

GETTLER-RYAN INC.

10/3/cc. 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

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

Mr. Tim Ripp

IT Corporation

1921 Ringwood Avenue San Jose, California 95131

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



IT Corporation

1921 Ringwood Avenue San Jose, CA 95131-1721 Tel. 408.453.7300

Tel. 408.453.7300 Fax. 408.437.9526

A Member of The IT Group

24/

November 1, 2000 Project 819726-05760001

Mr. Amir Gholami

Alameda County Health Services Agency, Environmental Health Services

1131 Harbor Bay Parkway, Suite 250

Alameda, California 94502

Re: Proposal to Reduce Sampling Frequency

76 Service Station 5760 376 Lewelling Boulevard at Usher Street San Lorenzo, California

Dear Mr. Gholami:

On behalf of Tosco Marketing Company (Tosco), IT Corporation (IT) has prepared this letter in regard to the Tosco facility referenced above. This letter has been prepared in response to a letter to Tosco from the Alameda County Health Care Services Agency (ACHCSA) dated October 3, 2000.

The October 3, 2000 ACHCSA letter presented a review of the May 9, 2000 Groundwater Monitoring and Sampling Report submitted by Gettler-Ryan, Inc. (Gettler-Ryan) for the subject site (Attachment A). The October 3, 2000 ACHCSA letter also advised Tosco that continued sampling of some wells at the subject site may be unnecessary. This comment was based on the historical lack of detectable petroleum hydrocarbons in groundwater samples collected from some site wells. Groundwater samples from other site wells were noted to contain very low concentrations of petroleum hydrocarbons.

Based on a review of the data presented in the May 9, 2000 Gettler-Ryan report, and the comments presented by the ACHCSA in the October 3, 2000 letter to Tosco, IT proposes that groundwater samples no longer be collected from wells U-2, U-4, and U-6. However, IT recommends that these wells continue to be gauged to determine depth to groundwater during future monitoring and sampling events.

Additionally IT recommends that the monitoring and sampling frequency for the remaining wells, U-1, U-5, U-7 and U-8, be revised from semi-annual to annual. IT

recommends that annual groundwater monitoring and sampling events be performed in September. No changes to the current laboratory analytical parameters are recommended.

Upon the approval of the ACHCSA, IT will contact Gettler-Ryan to make the proposed changes t the groundwater monitoring and sampling program for the subject site.

If you have questions or comments, please do not hesitate to contact our office.

Sincerely,

IT Corporation

Timothy L. Ripp Project Geologist

RG 6745

Attachments: Attachment A - Groundwater Monitoring and Sampling Report,

Gettler-Ryan, Inc., May 9, 2000

cc: Mr. David DeWitt, Tosco Marketing Company

Mr. Chuck Headlee, Regional Water Quality Control Board -

San Francisco Bay Region



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

Figure 1:

Potentiometric Map Concentration Map

Figure 2: Table 1:

Groundwater Monitoring Data and Analytical Results

Table 1:

Dissolved Oxygen Concentrations

Attachments:

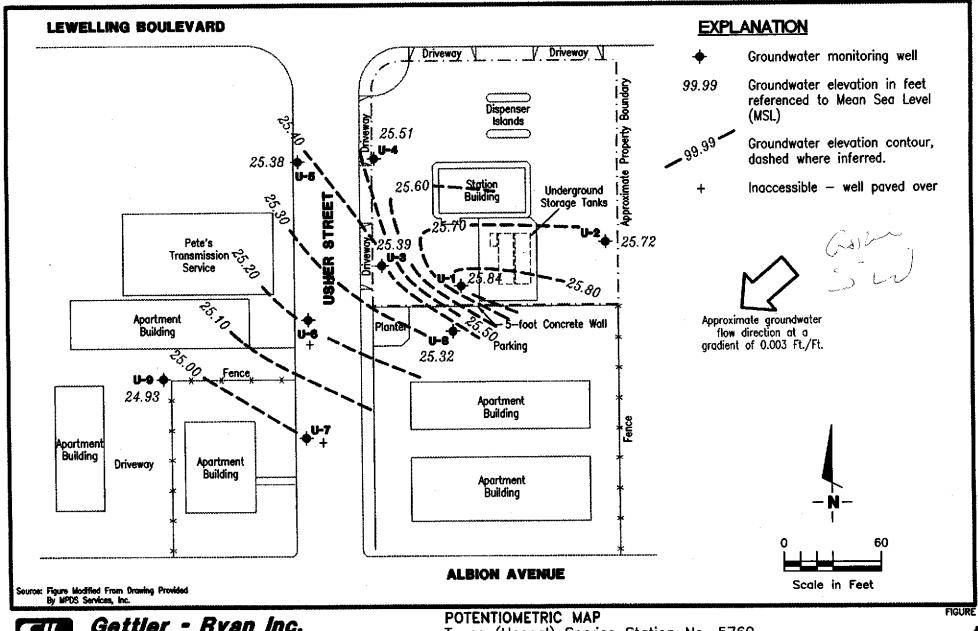
Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

No. 5577

5760.qml





Gettler - Ryan Inc.

REVIEWED BY

6747 Sierro Ct., Suite J Dublin, CA 94568

(925) 551-7555

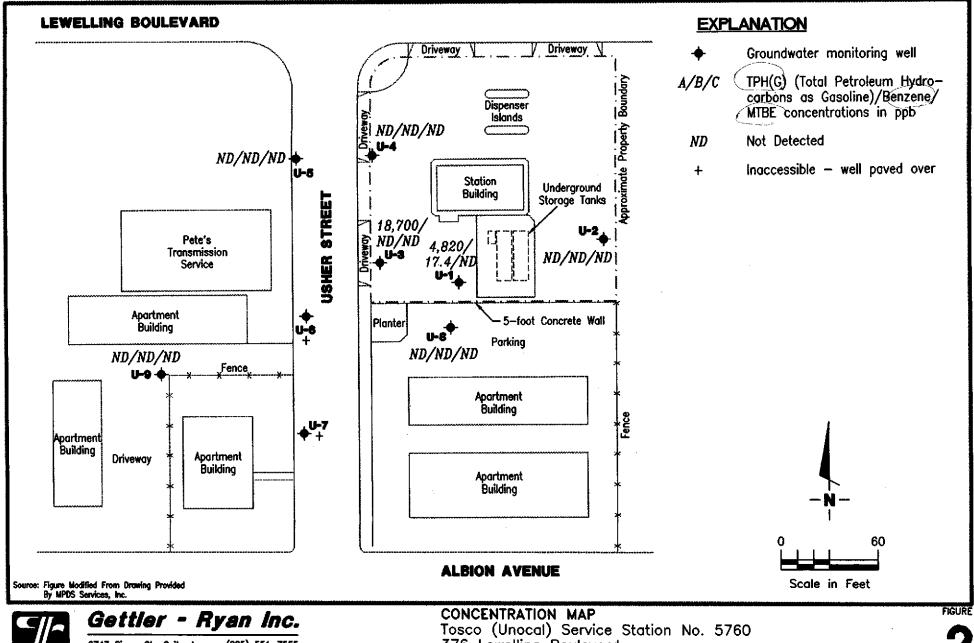
Tosco (Unocal) Service Station No. 5760 376 Lewelling Boulevard San Lorenzo, California

DATE

REVISED DATE

JOB NUMBER 180109

March 21, 2000



6747 Sierro Ct., Suite J Dublin, CA 94568

(925) 551-7555

376 Lewelling Boulevard
San Lorenzo, California

DATE March 21, 2000

REVISED DATE

JOB NUMBER 180109 REVIEWED BY

Table 1
Groundwater Monitoring Data and Analytical Results

				Product						
Well ID/	Date	DTW	GWE	Thickness	TPH(G)	В	T	E	X	MTBE
TOC*		(fi.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-1	02/09/88				93,000	3,600	11,000	1	20,000	***
U-1	03/20/90	<u></u>		 	36,000	2,100	5,500	1,900	9,300	
	05/20/90				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	 - <u>-</u>			NOT SAMPLED D	· ·		•	5,500 	
					NOT SAMPLED D					
	03/04/91				NOT SAMPLED D					-
	06/03/91		~~		NOT SAMPLED D					
	09/19/91				NOT SAMPLED D					
	12/04/91		70		NOT SAMPLED D					
	03/05/92									
	04/07/92				NOT SAMPLED -					
	08/06/92				NOT SAMPLED D					
	11/20/92				NOT SAMPLED D					
	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 D					
	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				MEDIATION SYST					
	03/20/96	INACCESSIBLE -	WELL CONN	ECTED TO RE	MEDIATION SYST	EM WHICH WAS	NOT RUNNING			
	03/22/96				13,000	200	590	640	4,000	790
	09/24/96	INACCESSIBLE -	WELL CONN	ECTED TO RE	MEDIATION SYST	EM 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	${ m ND}^7$
	03/21/00	14.36	25.84	0.00	4,8208	17.4	7.74	297	1,370	ND^7

Table 1
Groundwater Monitoring Data and Analytical Results

				Product						
Well ID/	Date	DTW	GWE	Thickness	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(msl)	(ft.)	(ppb)	(ррь)	(ppb)	(ppb)	(ppb)	(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	<u></u>
	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	
11.02	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	
11.20	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

Well ID/	Date	DTW	GWE	Product Thickness	TPH(G)	В	Т	E	X	MTBE
TOC*	Pate	(fi.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	 (ppb)	(ppb)
900000000000000000000000000000000000000					4 •					
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		M.M.		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 CONN	ECTED TO REM	EDIATION SYST	EM WHICH WAS	NOT RUNNING			
	03/20/96	INACCESSIBLE -	- WELL CONN	ECTED TO REM	EDIATION SYST	EM WHICH WAS	NOT RUNNING			
	03/22/96				15,000	150	490	480	3,100	400
	09/24/96	INACCESSIBLE	- WELL CONN	ECTED TO REM	EDIATION SYST	EM 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	$18,700^8$	\mathbf{ND}^{7}	ND^7	1,290	4,770	ND^7

Table 1 Groundwater Monitoring Data and Analytical Results

		rsenta:	COLLEGE	Product	TDH(C)		781	E	X	CORDO
Well ID/	Date	DTW	GWE	Thickness	TPH(G)	В	Т		and the second of the second o	MTBE
TOC*		(ft.)	(mst)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(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

				Product						
Well ID/	Date	DTW	GWE	Thickness	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(mst)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(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	
27.01	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	
37.31	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

				Product						
Well ID/	Date	DTW	GWE	Thickness	TPH(G)	В	T	E	X	MTBE
TOC*		(ft.)	(mst)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-6	06/09/94	15.18	22.50	0.00	2,600 ⁴	16	ND	29	ND	
	09/07/94	16.20	22.30	0.00	16,004	ND	ND	ND	ND ND	
(cont)		15.60	22.08	0.00	450 ⁵	ND ND	ND ND	ND	ND ND	
	12/05/94 03/09/95	13.74	22.08	0.00	2,500	ND 29	ND ND	70	120	320
						ND	ND ND	70 20	46	5,400
	06/13/95	13.73	23.95	0.00	1,300					
	09/12/95	14.85	22.83	0.00	ND	ND ND	ND ND	ND 7.0	ND 8.4	6,600 1,100
	12/14/95	14.89	22.79	0.00	760					
	03/20/96	12.41	25.27	0.00	52 ND	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								
	03/21/00	INACCESSIBLE	- PAVED OVE	R	-		-			-
U-7	04/07/92				ND	ND	ND	ND	ND	wa
· ,	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	
シルマグ	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	
31.11	03/09/94	14.45	22.66	0.00	ND	1.4	4.4	0.96	7.5	
	03/09/94	14.63	22.48	0.00	ND ND	ND	ND	ND	ND	
	06/09/94	14.70	22.41	0.00	ND	ND	ND	ND	ND	
	06/09/94	15.72	21.39	0.00	ND ND	ND	ND ND	ND	ND	
			22.01	0.00	ND ND	ND ND	ND ND	ND ND	ND ND	
	12/05/94	15.10			ND	ND ND	ND ND	ND	ND ND	ND
	03/09/95	13.36	23.75	0.00			ND ND	ND ND	ND ND	3.5
	06/13/95	13.33	23.78	0.00	ND	ND				3.5 ND
	09/12/95	14.40	22.71	0.00	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

Well ID/	Date	DTW	GWE	Product Thickness	TPH(G)	В	T	E	X	МТВЕ
TOC*		(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
	00/04/07	14.50	22.52	0.00						
U-7	09/24/96	14.59	22.52	0.00			AID		 ND	 ND
(cont)	03/27/97	13.08	24.03	0.00	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 OVE	CR .						
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

Well ID/	These	DTW	GWE	Product Thickness	TPH(G)	В	Т	E	X	MTBE
TOC*	Date	(ft.)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
	<u> </u>									
U-9					2					
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	2,900⁵	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	3,700⁵	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
m ' m. '										·
Trip Blank TB-LB	03/10/98				ND	ND	ND	ND	ND	ND
110-170	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	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

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

msl = Relative to mean sea level

MTBE = Methyl tertiary butyl ether

TPH(G) = Total Petroleum Hydrocarbons as Gasoline

- * 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.
- Ethylbenzene and xylenes were combined prior to March 1990.
- The concentration reported as gasoline is primarily due to the presence of a discrete hydrocarbon peak not indicative of standard gasoline
- The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline
- Laboratory report indicates the hydrocarbons detected appeared to be gasoline and non-gasoline mixture
- Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 6 Laboratory report indicates gasoline and unidentified hydrocarbons > C8.
- 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 09/20/96 03/27/97 09/23/97 03/10/98	3.85 3.73 4.43 	3.89 3.81 4.36 4.14 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 09/20/96 03/27/97 09/23/97 03/10/98	4.02 3.85 3.65 	4.00 3.98 3.57 3.80 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.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

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

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

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

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

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

As requested by 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.

Client/ Facility #576	60		Job	#: <u> </u>	80109		
•	6 Lewelling B	lvd.	Date): 	3-21-00	9	
City: Sav			Sam	pler:	Joe & BI	nei.	
Well ID	UL_	Well	Condition: _	o.k			
Well Diameter	3 in,	•	ocarbon	·	Amount Ba		(Gallons)
Total Depth	29.05 tc		mess: $\underline{\underline{U}}$		(product/wat 3" = 0.38		' = 0.66
Depth to Water	14.36 n.	1	or (VF)	6 = 1.	.50	12" = 5.80	
	14.69 ×	vf <u>0.38</u>	_ <u>5.8</u> x3(cas	e volume) =	Estimated Pu	rge Volume: _	7 (gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Sampling Equipmen	nt: Dis Bai Pre Gra	sposable Ba iler essure Baile ab Sample her:	er	· ·
Sampling Time: Purging Flow Ra	1:52 2:150 te:	gom.	Weather Condit Water Color: Sediment Desci If yes; Time:	c le ription:	none		
Time \	Volume pH (gal.)	Conde	uctivity d ^O Tem os/cm X		D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
2:03 2:05	11 7.27 17 7.25	// .	60	1.6			
SAMPLE ID	(#) - CONTAINER	LABORA	ATORY INFORM PRESERV. TYPE		RATORY	ANAL	YSES
U-1	3vo+	Υ	HCL	SEQUON	4	TPH(G)/btex/r	ntbe
COMMENTS.			-				
COMMENTS:							
			<u> </u>		<u> </u>	 	

Client/ Facility # 57	160		· 	Job#	: _	180109	·	
_	6 Lewelling 1	slvd.		Date		3-21-0	O	
	u Loienzo			Sam	oler:	Joe 4 B	(idn	
Well ID	<u>U-2</u>	We	ll Condition	:	o, k			
Well Diameter	3 _{in}		drocarbon ckness:	A	Hami	Amount B	Λ-	(Gallons)
Total Depth	29.88 ft		olume	2" = 0	.17	· · · · · · · · · · · · · · · · · · ·		* = 0.66
Depth to Water	· 15.54 to	Fa	ictor (VF)		6 = 1	1.50	12" = 5.80	
	<u>14.34</u> x	VF 0.38	<u>-5.45</u> x	3 (case	volume} =	Estimated Po	urge Volume: _	16.5 lgal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grandfos	•		apling ipment	Ba Pr	sposable Brailer essure Bailer ab Sample	er	
<u>.</u>	Other:					ther:		,
Starting Time:	1:0	<u>U_</u>	Weather C	Conditio	วกร:	clear	<u>-</u>	
Sampling Time:	1:28	Pm	Water Col	or:	<u>cle</u>	ear_	Odor:v	Due
Purging Flow Ra	nte:	<u>qom.</u>	Sediment	Descri	otion: _	non e_	·	
Did well de-wat	er?	·	If yes; T	ime: _	-	Volun	ne:	[.isp]
	Volume pH (gai.) 7.19		ductivity 1d	Temp	<i>i. J</i>	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:14 -	16, 7.27		5.81	69	1.4			
SAMPLE ID	(#) - CONTAINER	LABOR	RATORY IN		.*	PRATORY	ANAL	YSES
U-2	3vo+	Y	HCL		SEQUOL	Α	TPH(G)/btex/	mtbe
							-	
-		· -			<u>*</u>			
COMMENTS:								<u> </u>
								<u></u>

9/37-(leldec/m

Client/ Facility #57	· 60		Job#	: 1	80109		
	6 Lewelling B	lvd.	Date:		•	ð	
_	Loienzo				Joe 4 B:	_	
Well 1D	<u>U-3</u>	Wel	Il Candition:	o. k	-		
Well Diameter	3 in.	-	drocarbon	Hared	Amount Ba	سين	(Gallons)
Total Depth	24.80 t.		$\frac{Ckness:}{2^n = 0}$.17	3" = 0.38	4	* = 0.66
Depth to Water	13.87 tc	Fa	ctor (VF)	6 = 1		12° = 5.80	
	10.93 x	vf <u>0.38</u>	=4.15 x 3 (case	volume) =	Estimated Pu	rge Volume:	12.5 (gal.)
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipment	ta Di:	sposable Ba	iller	
Edaibuteur	Stack			Ba	iiler essure Baile		•
	Suction Grandfos			Gr	ab Sample		
	Other:			Ot	ther:		
	1:30 1:45 te:1	?. v	Weather Condition Water Color: Sediment Descri	<u>c l</u>	2a/		
	er?		If yes; Time: _		Volum	ne:	(_lsp)
1:35	Volume pH (gal.) 8 7.80 7.47 12.7 7.51	भ्या	ductivity 10° Temp shos/cm x 2.66 69. 4.18 69.	t 2	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID	(#) - CONTAINER	LABOI REFRIG.	RATORY INFORM. PRESERV. TYPE		RATORY	ANAL	YSES .
U-3	3vo+	Y	HCL ·	SEQUOL	A	TPH(G)/btex/s	ntbe
			<u> </u>	<u> </u>			
	J						
COMMENTS: .							
							

Client/ Facility <u>#57</u>	60		Job#	#: 1	80109		
-	6 Lewelling B	الما.	Date		3-21-0	<i>0</i>	
_	1 Corenzo				Joe & B	(i 9 v	
Well ID	<u>U-4</u>	We	Il Condition:	o, k			
Well Diameter	3 in,		Irocarbon 🔑		Amount B		
Total Depth	27.85 ft.	F	ckness: C	<u>⊓eet)</u> 0.17	(product/wat 3" = 0.38		(Gallons) = 0.66
Depth to Water	14.74 tt.	Fa	ctor (VF)	6 = 1	.50 	12* = 5.80	
	13.11_ ×	vf <u>0.38</u>	. = <u>4.98</u> x 3 (case	e volume) =	Estimated Pu	irge Volume: _	[(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Sampling Equipmen	Ba Pro Gr	sposable Bailer essure Baile ab Sample ther:	er	
Purging Flow Ra		45 R.m.	Weather Condition Water Color: Sediment Description If yes; Time:	c le iption: _	none	· · · · · · · · · · · · · · · · · · ·	····
Time \\ \	Volume pH (gal) 7 47 10 7.57 15 7.60	Con μ	ductivity (d ^O Tem) thos/cm X	perature 9. L	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID	(#) - CONTAINER	LABOR	RATORY INFORM	•	RATORY	ANAL	YSES
U-A	3vot	Y	HCL ·	SEQUON	٩	TPH(G)/btex/r	ntbe
COMMENTS:							
				-	······································		

Client/ Facility # 576	60		Job#:	180109		
·	6 Lewelling B	lvd.	 Date:	3-21-0	0	
City: Say			Samp	ler: Joe 4 B	Blign	
Well ID	<u>U-5</u>	Weil	Condition:	0, k-		
Well Diameter	2 in.	-	ocarbon	Amount		(Gallons)
Total Depth	28.45 n.	Vol		17 3" = 0.5 6" = 1.50	38 4	= 0.66
Depth to Water	13.93 tc	Pad	ox (VF)			
	14.52 x	VF 0.17	= <u>2.4</u> 7x3 (case ·	volume) = Estimated	Purge Volume:	7. Sagal.)
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipment		Bailer	• •
• •	Stack &uction			Bailer Pressure Ba	îler	
	Grundfos Other:			Grab Sampl Other:		
	Other.					
Starting Time:	11:3			ns: <u>clear</u>		
Sampling Time:				clear		
	te:			ntion:Valu		
Did well de-wate	er?		If yes; time: _	Volu	e	
Time \	Volume pH		uctivity (d ^O Tempo tos/cm (t	• /		Alkalinity (ppm)
11:40 _	749		27 <u>69</u>	2		
	7.5 7.36	- - G	.87 70	2.5		
				<u> </u>		
		LABOR	ATORY INFORMA	ATION		
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE /	LABORATORY		YSES
U-5	3vo+	Y	HCL	SEQUOIA	TPH(G)/btex/	mtbe
					1	
COMMENTS:						

3/37-44-6-6.100

Client/ Facility #57	60		Job#	- 18	0109		
•	6 Lewelling 9	3/vd.	Date	: 3	-21-0	o	
City: Sa.			Sam	pler:ブ	0e 4 B	(iðn	
Well ID	_U-6	Well C	ondition: _	ork	.		
Well Diameter	2 in		4	-· ·	Amount B		
Total Depth	2001.0.00 ft	Thickn).17	900 = 0.38	3 4	(Gallons) = 0.66
Depth to Water	<u>. ft</u>		(VF)	6 = 1.5	o 	12" = 5.80	
	×	vf 612 -	X 3 (case	: volume) = E	istimated Pu	arge Volume:	(gal.)
Purge Equipment:	Disposable Bailer Bailer Stack	•	Sampling Equipmen	Baile		•	
	Suction Grandfos Other:			Grai	sure Baile o Sample er:		
Starting Time:		w	eather Conditi	ons:	Years	1	
Sampling Time:		w	ater Color:	<u>allex</u>	2k/	Odor:	efref_
Purging Flow Ra	te:	gom. Se	ediment Descri	ption: 🖊	none	/ /	/
Did well de-wate	er?	If	yes; Time: _	- l-	(Volun	ne:	(Japl.)
Time	Volume pH (gal.)	Conduc	rivity (d ^O Temp Vem X	erature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
		/			$\overline{/}$		7—
$\overline{}$ Z			/				7
/_	— <i>-</i>	_	/-			- /-	/
			TORY INFORM	ÁTION			
SAMPLE ID	(#) - CONTAINER		PRESERV. TYPE	•	ATORY	ANAL	YSES
0-6	3vot	Y	HCL /	SEQUOIA	-	TPH(G)/btex/s	ntbe
				 			
1	(.						
COMMENTS.	Pavedover	well.					
CONNINIEN (5.	V VECT TO VE				· · · · · · · · · · · · · · · · · · ·		

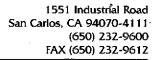
Client/ Facility <u>#576</u>	· 60	,	Job#:	180109		
			Date:	3-21-0	<i>o</i> .	
	Lewelling Bl	<u>va · </u>				
City: San	LOIPHZO		Sampl	er: <u>Joe 4 B</u>	(19~	
<u> </u>					· · · · · · · · · · · · · · · · · · ·	
Well ID	<u> </u>	Well Condition	n:	o.k.		· · · · · · · · · · · · · · · · · · ·
Well Diameter	2 in.	Hydrocarbon Thickness:	0	Amount 8		(Gallons)
Total Depth	BOUSE tt.	Volume Factor (VF)	2" = 0.1	7 3" = 0.3 6 = 1.50	8 4° 12° = 5.80	= 0.66
Depth to Water	<u> </u>				<u></u>	i
	x v	F 0.17 =	X 3 (case v	olume) = Estimated P	urge Volume:	<u>(gal.)</u>
Purge	Disposable Bailer		mpling	Disposable B	ailer	•
Equipment:	Bailer Stack	Eq	uipment:	Bailer	enci	
	Suction _			Pressure Bail	er	
	Grundfos			Grab Sample	:	
	Other:	<u> </u>		Other:		
				ore		
Corrier Time:		Weather	Condition	ns: Non-		
Starting Time:			, m	Sara	Odgr: vaca	1/2
Sampling Time:	-/			/		
Purging Flow Rat	te:/a	- /		tion:Avs e	1	/
Did well de-wate	ir?	If yes;	Time: \neq	Volu	me:	lgal.)
			2- (D.O./	ORP	Alkalinity
	olume pH (gal.)	Conductivity [•F	rature D.O. (rog/L)	(mV)	(ppm)
				/	/	/
					- —	
_					- /	
7	 /		<u></u>	<u>/</u>		
		· 				
		LABORATORY I	NFORMA V. TYPE /	TION	ANAL	YSES
SAMPLE ID	(#) - CONTAINER	X HC		SEQUOIA	TPH(G)/btex/r	ntbe
07/	3vo+	/ "	<u>-</u>			
		'			+	
					 	
					1	
		11				
COMMENTS:	paved ovoc	with		-		
						3/37-R-idec.fr

Client/	,		lob#	: _18	nina		
Facility #570		<u> </u>		-	1		
Address: <u>370</u>	6 Lewelling B	Slvd.	Date:		-21-0		
City: Say	LOIPHZO		Samp	oler:	0e 4 B	N6i)	
							
Well ID	<u>U-8</u>	Wel	l Condition:	o.k.	· 		
Well Diameter	2 in.	Hyd	Irocarbon ckness:	en.	mount B		(Gallons)
Total Depth	29.85 tc			.17			= 0.66
Depth to Water	13.25 tc	Fa	ctor (VF)	6 = 1.50	-	12" = 5.80	
		vf 0.17	= <u>2.82</u> x 3 (case	volume) = E	stimated Pu	rge Volume: _	8.5 (gal.)
Purge	Disposable Bailer		Sampling Equipment	- Disa	osable Ba	iller	
Equipment:	Bailer Stack		Edulturen	Baile	r		
	Suction				sure Baile Sample	r	
•	Grundfos Other:				er:		
<u></u>							
Starting Time:	11:	<u>w_</u>	Weather Condition	ons: <u>C</u>	lear		
Sampling Time:	11:2		Water Color:	clea	<u></u>	Odor:	Out-
	te:		Sediment Descrip	ption: <u>v</u>	ION e		
	er?		If yes; Time: _		_ Volun	ne:	(.lsp}
Time V	Volume pH	Con	ductivity d ^O Temp hos/cm \(\)		D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:08 _	7.47 3. 7.47	- - 6		· 2 ·			
$\frac{11.09}{11.11}$	750		37 69	<u> </u>			
<u></u>	8.) -/-4	L	· · · · · · · · · · · · · · · · · · ·				
	· · ·			·			
		1 AROE	RATORY INFORMA	ATION			
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE		ATORY	ANAL	YSES
U-8	3vo+	Y	HCL	SEQUOIA		TPH(G)/btex/r	ntbe
				<u> </u>			
	<u> </u>	<u> </u>		1		L	
COMMENTS: _							
						- 	
			· -				

3/37-fielder_frm

Client/ Facility <u># 57</u>	· 60		Job#	: _{	80109		
•	6 Lewelling B	 ادا	Date:	:	3-21-00		
	1 COIDNZO		Samp		Joe 4 Bi	19v	
Well ID	U-9	Well	Condition:	o.k	<u> </u>		·
Well Diameter	2 in,	•	rocarbon kness:	(fect)	Amount Ba	23	(Gallons)
Total Depth	28.20 tc.	Vol	ume 2" = 0	.17	3" = 0.38		= 0.66
Depth to Water	12.38 tr	Fac	tor (VF)				
	15.82 x	VF 0.17	= 2.69 x 3 (case	volume) =	Estimated Pu	rge Volume:	8 . S (gal.)
Purge Equipment:	Disposable Bailer Bailer		Sampling Equipment	: Di:	sposable Ba	iller	•
Edaibing	Stack			_	iler essure Baile	r	:
	Suction			Gr	ab Sample		
	Other:		•	Ot	her:		
Starting Time:			Weather Condition			Odor: N	ou e
	ate:		Sediment Descri				
	er?		If yes; Time: _		Volum	ne:	(<u>lsp)</u>
Time	Volume pH (gal.) 7.42	μπι 	Juctivity 10 Temp	9	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
10,42	8.5 7.38		.05 <u>76</u>	o.d			
					<u> </u>		
						<u>.</u>	<u> </u>
SAMPLE ID	(#) - CONTAINER	LABOR REFRIG.	PRESERV. TYPE		RATORY	ANAL	YSES
U-9	3vo+	Y	HCL .	SEQUOL	Α	TPH(G)/btex/r	ntbe
			·	 			
				+			
<u> </u>	_1,	L					
COMMENTS:							

																	V	пчп	<u> </u>	1 3	vus	IVUY NOVUI
	311	理性等	1	Fool	ilty Numb	, #	5760	705	# 18	1010	9		_	1	Contact	(Hame)			VID D		r	to tolera in the second
				Fadi	ity Addres	<u>9.</u>	76 Lew	e Ilin I	3/	vd:	· 2	20	-			(Phone	/		277-2			· · · · · · · · · · · · · · · · · · ·
	持量的		Cone	ultant Pr	rojeal Nu	mber_S	an Lor	<u>e420</u>	• T-		02	70		Laborator				Ana	TACTO	:AI		
	TOS	30	Cone	uKont H	ome_Gf	ettle	r-Ryan In a Court	الاميالة الاماماء	<u>-K_ID</u>		- CA	9/56		Loborator Sampl ee	y Relao	ee Numi	>+r \	20E	A50	- M 11		
	Tools Barbring 2000 Com Caryon	Company IFL Sta. 408								<u> </u>			`` []	zampres Collection	Date	3 - 2	(- O -	>				.,11:
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_		<u> </u>	<u> </u>	7 7	1	none).							•			e Perfoi						DO NOT BILL
٠.	#1 4 € 6 100	**	ç	\$ C. Set 0	Į į	1	e		Ä	1		Į,	ğ	T	Γ							TB-LB ANALYSIS
		Sample Number	Centoinen	1.1	Grab Composite Discrete		} }	(Q)	K WANTBE			Į į	Aromatic	Organica	Organica							1914.1 186. s
	đ us	* *	8	≺ ∪ '	111				Ę.	7) Halox	₹ •	δ.	2	Metals CACY-Po.Zn.Ni (CUP or AA)						
	22 9 8	, in the second	ž	18 × 25 × 25 × 25 × 25 × 25 × 25 × 25 × 2	000	١.	, e	<u>و</u> نخ	1	TPH Dissel (8015)	Of and (0522)	Purpeable (5010)	Purgeoble (8020)	Purpedble (8240)	Extractoble (8270)	1 4 5						10 to
	Somple	. 3	Mumber	¥or E	Ě	Ę	Somply	3	THE CAN	<u>₹</u> .e.	2 ক	¥ 50	200	T.	35	328						Remerke
_	TD TD	:	J. A	W	6	_	HCL	γ	V													3.4
_	TB-LB		3v04		/	2:15		1	1							-			1			्र १ क्षेत्रपति
	U-2		"		/	1:22		//	17							1						1.5.1 過熱質15
			4		1,	1:45	1 /	/	17													5.31.6
1	U-3 U-4	17.7	4	<i></i>	1	12:45		1	1			· · · · · · · · · · · · · · · · · · ·										7017
	U-5		4		1	11:53	/	/		1						,						1 1 1 1 1 1 1 1
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	quehed By	(Signature)		Org	aniza Voti	·	Date/Time	Re	celved E	ly (Sign				Organiza	lion	Dat	•/Tlm•		Ì			Hre. Doye
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	Wined By	(Signature)		Oti	gonization		Date/Time	"		oi rabi	numy I	n) failtu	- 147				-1				Va C	ontracted





April 5, 2000



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

RE: Tosco/L003207

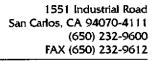
Dear Deanna Harding

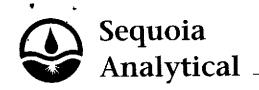
Enclosed are the results of analyses for sample(s) received by the laboratory on March 21, 2000. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Stevenson Project Manager

CA ELAP Certificate Number I2360





Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite D Dublin, CA 94568 Project: Tosco(4)
Project Number: SS#5760/180109
Project Manager: Deanna Harding

Sampled: 3/21/00 Received: 3/21/00 Reported: 4/5/00

ANALYTICAL REPORT FOR L003207

Laboratory Sample Number	Sample Matrix	Date Sampled
L003207-01	Water	3/21/00
L003207-02	Water	3/21/00
L003207-03	Water	3/21/00
L003207-04	Water	3/21/00
L003207-05	Water	3/21/00
L003207-06	Water	3/21/00
L003207-07	Water	3/21/00
L003207-08	Water	3/21/00
	L003207-01 L003207-02 L003207-03 L003207-04 L003207-05 L003207-06 L003207-07	L003207-01 Water L003207-02 Water L003207-03 Water L003207-04 Water L003207-05 Water L003207-06 Water L003207-07 Water



The results in this report apply to the samples analyzed in accordance with the chain of custody document.

This analytical report must be reproduced in its entirety.



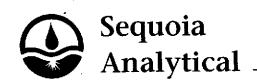
Gettler-Ryan/Geostrategies(1)	Project:	Tosco(4)	Sampled:	3/21/00
6747 Sierra Court, Suite D	Project Number:	SS#5760/180109	Received:	3/21/00
Dublin, CA 94568	Project Manager:	Deanna Harding	Reported:	4/5/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - San Carlos

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
	· · · -		-					
TB-LB			L0032	<u>07-01</u>			Water	
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		50.0	ND	ug/l	
Benzene	**	H	11		0.500	ND	61	
Toluene	er e	P	11		0.500	ND	11	
Ethylbenzene	11	**	11		0.500	ND	(f	
Xylenes (total)	17	n	tı		0.500	. ND	17	
Methyl tert-butyl ether	11	*	11		5.00	ND	11	
Surrogate: a,a,a-Trifluorotoluene	rr	H	и	70.0-130		116	%	
<u>U-1</u>			L0032	07-02			Water	
Purgeable Hydrocarbons as Gasoline	0040012	4/4/00	4/4/00	01-02	500	4820	ug/l	1
Benzene	N 10012	***************************************	11		5.00	17.4	11	-
Foluene	,,	11	tr		5.00	7.74	n	
ronuene Ethylbenzene	H	11	11		5.00	297	P	
Xylenes (total)	19	11	ir .		5.00	1370	н	
Methyl tert-butyl ether	17	11	n		50.0	ND	н	
Surrogate: a,a,a-Trifluorotoluene	#	п	- и	70.0-130	50.0	116	%	
surrogate. a,u,u-11tituorototuene				70.0-150		110	70	
<u>U-2</u>			L0032	<u>07-03</u>			<u>Water</u>	
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		50.0	ND	ug/l	
Benzene	я :	17	H		0.500	ND	P	
Toluene	11	11	H		0.500	ND		
Ethylbenzene	11	Ð	u		0.500	ND	**	
Xylenes (total)	11	H	If		0.500	ND	m	
Methyl tert-butyl ether	11	H	11		5.00	ND	n	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		115	%	
<u>U-3</u>			L0032	07_04			Water	
Purgeable Hydrocarbons as Gasoline	0040012	4/4/00	4/4/00	07-04	2500	18700	ug/l	1
Benzene	'II	H	11		25.0	ND	"	-
Poluene	н	н	11		25.0	ND	11	
Ethylbenzene	n	Ħ	п .		25.0	1290	31	
Xylenes (total)		**	11		25.0	4770		
Methyl tert-butyl ether	11	н	н		250	ND	11	
Surrogate: a,a,a-Trifluorotoluene	"	<i>"</i>	<i>n</i>	70.0-130		108	%	
- -			T 0000	0.5.0.5			Water	
<u>U-4</u>		4/4/00	L0032	<u>07-05</u>	50.0	NIP.	Water	
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		50.0	ND ND	ug/l "	
Benzene -		n n			0.500	ND	11	
Toluene	**		11		0.500	ND	17	
Ethylbenzene	**	ff 	"		0.500	ND	17	
Xylenes (total)	11	11	n		0.500	ND	11	

Sequoia Analytical - San Carlos

*Refer to end of report for text of notes and definitions.



Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite D Dublin, CA 94568 Project Number: SS#5760/180109
Project Manager: Deanna Harding

Sampled: 3/21/00 Received: 3/21/00 Reported: 4/5/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - San Carlos

	Batch	Date	Date	Surrogate	Reporting			
Analyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes*
TI 4 (continued)			L0032	07-05			Water	
<u>U-4 (continued)</u> Methyl tert-butyl ether	0040010	4/4/00	4/4/00	<u>07-95</u>	5.00	ND	ug/l	
Surrogate: a,a,a-Trifluorotoluene	"	#	#	70.0-130		108	%	
Surroguie. a, a, a-17 iji uoroioi uene				70.0-130		100	,-	
U-5			L0032	<u>07-06</u>			Water	
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00		50.0	ND	ug/l	
Benzene	10	17	H		0.500	ND	**	
Toluene	H	**	41		0.500	ND	H	
Ethylbenzene	Ħ	11	ff		0.500	ND	"	
Xylenes (total)	**	11	11°		0.500	ND	n	
Methyl tert-butyl ether	#1	**	H .		5.00	ND	#	
Surrogate: a,a,a-Trifluorotoluene	n	п	"	70.0-130		105	%	
<u>U-8</u>			L0032	07-07			Water	
Purgeable Hydrocarbons as Gasoline	0040010	4/4/00	4/4/00	<u>07-07</u>	50.0	ND	ug/l	
Benzene	11	17-17-0-0	H 400		0.500	ND	"	
Toluene	n		**		0.500	ND	tt	
Ethylbenzene	,,		11		0.500	ND	11	
Xylenes (total)	H	**	11		0.500	ND	17	
Methyl tert-butyl ether	n	11	11		5.00	ND	H	
Surrogate: a,a,a-Trifluorotoluene	H	н	п	70.0-130		117	%	-
TI O			L0032	A7 AQ			Water	
<u>U-9</u>	0040010	4/4/00	4/4/00	<u>v/-vo</u>	50.0	ND	ug/l	
Purgeable Hydrocarbons as Gasoline	# #	4/4/00	4/4/00		0.500	ND	4 CD/ 1	
Benzene		 H	71		0.500	ND	•	
Toluene		 H	**		0.500	ND	11	
Ethylbenzene	" It		# #		0.500	ND	ıı	
Xylenes (total)	и .	"	"		5.00	ND	f f	
Methyl tert-butyl ether	"	"		20.0.120	3.00	110	%	
Surrogate: a,a,a-Trifluorotoluene	**	"	.,	70.0-130		110	70	



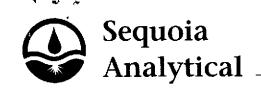
Gettler-Ryan/Geostrategies(1) Project: Tosco(4) Sampled: 3/21/00 6747 Sierra Court, Suite D Project Number: SS#5760/180109 Received: 3/21/00 4/5/00 Dublin, CA 94568 Project Manager: Deanna Harding Reported:

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUET/Quality Control Sequeia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	% Notes*
	<u>*</u>								······································
Batch: 0040010	Date Prepa	red: 4/4/00			Extrac	tion Method: EP	A 5030B	[P/T]	
<u>Blank</u>	0040010-B)	<u>_K1</u>							
Purgeable Hydrocarbons as Gasoline	4/4/00			ND	ug/l	50.0			
Benzene	tr		-	ND	44	0.500			
Toluene	N			ND	11	0.500			
Ethylbenzene	17			ND	И	0.500			
Xylenes (total)				ND	11	0.500			
Methyl tert-butyl ether	If			ND	11	5.00		<u>-</u>	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.2	11	70.0-130	112		
LCS	0040010-B	<u>81</u>							
Benzene	4/4/00	10.0		10.0	ug/l	70.0-130	100		
Toluene	11	10.0		9.33	0	70.0-130	93.3		
Ethylbenzene	11	10.0		9.49	11	70.0-130	94.9		
Xylenes (total)	11	30.0		28.2	tr	70.0-130	94.0		
Surrogate: a,a,a-Trifluorotoluene	II	10.0		11.1	n	70.0-130	111		
LCS	0040010-B	S2							
Purgeable Hydrocarbons as Gasoline	4/4/00	250		232	ug/l	70.0-130	92.8		
Surrogate: a,a,a-Trifluorotoluene	W	10.0		11.7	11	70.0-130	117		
Matrix Spike	0040010-M	<u>s1 L0</u>	03207-03						
Benzene	4/4/00	10.0	ND	10.3	ug/l	60.0-140	103		
Toluene	II.	10.0	ND	9.68	P	60.0-140	96.8		
Ethylbenzene	H	10.0	ND	9.79	R	60.0-140	97.9		
Xylenes (total)	*	30.0	ND	29.2	17	60.0-140	97.3		
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.7	"	70.0-130	107		
Matrix Spike Dup	0040010-M	SD1 L	03207-03						
Benzene	4/4/00	10.0	ND	9.15	ug/l	60.0-140	91.5	25.0	11.8
Toluene	4	10.0	ND	8.22	Ħ	60.0-140	82.2	25.0	16.3
Ethylbenzene	Ħ	10.0	ND	8.18	**	60.0-140	81.8	25.0	17.9
Xylenes (total)	#1	30.0	ND	24.7	**	60.0-140	82.3	25.0	16.7
Surrogate: a,a,a-Trifluorotoluene	ļī.	10.0		8.72	n	70.0-130	87.2		
Batch: 0040012	Date Prepa		!		Extrac	ction Method: EP.	A 5030B	[P/T]	
<u>Blank</u>	0040012-B	<u>LK1</u>							
Purgeable Hydrocarbons as Gasoline	4/4/00			ND	ug/l	50.0			
Benzene	#1			ND	11	0.500			
Toluene	Ħ			ND	11	0.500			
Ethylbenzene	11			ND	44	0.500			
Xylenes (total)	IT			ND	11	0.500			

Sequoia Analytical - San Carlos

*Refer to end of report for text of notes and definitions.



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite D

Project Number: SS#5760/180109

Dublin, CA 94568

Project Manager: Deanna Harding

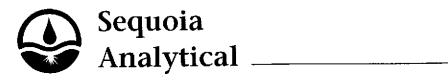
Sampled: 3/21/00

Received: 3/21/00

Reported: 4/5/00

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT/Quality Control Sequoia Analytical - San Carlos

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	%	Notes*
Blank (continued)	0040012-BI	V 1								
Methyl tert-butyl ether	4/4/00	<u>JIXI</u>		ND	ug/l	5.00				
Surrogate: a,a,a-Trifluorotoluene	#	10.0		11.6	"	70.0-130	116			····
LCS	0040012-BS									÷
Benzene	4/4/00	10.0	•	10.9	ug/l	70.0-130	109			
Toluene	n	10.0		10.3	11	70.0-130	103			
Ethylbenzene	IT	10.0		10.2	"	70.0-130	102			
Xylenes (total)	n	30.0		31.2	H .	70.0-130	104			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		11.4	"	70.0-130	114			
LCS	0040012-BS	32								
Purgeable Hydrocarbons as Gasoline	4/4/00	250		292	ug/l	70.0-130	117			
Surrogate: a,a,a-Trifluorotoluene	Ħ	10.0		12.7	"	70.0-130	127			
Matrix Spike	0040012-M	S1 L	003218-03							
Benzene	4/5/00	10.0	ND	10.5	ug/l	60.0-140	105			
Toluene	"	10.0	ND	10.1	H_	60.0-140	101			
Ethylbenzene	ti .	10.0	ND	9.06	T .	60.0-140	90.6			
Xylenes (total)	н	30.0	ND	29.3	. 17	60.0-140	97.7			
Surrogate: a,a,a-Trifluorotoluene	n	10.0		9.88	"	70.0-130	98.8			
Matrix Spike Dup	0040012-M	SD1 L	003218-03							
Benzene	4/5/00	10.0	ND	10.8	ug/l	60.0-140	108	25.0	2.82	
Toluene	11 37 00	10.0	ND	10.3	11	60.0-140	103	25.0	1.96	
Ethylbenzene	Ħ	10.0	ND	10.1	71	60.0-140	101	25.0	10.9	
Xylenes (total)	H	30.0	ND	30.8	11	60.0-140	103	25.0	5.28	
Surrogate: a,a,a-Trifluorotoluene	17	10.0	1410	10.2	н	70.0-130	102			
surroguie. u,u,u-rrijiuoroioiuene		10.0		10.2		70.0-150	102			



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Project: Tosco(4)

Sampled: 3/21/00

Project Manager: Deanna Harding

Project Number: SS#5760/180109

Received: 3/21/00 Reported: 4/5/00

Notes and Definitions

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