (mg/L)	After Purging (mg/L)
U-1	03/27/97	2.41	2.35
U-2	03/27/97	4.36	4.49
U-3	03/27/97	3.18	3.32
U-4	03/27/97	3.32	3.26
U-5	03/27/97	3.74	3.77
U-6	03/20/96	3.85	3.89
	09/20/96	3.73	3.81
	03/27/97	4.43	4.36
	09/23/97	--	4.14
	03/10/98	**--**	**3.95**
U-7	03/27/97	3.29	3.38
U-8	03/27/97	3.04	3.11
U-9	03/20/96	4.02	4.00
	09/20/96	3.85	3.98
	03/27/97	3.65	3.57
	09/23/97	--	3.80
	03/10/98	**--**	**3.62**

EXPLANATIONS:

Dissolved oxygen concentrations prior to March 10, 1998, were provided by MPDS Services, Inc.

mg/L = milligrams per liter

-- = Not Measured

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

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

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

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/ Facility # TOSCO-UNOCAL #5760 Job#: 180109

Address: 346 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-1 Well Condition: GOOD

Well Diameter 3 in. Hydrocarbon Thickness: ∅ in. Amount Bailed (product/water): _____ (gal.)

Total Depth 23.17 ft.

Depth to Water 12.68 ft.

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

10.49 x VF 0.38 = 3.99 X 3 (case volume) = Estimated Purge Volume: 12 (gal.)

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

Sampling Equipment: [Disposable Bailer] / Bailer / Pressure Bailer / Grab Sample / Other: _____

Starting Time: 3:38 Weather Conditions: SUNNY

Sampling Time: 3:52 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
3:40	4	7.28	638	21.4			
	8	7.25	647	21.1			
3:44	12	7.24	652	20.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-1	3 VOA's	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5460 Job#: 180109

Address: 346 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-2 Well Condition: GOOD

Well Diameter 3 in. Hydrocarbon Thickness: Ø in. Amount Bailed (product/water): ____ (gal.)

Total Depth 29.89 ft.

Depth to Water 13.79 ft.

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

16.10 x VF 0.38 = 6.12 x 3 (case volume) = Estimated Purge Volume: 18 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / (Suction) / Grundfos / Other: ____

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

Starting Time: 1:17 Weather Conditions: SUNNY

Sampling Time: 1:33 Water Color: ____ Odor: ____

Purging Flow Rate: 2.5 gpm. Sediment Description: ____

Did well de-water? NO If yes; Time: ____ Volume: ____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:20	6	7.09	572	21.4			
	12	7.06	581	21.2			
1:25	18	7.04	588	21.1			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-2	3 VOA's	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: ____

9/97-fieldat.frm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL # 5760 Job#: 180109

Address: 346 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-3 Well Condition: GOOD

Well Diameter 3 in. Hydrocarbon Thickness: Ø in. Amount Bailed (product/water): _____ (gal.)

Total Depth 24.81 ft.

Depth to Water 12.18 ft.

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

12.63 x VF 0.38 = 4.80 x 3 (case volume) = Estimated Purge Volume: 14 (gal.)

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

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

Starting Time: 3:13 Weather Conditions: SUNNY

Sampling Time: 3:26 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
3:15	5	7.43	783	23.0			
	10	7.39	792	22.7			
3:19	14	7.41	790	22.8			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-3	3 VOA'S	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5760 Job#: 180109

Address: 396 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-4 Well Condition: GOOD

Well Diameter 3 in. Hydrocarbon Thickness: Ø in. Amount Bailed (product/water): _____ (gal.)

Total Depth 27.86 ft.

Depth to Water 12.99 ft.

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

14.87 x VF 0.38 = 5.65 X 3 (case volume) = Estimated Purge Volume: 17 (gal.)

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

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

Starting Time: 1:47 Weather Conditions: SUNNY

Sampling Time: 2:04 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:50	6	7.19	940	21.7			
	12	7.15	928	21.6			
1:55	17	7.13	922	21.4			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-4	3 VOA's	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5760 Job#: 180109

Address: 346 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-5 Well Condition: GOOD

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

Total Depth 28.47 ft.

Depth to Water 12.21 ft.

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

16.26 x VF 0.17 = 2.76 x 3 (case volume) = Estimated Purge Volume: 8 (gal.)

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

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

Starting Time: 2:20 Weather Conditions: SUNNY

Sampling Time: 2:33 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:22	3	7.39	830	21.8			
	6	7.37	814	21.5			
2:25	8	7.35	806	21.6			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-5	3 VOA's	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5760 Job#: 180109

Address: 376 LEWELLING BLVD, Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-6 Well Condition: GOOD

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

Total Depth 28.27 ft.

Depth to Water 10.90 ft.

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

17.37 x VF 0.17 = 2.95 X 3 (case volume) = Estimated Purge Volume: 9 (gal.)

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

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

Starting Time: 2:47 Weather Conditions: SUNNY

Sampling Time: 3:00 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:49	3	7.54	623	22.8			
	6	7.50	620	22.6			
2:52	9	7.48	616	22.5	3.95		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-6	3 VOA'S	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: WELL W/EXISTING ORC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5760 Job#: 180109

Address: 376 LEWELLING BLVD, Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-7 Well Condition: GOOD

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

Total Depth 34.88 ft.

Depth to Water 10.46 ft.

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

24.42 x VF 0.17 = 4.15 x 3 (case volume) = Estimated Purge Volume: 12 (gal.)

Purge Equipment: Disposable Bailer; Bailer; ~~Stack~~; [Suction]; Grundfos; Other: _____

Sampling Equipment: [Disposable Bailer]; ~~Bailer~~; Pressure Bailer; Grab Sample; Other: _____

Starting Time: 11:53 Weather Conditions: SUNNY

Sampling Time: 12:10 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:55	4	7.58	512	22.4			
	8	7.53	525	22.1			
11:59	12	7.51	530	21.9			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-7	3 VOA'S	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: _____

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5960 Job#: 180109

Address: 376 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-8 Well Condition: GOOD

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

Total Depth 29.83 ft.

Depth to Water 11.63 ft.

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

18.20 x VF 0.17 = 3.09 x 3 (case volume) = Estimated Purge Volume: 9 (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: SUNNY

Sampling Time: 12:35 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm. Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:25	3	7.35	478	22.6			
	6	7.32	470	22.5			
12:28	9	7.30	464	22.2			

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-8	3 VOA'S	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: _____

9/97-fieldst.fmm

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/
Facility # TOSCO-UNOCAL #5760 Job#: 180109

Address: 376 LEWELLING BLVD. Date: 3/10/98

City: SAN LORENZO, CA Sampler: HAIG KEVORK

Well ID U-9 Well Condition: GOOD

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

Total Depth 28.20 ft.

Depth to Water 10.86 ft.

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

17.34 x VF 0.17 = 2.95 x 3 (case volume) = Estimated Purge Volume: 9 (gal.)

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

Sampling Equipment: [Disposable Bailer]; Bailer; Pressure Bailer; Grab Sample; Other: _____

Starting Time: 12:48 Weather Conditions: SUNNY

Sampling Time: 1:03 Water Color: _____ Odor: _____

Purging Flow Rate: 2.5 gpm Sediment Description: _____

Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity µmhos/cm	Temperature °C	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
12:50	3	6.95	876	22.5			
	6	6.91	882	22.2			
12:54	9	6.94	885	22.0	3.62		

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-9	3 VOA'S	YES	HCl	SEQUOIA	G/BTEX/MTBE

COMMENTS: WELL W/ EXISTING ORC

3/97-fieldat.frm

Chain of Custody Record

TOSCO

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

Facility Number: UNOCAL SS#5760
Facility Address: 376 Lewelling Blvd. San Lorenzo CA
Consultant Project Number: 180109.85
Consultant Name: Gettler-Ryan Inc. (G-R Inc.)
Address: 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name): Deanna L. Harding
(Phone) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name): Ms. Tina Berry
(Phone): (510) 227-2321
Laboratory Name: Sequoia Analytical
Laboratory Release Number:
Samples Collected by (Name): HAIG KEVORK
Collection Date: 3/10/1998
Signature:

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	TPH Gas + BTEX w/MTBE (8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)					DO NOT BILL TB-LB ANALYSIS Remarks
								Analyses To Be Performed												
TB-LB		1	W	G		HCl	YES	✓										80311149		Limited Sample for U-2
U-1		3	W	G				✓										80311150		
U-2		3	W	G				✓										80311151		
U-3		3	W	G				✓										80311152		
U-4		3	W	G				✓										80311153		
U-5		3	W	G				✓										80311154		
U-6		3	W	G				✓										80311155		
U-7		3	W	G				✓										80311156		
U-8		3	W	G				✓										80311157		
U-9		3	W	G				✓										80311158		

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	G-R Inc.	3/10/98			
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time
					3/10/98 1815

Turn Around Time (Circle Choice)

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler-Ryan	Client Project ID:	Tosco #5760, San Lorenzo	Sampled: Mar 10, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Mar 10, 1998
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 2, 1998
Attention: Deanna L. Harding	First Sample #:	803-1149	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 803-1149 TB-LB	Sample I.D. 803-1150 U-1	Sample I.D. 803-1151 U-2	Sample I.D. 803-1152 U-3	Sample I.D. 803-1153 U-4	Sample I.D. 803-1154 U-5
QC Batch Number:		GC032398 802004A	GC032398 802004A	GC032398 802004A	GC032398 802004A	GC032398 802004A	GC032398 802004A
Purgeable Hydrocarbons	50	N.D.	2,200	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	19	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	4.8	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	980	N.D.	3.1	N.D.	N.D.
MTBE	2.5	N.D.	38	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	Gasoline & Unidentified Hydrocarbons >C8	--	--	--	--
Quality Control Data							
Report Limit Multiplication Factor:		1.0	5.0	1.0	1.0	1.0	1.0
Date Analyzed:		3/23/98	3/23/98	3/23/98	3/23/98	3/23/98	3/23/98
Instrument Identification:		HP-4	HP-4	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)		102	98	102	104	103	101

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Mike Gregory
Project Manager

8031149.GET <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler-Ryan	Client Project ID:	Tosco #5760, San Lorenzo	Sampled: Mar 10, 1998
6747 Sierra Court, Suite J	Sample Matrix:	Water	Received: Mar 10, 1998
Dublin, CA 94568	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Apr 2, 1998
Attention: Deanna L. Harding	First Sample #:	803-1155	

QC Batch Number: GC032398 802004A | GC032398 802004A | GC032398 802004A | GC032398 802004A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 803-1155 U-6	Sample I.D. 803-1156 U-7	Sample I.D. 803-1157 U-8	Sample I.D. 803-1158 U-9
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	3.1
MTBE	2.5	18	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	3/23/98	3/23/98	3/23/98	3/23/98
Instrument Identification:	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	99	100	107	103

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Mike Gregory
Project Manager

8031149.GET <2>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Gettler-Ryan
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Deanna L. Harding

Client Project ID: Tosco #5760, San Lorenzo
Matrix: Liquid
QC Sample Group: 8031149-158
Reported: Apr 2, 1998

QUALITY CONTROL DATA REPORT

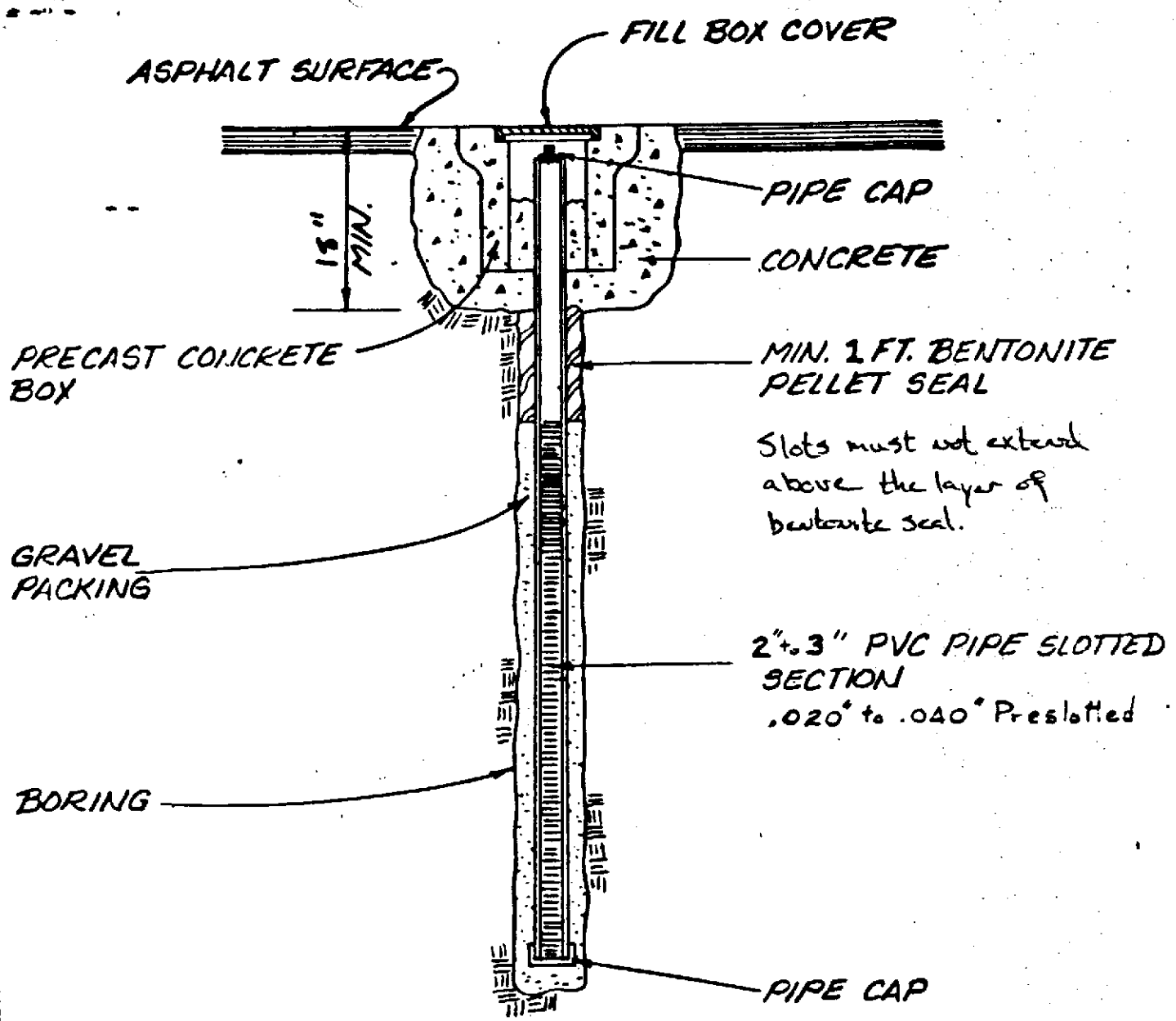
Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032398 802004A	GC032398 802004A	GC032398 802004A	GC032398 802004A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8031151	8031151	8031151	8031151
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/23/98	3/23/98	3/23/98	3/23/98
Analyzed Date:	3/23/98	3/23/98	3/23/98	3/23/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	23	23	21	66
MS % Recovery:	115	115	105	110
Dup. Result:	23	23	21	67
MSD % Recov.:	115	115	105	112
RPD:	0.0	0.0	0.0	1.5
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	4LCS032398	4LCS032398	4LCS032398	4LCS032398
Prepared Date:	3/23/98	3/23/98	3/23/98	3/23/98
Analyzed Date:	3/23/98	3/23/98	3/23/98	3/23/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	18	19	18	55
LCS % Recov.:	90	95	90	92
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Mike Gregory
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



DEPTH OF HOLE: 20'

TOTAL NUMBER OF HOLES REQUIRED: 5

REV

PLANS & SPECIFICATIONS
TYPICAL WELL PROFILE

2/1/83

DR RB CH.
DR APP.
ENGR.
OPR'G. DEPT.
APPROVED
ENG'R. DEPT.

SCALE NONE DATE

W.O.
S.O.

Printed in U.S.A.
GC-680-AB (CD-1-74)

Gettler - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 1

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
1'		Black clay
3'		Brown Sandy clay
7'		Brown sandy clay (moist)
9'		Black clay
11'		Grey clay (hydrocarbon vapor)
14'		Tan mud (water)
20'		" "

FOREMAN: Mike Divita SHEET: 1 OF 1

Gettler - Ryan Inc. — GENERAL CONTRACTORS

WELL BORING LOG

COMPANY: Chevron U.S.A — JOB NO: OR - 5107

LOCATION: 15900 Hesperian — DATE: 12-29-83

CITY: San Lorenzo — WELL #: 2

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
3½'		Black sandy clay
5'		Brown sandy clay
6'		Brown clay
8'		Light brown clay
12'		Black clay
15'		Tan sandy clay
20'		Tan mud

FOREMAN: Mike Divita — SHEET: 1 OF 1

Gettler - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 3

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
2½'		Baserock
4½'		Reddish brown sandy clay
5'		Brown sandy clay
7'		Brown sand
8'		Brown sandy clay
11'		Dark brown clay
14'		Black clay
15'		Tan sandy clay (water)
20'		" "

FOREMAN: Mike Arita SHEET: 1 OF 1

Gettler - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: #4

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
4"		Asphalt
3'		Basecrock
4'		Sand
5'		Black clay
6'		Dark brown sandy clay
8'		Black clay
15'		Tan sandy clay (water)
17'		Tan mud
20'		" "

FOREMAN: Mike Devita SHEET: 1 OF 1

Gettler - Ryan Inc. GENERAL CONTRACTORS

WELL BORING LOG

COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian DATE: 12-29-83

CITY: San Lorenzo WELL #: 5

DEPTH	SAMPLE NO.	SOIL DESCRIPTION
0 ft.		
3"		Asphalt
1'		Baserock
3'		Top soil - silt
5'		Brown sandy clay
6½'		Dark brown sandy clay
13'		Dark tan clay
15'		Light tan sandy clay (water)
17'		Tan clay
20'		" "

FOREMAN: Mike Divita SHEET: 1 OF 1

Geller - Ryan Inc. GENERAL CONTRACTORS

OBSERVATION WELL
DAILY MONITOR RECORD

COMPANY: Chevron U.S.A. #504 JOB NO: OR - 5107

LOCATION: 15900 Hesperian Blvd DATE: 12.29.83

CITY: San Lorenzo TIME: 4:00 P.M

WELL	LIQUID DEPTH	HYDROCARBON THICKNESS	AMOUNT PUMPED
1	119" ≈10'	0	
2	121" ≈ 11'	0	
3	125" ≈ 11'	0	
4	130" ≈ 11.5'	0	
5	128" ≈ 11'	0	
6			
7			
8			
9			
10			
11			
12			
RW			

FLOWMETER: DISCHARGE:

WATER TABLE DEPRESSION PUMP: CLEANED:

SCAVENGER OPERATION: CLEANED:

CLARIFIER/SENSOR: CLEANED:

PRODUCT TANK: TOTAL LIQUID: INCHES WATER: INCHES

PUMPED OUT: GALLONS

TOTAL RECOVERED TO DATE:

COMMENTS:

FOREMAN: M. Divita ASSISTANT:

Gettler - Ryan Inc. — GENERAL CONTRACTORS

OBSERVATION WELL
DAILY MONITOR RECORD

COMPANY: Chevron U.S.A. JOB NO: OR - 5107

LOCATION: 15900 Hesperian Blvd DATE: 1-9-84

CITY: San Lorenzo TIME: 1:00 P.M.

WELL	LIQUID DEPTH	HYDROCARBON THICKNESS	AMOUNT PUMPED
1	113"	0	
2	112"	0	
3	117"	0	
4	125"	0	
5	118"	0	
6			
7			
8			
9			
10			
11			
12			
RW			

FLOWMETER: DISCHARGE:

WATER TABLE DEPRESSION PUMP: CLEANED:

SCAVENGER OPERATION: CLEANED:

CLARIFIER/SENSOR: CLEANED:

PRODUCT TANK: TOTAL LIQUID: INCHES WATER: INCHES

PUMPED OUT: GALLONS

TOTAL RECOVERED TO DATE:

COMMENTS:

FOREMAN: David Byron ASSISTANT:

Gettler - Ryan Inc. GENERAL CONTRACTORS

WELL ELEVATION SURVEY

COMPANY: CHEVRON U.S.A. #504 JOB NO: OR - 5107

LOCATION: 15900 HESPERIAN BLVD DATE: 1-9-84

CITY: SAN LORENZO, CA TIME: 1:00 P.M.

BENCHMARK LOCATION: WELL # 1 ROD SETTING: 91.88

WELL	LID ELEVATION	DIFFERENTIAL	TOTAL DEPTH
1	91.88	—	20'
2	92.13	+0.25	20'
3	93.34	+1.46	20'
4	93.72	+1.84	20'
5	93.24	+1.36	20'
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

COMMENTS:

FOREMAN: DAVID BYRON ASSISTANT: JEFF RYAN