TRANSMITTAL

February 6, 2001 G-R #180061

TO:

Mr. David B. De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

CC:

Mr. David Vossler

Gettler-Ryan Inc.

Petaluma, California

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

RE:

Tosco (Unocal) SS #5325

3220 Lakeshore Avenue

Oakland, California FO # Bory Chin

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 2, 2001	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of December 12, 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 February 16, 2001, this report will be distributed to the following:

Alameda County Hearth Care Sorvices, 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Enclosure

trans/5325-DBD

February 2, 2001 G-R Job #180061

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

RE:

Fourth Quarter 2000 Groundwater Monitoring & Sampling Report

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue Oakland, California

Dear Mr. De Witt:

This report documents the quarterly groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R). On December 12, 2000, field personnel monitored and sampled six wells (U-1 through U-6) at the above referenced site.

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in any wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are summarized in Table 4. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by Standard Operating Procedure Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Tables 1, 2 and 3. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

Project Coordinator

Hagop Kevork P.E. No. C55734

Figure 1:

Potentiometric Map

Figure 2: Table 1:

Concentration Map

Groundwater Monitoring Data and Analytical Results

Table 2:

Groundwater Analytical Results - Oxygenate Compounds

Table 3: Table 4: Groundwater Analytical Results

Dissolved Oxygen Concentrations

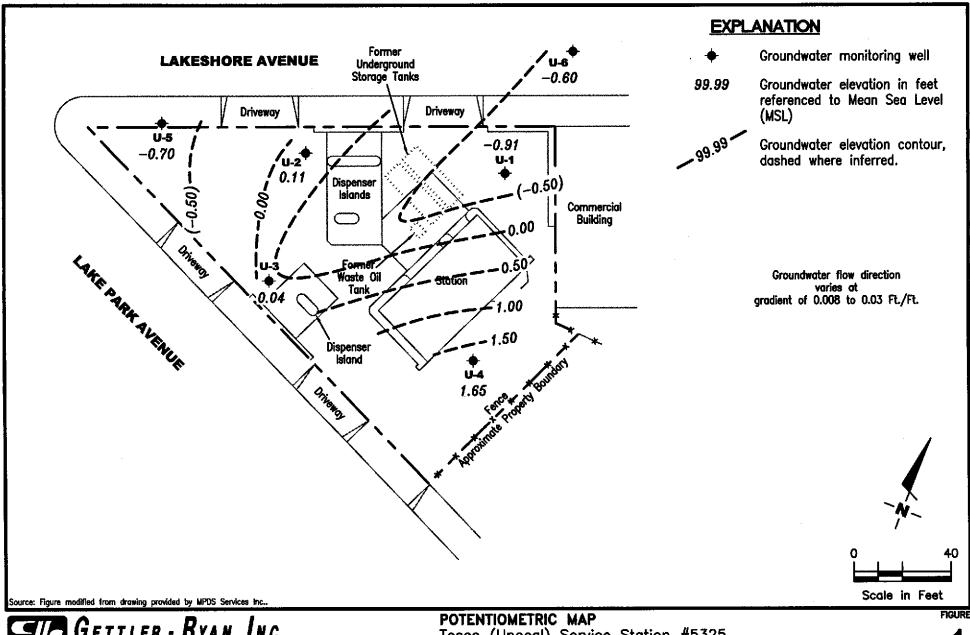
Attachments:

Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

5325.qml



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

Tosco (Unocal) Service Station #5325 3220 Lakeshore Avenue

Oakland, California

December 12, 2000

REVISED DATE

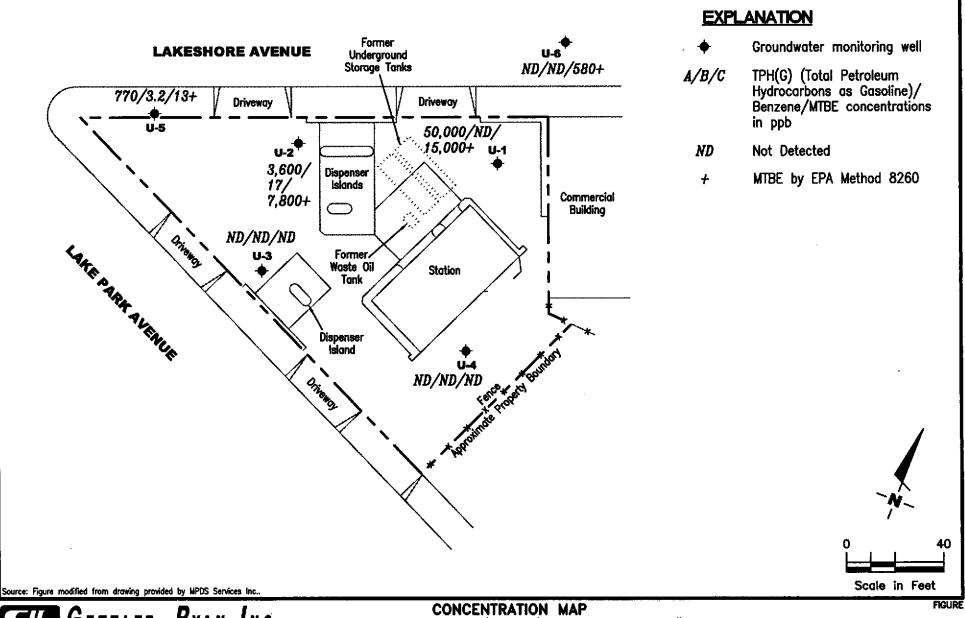
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FIGURE



GETTLER - RYAN INC.

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

REVIEWED BY

Tosco (Unocal) Service Station #5325 3220 Lakeshore Avenue

REVISED DATE

Oakland, California

Date December 12, 2000 2

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PROJECT NUMBER

Table 1 Groundwater Monitoring Data and Analytical Results

			سدديو	Product				_		
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(fl.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-1	08/10/90				690	38	75	8.6	130	
0-1	01/07/91				250	22	16	4.2	17	
	04/01/91				160	13	8.6	1.0	15	
	07/03/91				140	21	4.3	0.36	17	
	10/09/91				ND	ND	ND	ND	ND	
	02/12/92				250	ND	ND	ND	ND	
	05/05/92				230	1.2	ND	ND	ND	
	06/11/92				1,000	80	1.4	6.7	41	
	08/20/92	•-			400 ¹	1.0	ND	ND	0.6	
	02/22/93				34,000	1,400	5,500	910	7,300	
	05/07/93				8,700	600	240	650	3,300	
	08/08/93				4,900 ²	79	ND	832	270	**
5.32	11/16/93	8.61	-3.29	0.00	690 ³	ND	ND	ND	ND	
0.02	02/16/94	8.54	-3.22	0.00	6,800 ⁴	ND	ND	ND	ND	
8.46	06/22/94	8.39	0.07	0.00	200	ND	ND	5.9	21	
	09/22/94	8.66	-0.20	0.00	6,100 ³	ND	ND	ND	ND	
	12/24/94	8.04	0.42	0.00	50,000	2,500	9,700	2,400	17,000	
	03/25/95	7.72	1.02**	0.37	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	06/21/95	9.30	-0.69**	0.20	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	09/19/95	9.29	-0.53**	0.40	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	12/19/95	8.98	-0.50**	0.03	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	03/18/96	8.25	0.21	0.00	27,000	ND	2,300	1,400	11,000	4,900
	06/27/96	7.92	0.54	< 0.01	120,000	540	4,300	2,600	26,000	ND
	09/26/96	9.10	-0.62**	0.02	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	12/09/96	6.88	1.60**	0.03	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	03/14/97	9.02	-0.15**	0.55	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		**
	06/30/97	8.41	0.07**	0.02	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	09/19/97	8.56	-0.08**	0.02	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	12/12/97	8.58	-0.11**	0.01	NOT SAMPLED	DUE TO THE PR	ESENCE OF FREE	PRODUCT		
	03/03/98	8.23	0.26**	0.04	NOT SAMPLED		ESENCE OF FREE	PRODUCT		
	06/15/98	8.37	0.09	Sheen	52,000	ND ⁷	900	1,800	13,000	ND^7
	09/30/98	8.94	-0.48	Sheen	1,000,000	ND ⁷	2,600	13,000	83,000	4,800

Table 1
Groundwater Monitoring Data and Analytical Results

				Product			-			
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft.)	(ft.)	(ppb)	(ppb)	(ррв)	(ppb)	(ppb)	(ppb)
U-1	12/28/98	8.57	-0.11	<0.01	1,100,000 ⁹	ND^7	1,600	8,600	71,000	5,700
(cont)	03/22/99	8.18	0.28	Sheen	130,000	470	1,100	2,000	28,000	5,700
(COIII)	06/09/99	9.37	-0.91	0.00	40,000	230	640	590	13,000	3,500/2,100 ¹⁰
	09/08/99	9.53	-1.07	0.00	55,000 ¹¹	217	202	745	14,300	6,890/6,690 ¹⁰
	12/07/99	9.67	-1.21	0.00	41,200 ¹³	89.3	ND ⁷	385	6,930	15,800/14,700 ¹²
	03/13/00	8.44	0.02	0.00	48,00011	490	610	2,400	10,000	22,000/23,000 ¹⁰
	06/21/00	9.45	-0.99	0.00	37,000 ¹¹	200	ND ⁷	1,200	7,200	15,000/20,000 ¹⁰
	09/27/00	9.29	-0.83	0.00	15,00011	92	ND ⁷	540	2,800	74,000/83,000 ¹⁵
	12/12/00	9.29	-0.91	0.00	50,000 ¹⁶	ND ⁷	ND ⁷	250	1,900	12,000/15,000 ¹²
	121200	9.31	-0.71	0.00	20,000	1,2	1,2	250	1,700	22,000,10,000
U-2	08/10/90	••		·	780	27	46	15	130	
	01/07/91				1,900	67	5.8	58	69	
	04/01/91				1,700	250	89	34	190	
	07/03/91				2,100	150	25	3.1	290	
	10/09/91			••	230	7.1	ND	ND	11	
	02/12/92				410	1.9	ND	0.36	0.4	
	05/05/92				1,600	120	52	6.2	290	
	06/11/92				620	17	2.1	ND	37	
	08/20/92		••		700	28	6.5	1.3	4.6	
	02/22/93				3,400	2,400	2,100	1,200	5,800	
	05/07/93				17,000	1,800	660	1,700	4,000	
	08/08/93				5,600 ²	420	ND	410	670	
4.53	11/16/93	8.17	-3.64	0.00	510 ³	ND	ND	ND	ND	
	02/16/94	7.73	-3.20	0.00	980 ⁴	49	13	2.7	40	
7.62	06/22/94	7.60	0.02	0.00	31,000	2,200	62	1,500	3,500	•-
	09/22/94	7.93	-0.31	0.00	8,500 ³	29	ND	ND	ND	
	12/24/94	7.27	0.35	0.00	32,000	1,500	890	1,300	5,000	
	03/25/95	7.01	0.61	0.00	170,000	1,900	21,000	4,800	33,000	
	06/21/95	6.98	0.64	0.00	16,000	2,100	ND	1,800	1,700	
	09/19/95	7.70	-0.08	0.00	3,000	610	ND	78	240	5
	12/19/95	7.30	0.32	0.00	1,600	140	55	52	270	6
	03/18/96	6.45	1.17	0.00	12,000	2,200	ND	1,200	2,200	22,000

Table 1
Groundwater Monitoring Data and Analytical Results

				Product						
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	В	T	E	X	MTBE
TOC*		(fi.)	(fi.)	(ft.)	(ppb)	(ppb)	(ppb)	(ррв)	(ppb)	(ppb)
T) A	06107106	7.41	0.01	0.00	20.000	2.400	ND	2 800	2 100	3,000
U-2	06/27/96	7.41	0.21	0.00	28,000	3,400		2,800	3,100	
(cont)	09/26/96	7.90	-0.28	0.00	5,900	750	ND	ND	ND	18,000
	12/09/96	6.76	0.86	0.00	13,000	5,100	290	980	370	2,700
	03/14/97	7.12	0.52**	0.03		DUE TO THE PRI				
	06/30/97	6.19	1.43	< 0.01	=	DUE TO THE PRI				
	09/19/97	7.31	0.31	< 0.01		DUE TO THE PRI			***	
	12/12/97	6.75	0.88**	< 0.01		DUE TO THE PRI				
	03/03/98	6.36	1.26	Sheen	80,000	3,000	1,100	820	16,000	16,000
	06/15/98	6.51	1.11	Sheen	48,000	1,800	330	470	7,900	20,000
	09/30/98	7.17	0.45	Sheen	60,000	1,300	ND ⁷	500	9,700	19,000
	12/28/98	7.06	0.56	0.00	63,000	590	160	320	5,600	16,000
	03/22/99	6.82	0.80	0.00	28,000	1,100	ND^7	360	2,900	25,000
	06/09/99	7.51	0.11	0.00	21,000	110	190	310	2,600	7,900/7,800 ¹⁰
	09/08/99	8.16	-0.54	0.00	23,300 ¹¹	477	138	286	4,110	16,400/15,300 ¹⁰
	12/07/99	8.31	-0.69	0.00	4,84013	17.2	ND^7	ND^7	157	14,900/15,600 ¹²
	03/13/00	6.69	0.93	0.00	11,000 ¹¹	380	160	ND^7	2,100	22,000/26,000 ¹⁰
	06/21/00	7.67	-0.05	0.00	9,10011	22	ND^7	ND^7	800	16,000/22,000 ¹⁰
	09/27/00	7.44	0.18	0.00	2,90011	43	ND ⁷	ND^7	39	20,000/26,00015
	12/12/00	7.51	0.11	0.00	3,60011	17	ND ⁷	ND ⁷	87	8,000/7,800 ¹²
U-3	08/10/90				ND	ND	ND	ND	ND	
	01/07/91				ND	ND	ND	ND	1.8	
	04/01/91				ND	1.0	2.9	0.53	5.4	
	07/03/91			**	ND	ND	ND	ND	ND	
	10/09/91			••	ND	ND	ND	ND	ND	
	02/12/92				ND	ND	ND	ND	ND	
	05/05/92				ND	ND	ND	ND	ND	
	06/11/92		ক		ND	ND	ND	ND	ND	
	08/20/92				ND	ND	ND	ND	ND	
	02/22/93				ND	ND	ND	ND	ND	

3

Table 1 Groundwater Monitoring Data and Analytical Results

				Product						
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	В	T	E	X	MTBE
OC*		(ft.)	(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
J-3	05/07/93	••			ND	ND	ND	ND	ND	
cont)	08/08/93				210	5.0	9.7	0.7	4.1	
7.86	11/16/93	11.82	-3.96	0.00	ND	ND	ND	ND	ND	
	02/16/94	11.62	-3.76	0.00	ND	ND	ND	ND	ND	
0.98	06/22/94	11.64	-0.66	0.00	ND	ND	ND	ND	ND	
	09/22/94	11.76	-0.78	0.00	ND	ND	ND	ND	ND	
	12/24/94	11.28	-0.30	0.00	ND	ND	ND	ND	ND	
	03/25/95	10.96	0.02	0.00	ND	ND	ND	ND	ND	
	06/21/95	11.37	-0.39	0.00	ND	ND	ND	ND	ND	
	09/19/95	11.55	-0.57	0.00	ND	ND	ND	ND	ND	5
	12/19/95	11.45	-0.47	0.00	ND	ND	ND	ND	ND	
	03/18/96	11.10	-0.12	0.00	ND	ND	ND	ND	ND	
	06/27/96	11.16	-0.18	0.00	440	49	50	51	140	50
	09/26/96	11.55	-0.57	0.00	ND	ND	ND	ND	ND	ND
	12/09/96	10.12	0.86	0.00	ND	ND	ND	ND	ND	29
	03/14/97	10.87	0.11	0.00	ND	ND	ND	ND	ND	ND
	06/30/97	11.08	-0.10	0.00	ND	ND	ND	ND	ND	ND
	09/19/97	11.05	-0.07	0.00	ND	ND	ND	ND	ND	ND
	12/12/97	10.58	0.40	0.00	ND	ND	ND	ND	ND	ND
	03/03/98	9.84	1.14	0.00	ND	ND	ND	ND	ND	ND
	06/15/98	10.56	0.42	0.00	ND	ND	ND	ND	ND	ND
	09/30/98	11.12	-0.14	0.00	ND	ND	NĎ	ND	ND	ND
	12/28/98	10.96	0.02	0.00	ND	ND	ND	ND ·	ND	ND
	03/22/99	9.46	1.52	0.00	ND	ND	ND	ND	ND	ND
	06/09/99	11.01	-0.03	0.00	ND	ND	ND	ND	ND	ND
	09/08/99	11.31	-0.33	0.00	ND	ND	ND	ND	ND	ND
	12/07/99	11.26	-0.28	0.00	ND	ND	ND	ND	ND	ND
	03/13/00	8.28	2.70	0.00	ND	ND	ND	ND	ND	ND
	06/21/00	11.12	-0.14	0.00	ND	NĎ	ND	ND	ND	ND
	09/27/00	11.07	-0.09	0.00	ND	ND	ND	ND	ND	ND
	12/12/00	10.94	0.04	0.00	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results

				Product				55	v	A STOCKET
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	B	T	E	X	MTBE
TOC*		(ft.)	(ft.)	(fi.)	(ррь)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-4										
11.15	06/22/94	10.16	0.99	0.00	ND	ND	ND	ND	ND	
	09/22/94	10.79	0.36	0.00	ND	0.78	1.3	ND	1.4	
	12/24/94	9.81	1.34	0.00	ND	ND	ND	ND	ND	
	03/25/95	9.51	1.64	0.00	ND	ND	ND	ND	ND	
	06/21/95	9.54	1.61	0.00	ND	ND	ND	ND	ND	
	09/19/95	10.17	0.98	0.00	ND	ND	ND	ND	ND	
	12/19/95	9.98	1.17	0.00	ND	ND	ND	ND	ND	
	03/18/96	9.66	1.49	0.00	ND	ND	ND	ND	ND	
	06/27/96	9.74	1.41	0.00	ND	ND	ND	ND	ND	ND
	09/26/96	10.14	1.01	0.00	ND	ND	ND	ND	ND	ND
	12/09/96	8.67	2.48	0.00	ND	ND	ND	ND	ND	33
	03/14/97	9.35	1.80	0.00	ND	ND	ND	ND	ND	ND
	06/30/97	9.89	1.26	0.00	ND	ND	ND	ND	ND	ND
	09/19/97	9.96	1.19	0.00	ND	ND	ND	ND	ND	ND
	12/12/97	8.56	2.59	0.00	ND	ND	ND	ND	ND	ND
	03/03/98	7.85	3.30	0.00	ND	ND	ND	ND	ND	ND
	06/15/98	9.08	2.07	0.00	ND	ND	ND	ND	ND	ND
	09/30/98	9.75	1.40	0.00	ND ·	ND	ND	ND	ND	ND
	12/28/98	9.59	1.56	0.00	ND	ND	ND	ND	ND	ND
	03/22/99	8.34	2.81	0.00	ND	ND	ND	ND	ND	ND
	06/09/99	9.39	1.76	0.00	ND	ND	ND	ND	ND	ND
	09/08/99	9.90	1.25	0.00	ND	ND	ND	ND	ND	ND
	12/07/99	10.05	1.10	0.00	ND	ND	ND	ND	ND	ND
	03/13/00	7.24	3.91	0.00	ND	ND	ND	ND	ND	ND
	06/21/00	9.48	1.67	0.00	ND	ND	ND	ND	ND	ND
	09/27/00	9.42	1.73	0.00	ND	ND	ND	ND	ND	ND
	12/12/00	9.50	1.65	0.00	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results

			0,222	Product		_				
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft.)	(ft)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-5										
6.98	06/22/94	6.83	0.15	0.00	210	7.1	13	4.5	26	
	09/22/94	6.90	0.08	0.00	170	8.4	10	8.5	18	
	12/24/94	6.43	0.55	0.00	8,700	560	70	670	430	
	03/25/95	6.35	0.63	0.00	44,000	390	960	1,500	7,600	
	06/21/95	7.11	-0.13	0.00	400	2.3	ND	9.1	3.5	
	09/19/95	6.99	-0.01	0.00	850	14	7.1	- 13	66	5
	12/19/95	7.17	-0.19	0.00	ND	ND	ND	ND	ND	
	03/18/96	6.65	0.33	0.00	100	0.67	0.5	0.51	5.4	
	06/27/96	6.49	0.49	0.00	16,000	280	150	1,400	4,600	530
	09/26/96	7.13	-0.15	0.00	ND	ND	0.57	ND	0.96	ND
	12/09/96	5.90	1.08	0.00	1,300	29	46	ND	140	97
	03/14/97	6.99	-0.01	0.00	ND	ND	ND	ND	ND	14
	06/30/97	7.08	-0.10	0.00	4,200	74	51	180	980	270
	09/19/97	6.78	0.20	0.00	6,300	160	13	370	1000	480
	12/12/97	6.94	0.04	0.00	60	1.3	ND	1.6	2.1	47
	03/03/98	6.50	0.48	0.00	1,700	29	${ m ND}^7$	150	190	330
	06/15/98	6.85	0.13	0.00	1,500	32	ND^7	91	83	330
	09/30/98	7.31	-0.33	0.00	1,700	44	ND^7	39	150	60
	12/28/98	7.25	-0.27	0.00	1,400	59	ND ⁷	13	27	150
	03/22/99	6.86	0.12	0.00	780	8.9	ND	0.76	4.5	350
	06/09/99	7.28	-0.30	0.00	1,000	ND^7	ND ⁷	10	35	280/350 ¹⁰
	09/08/99	7.52	-0.54	0.00	2,620 ¹¹	26.2	ND^7	32.2	157	280/23912
	12/07/99	7.67	-0.69	0.00	94911	9.26	ND^7	11.2	22.7	235/301 ¹²
	03/13/00	6.73	0.25	0.00	88014	12	1.0	5.6	8.7	46/37 ¹⁰
	06/21/00	7.39	-0.41	0.00	700 ¹¹	4.0	ND	0.99	4.0	120/140 ¹⁰
	09/27/00	7.45	-0.47	0.00	40011	1.9	ND	ND	1.5	160/250 ¹⁵
	12/12/00	7.68	-0.70	0.00	770 ¹¹	3.2	ND ⁷	ND ⁷	ND ⁷	27/13 ¹²

Table 1
Groundwater Monitoring Data and Analytical Results

				Product						
WELL ID/	DATE	DTW	GWE	Thickness	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft.)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-6										
7.14	06/22/94	7.14	0.00	0.00	ND	ND	ND	ND	ND	
	09/22/94	7.34	-0.20	0.00	130	1.3	0.8	ND	0.73	
	12/24/94	6.67	0.47	0.00	6,900	500	59	600	380	
	03/25/95	6.29	0.85	0.00	47,000	450	1,300	1,700	8,200	
	06/21/95	7.60	-0.46	0.00	ND	ND	ND .	ND	ND	
	09/19/95	7.70	-0.56	0.00	ND	ND	ND	ND	ND	5
	12/19/95	7.75	-0.61	0.00	210	2.5	1.0	2.9	17	
	03/18/96	6.86	0.28	0.00	ND	ND	ND	ND	ND	
	06/27/96	6.52	0.62	0.00	ND	ND	ND	ND	ND	510
	09/26/96	7.62	-0.48	0.00	ND	ND	ND	ND	ND	1,400
	12/09/96	5.88	1.26	0.00	1,200	29	48	6.4	140	58
	03/14/97	7.30	-0.16	0.00	ND	ND	ND	ND	ND	1,500
	06/30/97	7.35	-0.21	0.00	ND	ND	ND	ND	ND	990
	09/19/97	7.25	-0.11	0.00	ND	ND	ND	ND	ND	1,400
	12/12/97	7.29	-0.15	0.00	ND	ND	ND	ND	ND	680
	03/03/98	7.00	0.14	0.00	ND	ND	ND	ND	ND	1,600
	06/15/98	7.18	-0.04	0.00	ND ⁷	ND ⁷	ND ⁷	ND^7	ND^7	1,000
	09/30/98	7.90	-0.76	0.00	ND	ND	ND	ND	ND	1,200
	12/28/98	7.79	-0.65	0.00	ND ⁷	730				
	03/22/99	7.47	-0.33	0.00	ND	ND	ND	ND	ND	1,800
	06/09/99	7.73	-0.59	0.00	ND^7	ND^7	ND ⁷	ND^7	ND ⁷	1,000/850 ¹
	09/08/99	7.95	-0.81	0.00	ND	ND	ND	ND	ND	851/1,040 ¹
	12/07/99	8.10	-0.96	0.00	ND	ND	ND	ND	ND	1,140/1,150
	03/13/00	6.95	0.19	0.00	ND	ND	ND	ND	ND	560/670 ¹⁰
	06/21/00	7.84	-0.70	0.00	ND	ND	ND	ND	ND	400/590 ¹⁰
	09/27/00	7.68	-0.54	0.00	ND	ND	ND	ND	ND	2,500/2,800
	12/12/00	7.74	-0.60	0.00	ND	ND	ND	ND	ND	590/580 ¹²

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*	DATE	DTW (ft.)	GWE (fi.)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
Trip Blank										
TB-LB	03/03/98				ND	ND	ND	ND	ND	ND
	06/15/98				ND	ND	ND	ND	ND	ND
	09/30/98				ND	ND	1.7	ND	2.2	ND
	12/28/98				ND	ND	0.71	ND	0.72	9.5
	03/22/99				ND	ND	ND	ND	ND	ND
	06/09/99				ND	ND	ND	ND	ND	ND
	09/08/99				ND	ND	ND	ND	ND	ND
	12/07/99			'	ND	ND	0.762	ND	ND	ND
	03/13/00				ND	ND	ND	ND	ND	ND
	06/21/00				ND	ND	ND	ND	ND	ND
	09/27/00				ND	ND	ND	ND	ND	ND
	12/12/00				ND	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325 3220 Lakeshore Avenue Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 3, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

B = Benzene

(ppb) = Parts per billion

(ft.) = Feet

T = Toluene

ND = Not Detected

DTW = Depth to Water

E = Ethylbenzene

-- = Not Measured/Not Analyzed

GWE = Groundwater Elevation

X = Xylenes

TPH-G = Total Petroleum Hydrocarbons as Gasoline

MTBE = Methyl tertiary butyl ether

- * TOC elevations are surveyed relative to City of Oakland Benchmark, at the northeasterly corner of Weller and Cheney Avenue

 (Elevation = 9.055 feet, city datum; add 3.00' to U.S.G.S. datum). Prior to November 16, 1993, the DTW measurements were taken from the well cover.
- ** Groundwater elevation corrected due to the presence of free product; correction factor = [(TOC-DTW)+(Product Thickness x 0.75)].
- The positive result for gasoline does not appear to have a typical gasoline pattern.
- 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 did not appear to be gasoline
- Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 5 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.
- Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well.
- Detection limit raised. Refer to analytical reports.
- 8 Laboratory report indicates unidentified hydrocarbons C6-C12.
- Laboratory report indicates gasoline and unidentified hydrocarbons >C8.
- 10 MTBE by EPA Method 8260.
- 11 Laboratory report indicates gasoline C6-C12.
- MTBE by EPA Method 8260 analyzed past the recommended holding time.
- Laboratory report indicates weathered gasoline C6-C12.
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons < C6.
- Laboratory report indicates sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.
- Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons >C10.

Table 2 Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5325 3220 Lakeshore Avenue Oakland, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (pph)	EDB (ppb)
U-1	09/27/00 ¹ 12/12/00	ND² 	83,000 1 5,000 ³	ND ²	ND ²	ND ²	ND ²	ND ²
U-2	09/27/00 12/12/00		26,000 ¹ 7,800 ³	 	 	 	 •-	
U-5	09/27/00 12/12/00	 	250 ¹ 13 ³	 	 	 	 	
U-6	09/27/00 12/12/00		2,800 ¹ 580 ³	** **	 	 		

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

 $ETBE = Ethyl \ tertiary \ butyl \ ether$

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

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

Detection limit raised. Refer to analytical reports.

This sample was analyzed outside the EPA recommended holding time.

Table 3 Groundwater Analytical Results

			Oakianu, Camoma	<u> </u>	
WELL ID	DATE	Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Potential mV'
					382 ²
U-1	06/15/98	39	ND	ND	382 ⁻ 366 ²
	09/30/98	17	ND	ND	
	12/28/98	4.3	6.3	28	298 ²
	03/22/99	4.9	ND	3.5	320 ³
	06/09/99	1.2	ND	ND	260 ³ 85 ³
	09/08/99	1.80	ND ¹	ND ¹	
	12/07/99	5.70	ND^1	17.0	404 ³
	03/13/00	8.0	0.18	ND	² 117/262 ³
	06/21/00	9.3	ND ¹	ND^1	148 ²
	09/27/00	2.8	ND¹	18.4	119 ²
	12/12/00	0.49	ND^1	16.0	131 ²
U-2	03/03/98	25	ND	ND	369 ²
U-2	06/15/98	42	ND ND	ND	341 ²
	09/30/98	25	ND	ND	354 ²
	12/28/98	28	ND	ND	276 ²
	03/22/99	0.68	ND	2.3	320^{3}
	06/09/99	0.50	ND	ND	290^{3}
	09/08/99	1.90	ND ¹	ND^1	235 ³
	12/07/99	0.250	ND ¹	ND ¹	389^{3}
	03/13/00	4.3	0.31	ND	² 121/184 ³
	06/21/00	0.26	ND ¹	ND ¹	136^{2}
	09/27/00	0.64	ND^1	10.5	142 ²
	12/12/00	2.7	ND ¹	ND ¹	155 ²
				0.04	190 ³
U -3	06/30/97	1.4	21	0.86	75 ³
	09/19/97	0.57	19	ND	75 390 ³
	12/12/97	1.9	23	0.85	390° 358²
	03/03/98	0.013	36	ND	338 318 ²
	06/15/98	0.16	33	ND	295 ²
	09/30/98	0.040	31	ND	293 281 ²
	12/28/98	ND	29	ND	310 ³
	03/22/99	0.015	30	0.14	350 ³
	06/09/99	ND	26	1.2	417 ³
	09/08/99	ND	32.9	ND ¹	417 ³
	12/07/99	0.0520	27.9	ND ¹	² 226/307 ³
	03/13/00	0.15	33	ND ND	225 ²
	06/21/00	0.20	32	ND ¹	225 ⁻ 211 ²
	09/27/00	ND	34	15.7	211 246 ²
	12/12/00	ND	31	ND^1	240

Table 3
Groundwater Analytical Results

			Oakiand, California		
WELL ID	DATE	Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Potential mV
					2
J -4	06/30/97	0.13	35	0.52	2003
	09/19/97	0.35	30	ND	45 ³
	12/12/97	0.68	31	0.73	380 ³
	03/03/98	0.018	3.2	ND	284 ²
	06/15/98	0.14	33	ND	256 ²
	09/30/98	0.049	31	ND	276 ²
	12/28/98	0.36	31	ND	280^{2}
	03/22/99	ND	30	0.14	320^{3}
	06/09/99	ND	35	0.91	340^{3}
	09/08/99	ND	24	ND ¹	391 ³
	12/07/99	ND	27.7	ND ¹	478 ³
	03/13/00	ND	33	ND	² 219/244 ³
	06/21/00	0.034	32	ND^1	248 ²
	09/27/00	ND	28	\mathbf{ND}^1	198 ²
	12/12/00	ND	30	ND^1	210 ²
-5	06/30/97	16	ND	ND	160 ³
	09/19/97	0.22	ND	ND	63 ³
	12/12/97	6.7	ND	ND.	400 ³
	03/03/98	18	3.1	ND	345 ²
	06/15/98	17	ND	ND	333 ²
	09/30/98	17	ND	ND	318 ²
	12/28/98	17	6.6	ND	305 ²
	03/22/99	0.12	NĎ	2.4	340 ³
	06/09/99	0.23	ND	ND	320 ³
	09/08/99	2.10	ND ¹	ND^1	335 ³
	12/07/99	0.310	ND ¹	ND^1	408 ³
	03/13/00	0.33	0.16	ND	² 111/264 ³
	06/21/00	0.15	ND ¹	ND¹	159 ²
	09/27/00	0.33	ND ¹	ND ¹	136 ²
	12/12/00	0.086	ND ¹	ND ¹	122 ²
U -6	06/30/97	88	0.80	ND	190 ³
- •	09/19/97	2.9	1.80	ND	ND^3
	12/12/97	51	ND	ND	380^{3}
	03/03/98	60	3.5	ND	327 ²
	06/15/98	590	4.8	ND	315 ²
	09/30/98	33	ND	ND	345 ²
	12/28/98	83	7.2	ND	297 ²
	03/22/99	2.1	ND	0.98	330 ³
	06/09/99	0.47	0.20	ND	320 ³
		0.47	5.59	ND ¹	305 ³
	09/08/99			ND ¹	443 ³
	12/07/99	0.260	ND	ND.	443

Table 3

Groundwater Analytical Results

Tosco (Unocal) Service Station #5325 3220 Lakeshore Avenue Oakland, California

WELL ID	DATE	Iron (ppm)	Nitrate as NO3 (ppm)	Phosphate as PO4 (ppm)	Redox Potential mV ²
U-6	03/13/00	0.79	0.26	ND	² 68/222 ³
(cont)	06/21/00	1.9	ND^1	ND^1	159 ²
	09/27/00	2.6	ND^1	ND^1	170 ²
	12/12/00	ND	2.7	ND ¹	128 ²

EXPLANATIONS:

Groundwater analytical results prior to March 3, 1998, were compiled from reports prepared by MPDS Services, Inc.

(ppm) = Parts per million

ND = Not Detected

mV = millivolts

- ² Field measurement.
- 3 Analyzed by laboratory.

Detection limit raised. Refer to analytical reports.

Table 4

Dissolved Oxygen Concentrations

	Cariano, Camoma	
WELL ID	DATE	Before Purge (mg/L)
U-1	12/07/99	1.36
	06/21/00	1.53
	09/27/00	1.63
	12/12/00	1.48
U-2	12/07/99	2.28
	06/21/00	1.96
	09/27/00	2.12
	12/12/00	2.35
U-3	06/30/97	4.1
	09/19/97	4.2
•	12/12/97	2.97
	03/03/98	2.63
	06/15/98	2.93
	09/30/98	3.11
	12/28/98	3.59
	03/22/99	4.02
	06/09/99	3.70
	09/08/99	3.96
	12/07/99	4.21
	06/21/00	4.27
	09/27/00	4.67
	12/12/00	4.79
U-4	06/30/97	5.4
	09/19/97	5.1
	12/12/97	3.11
	03/03/98	2.94
	06/15/98	3.08
	09/30/98	4.05
	12/28/98	4.57
	03/22/99	4.26
	06/09/99	3.61
	09/08/99	3.75
	12/07/99	4.03
	06/21/00	4.89
	09/27/00	5.09
	12/12/00	4.86

Table 4 Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #5325 3220 Lakeshore Avenue Oakland, California

WELL ID	DATE	Before Purge
		(mg/L)
U-5	06/30/97	3.4
0-5	09/19/97	0,6
	12/12/97	1.75
	03/03/98	2.36
	06/15/98	2.55
	09/30/98	1.93
	12/28/98	1.64
	03/22/99	1.99
	06/09/99	2.10
		2.21
	09/08/99	2.66
	12/07/99	3.42
	06/21/00	3.85
	09/27/00	3.53
	12/12/00	
U-6	06/30/97	0.30
	09/19/97	0.60
	12/12/97	2.70
	03/03/98	2.18
	06/15/98	2.48
	09/30/98	3.06
	12/28/98	3.42
	03/22/99	3.88
	06/09/99	3.29
	09/08/99	3.12
	12/07/99	3.44
	06/21/00	3.27
	09/27/00	3.49
	12/12/00	3.06

EXPLANATIONS:

Dissolved oxygen concentrations prior to March 3, 1998, were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = milligrams per liter

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.

lient/ acility # <u>53</u>	25		Job#	: 18000	3)
	20 Lakesho	ce Av	e Date	12-12-	. 00
city: Oal	4			pler: Joe	
Weil ID	<u>U-1</u>	Weil	Condition:	0, k.	
Vell Diameter	<u> </u>	-	rocarbon	Amount E	
otal Depth	19.70 +		kness:	<u>in toroduct/w</u> 2.17 3" = 0.3	
epth to Water	9,37 .	Fac	ior (VF)	6" = 1.50	12" = 5.50
•	10.33 x	vf 0.3 8	_3.93. ×3 (ceso	volume) = Estimated F	Purge Volume: 12 (cel.)
Purge	Disposable Bailer Bailer Stack Suction Grundfos		Sampling Equipment	Disposable B Bailer Pressure Bail Grab Sample	ler
Starting Time:	Other:			ons (aivy	
Sampling Time:	ie:			ption: · Vede	•
	37		If yes; Time: _	Volu	
10:40 10:42	Volume pH (gal.) 4 6.67 8 6.72		0.95 6 0.96 _6	perature D.O. F (mg/L) 95 1.48 59.2	
10144			0.97		
SAMPLE ID	(4) - CONTAINER	LABO	RATORY INFORM PRESERV. TYPE	LATION LABORATORY	ANALYSES
U- 1	3 YOA	Υ	HCL	Sequoia	TPHG, BTEX, MTBC
	l plastic	11		17	(Iron
					10 Nitrate
<u> </u>		T -			
			<u> </u>		1 (phosphate
COMMENTS: .	No FP Lo.	الما	's Stimme		1 (Phosphate

Client/ Facility # <u>53</u>	25		Job#:	18006	<u> </u>	
	20 Lakesho	Co Ave	Date:	12-12-	00	
City: 04				ler: <u>Joe</u>		
Well ID	<u>U-2</u>	Weil	Condition:	0,k.		
Well Diameter		•	ocarbon	Amount 8	-	1001
Total Depth	19.62-	Vois		17 3* = 0.38	3 4	· = 0,66
Depth to Water	7.51 .	Fac	er (VF)	6" = 1.50	12" = 5.50	
	12.11 ×	rF 0.38	= 4.60 x 3 (case ·	roluma) = Estimated Pr	urge Volume:	14 10-13
Purga	Disposable Bailer	•	Sampling	-	- J	
Equipment:	Bailer		Equipment:	Disposable Ba	<u>iler</u>	
•	Stack Suction	·.		Pressure Baile	er	
	Grundfos			-Grab Sample		
· •	Other:	_		Other:		
Starting Time:	9:4		Weather Condition	. 1	Odor:	1es
Sampling Time:	10;15	[A.m 	Weather Condition Water Color: Sediment Descrip If yes: Time:		·) es
Sampling Time: Purging Flow Rate Did well de-wate Time	10;15	Cond	Weather Condition Water Color: Sediment Descrip	rion: *** Volumentature D.O. (mg/L)	·	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate		Condigent	Weather Condition Water Color: Sediment Descrip If yes; Time: Inctivity Temples/cm. Y	rion: *** Volumentature D.O. (mg/L)	ORP (mV)	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 10.03		Condigent	Weather Condition Water Color: Sediment Descrip If yes; Time: huctivity Temp hos/cm Y	Tion:	ORP (mV)	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 10:09 10:03		Condinate 2	Weather Condition Water Color: Sediment Descrip If yes; Time: ductivity Temp hos/cm Y	Tion:	ORP (mV)	Alkalinity
Sampling Time: Purging Flow Rate Did well de wate Time (0:00 10:03	10:19 te:	Condinate 2	Weather Condition Water Color: Sediment Descrip If yes; Time: huctivity Temp hos/cm Y	Tion:	ORP (mV)	Alkalinity
Sampling Time: Purging Flow Rate Did well de wate Time 10.03 10.03 SAMPLE ID	18:19 te:	Condigent	Weather Condition Water Color: Sediment Descrip If yes; Time: Inctivity Temples/cm Y	Tion:	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de wate Time (0:00 10:03	10:19 Re:	Cond pml 2 2 LABOR REFRIG.	Weather Condition Water Color: Sediment Descrip If yes; Time: Incrivity Temp Hoos/cm Y	Tion: We Ac Volument D.O. (mg/L)	ORP (mV)	Alkalinity (ppm) LYSES EX, MITSE
Sampling Time: Purging Flow Rate Did well de wate Time 10.03 10.03 SAMPLE ID	18:19 te:	Condigant 2 2 LABOR	Weather Condition Water Color: Sediment Descrip If yes; Time: Inctivity Temples/cm Y	Tion: We do Volume Volume D.O. (mg/L) 6 2.35 7.8 ATION LABORATORY Sequio ia	ORP (mV) 155 105 ANA TPRG, BT	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time (0:00 10:03	10:19 Re:	Cond pml 2 2 LABOR REFRIG.	Weather Condition Water Color: Sediment Descrip If yes; Time: Inctivity Temples/cm Y	Tion: We do Volume Volume D.O. (mg/L) 6 2.35 7.8 ATION LABORATORY Sequio ia	ORP (mV) 155 100 ANA TPMG, BTM (Ico.	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de wate Time 10.03 10.03 SAMPLE ID	10:11 te:	Cond pml 2 2 LABOR REFRIG.	Weather Condition Water Color: Sediment Descrip If yes; Time: Inctivity Temples/cm Y	Tion: We do Volume Volume D.O. (mg/L) 6 2.35 7.8 ATION LABORATORY Sequio ia	ORP (mV) 155 100 ANA TPMG, BTM (Ico.	Alkalinity (ppm) LYSES EX, MITSE

acility # 53	25		Job#:	18006	<u> </u>	
	20 Lakesho	ce Ave	Date:	12-12-	<i>0</i> 0	
City: Oak	4		Sample	r: Joe		
Well ID	<u>U-3</u>	Well Conditi	ion:	O.k.		
Vell Diameter		Hydrocarbo Thickness:		Amount Ba		<u> </u>
otal Depth	19:40 -	Volume			4" = 0.64 12" = 5.50	5
epth to Water	10.94 -	Factor (VF)		6" = 1.50	T5 = 2'20	
	8.46 ×	uf 0.38 -3.21	_ X 3 (case voi	lume) = Estimated Pu	urge Volume: 10	
Purge Equipment:	Disposable Bailer Bailer Stzck Suction Grundfos Other:		Sampling Equipment: O:	Disposable Ba Bailer Pressure Baile Grab Sample ther:		.,
Starting Time: Sampling Time: Purging Flow Rate Did well de-wate	8522 e:	Sedim	ent Description	on: Volum	Ocior NON	(cal.)
		Canductivity	Temper	<u> </u>	ORP All	حانمنان
P	Volume pH	myos/cm /		(mg/L)		(bb=r)
		µmhos/cm.\	· F		(mV)	
	(<u>Gal</u>)	umbos/cm Ì	· F	(m g/L)	(mV)	
2.03	(<u>Gal</u>)	µmhos/cm.\	· F	(m g/L)	(mV)	
3.03	(<u>Gal</u>)	µmhos/cm.\	· F	(m g/L)	(mV)	
9:08 Y:10 9:12	(g1) 3.5 8.02 7 7.45 7.45	12.16 12.20 12.18	72 7/.9 7/.	(mg/L) 1 4.79 6	(mV) 246	
\$:08 Y:10 \$:12 SAMPLE 10	(g1) 3.5 8.02 7 7.45 (7)- CONTAINER	LABORATOR REFRIG. PRES	7 2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 TY INFORMATISERV. TYPE	(mg/L) 1 4.79 6	(mV)	(bbm)
9:08 Y:10 9:12	(g1) 3.5 8.02 7.41 7.45 (9- CONTAINER 3 YOA	LABORATOR REFRIG. PRES	72 7/.9 7/.	(mg/L) 1 4.79 6	(mV) 246 ANALYSES	(bbm)
\$:08 \$:10 \$:12 SAMPLE 10	(g1) 3.5 8.02 7 7.45 (7)- CONTAINER	LABORATOR REFRIG. PRES	7 2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 TY INFORMATISERV. TYPE	(mg/L) 4.79 G HON LABORATORY Sequeria	ANALYSES THE STEX, MY	L8C
\$:08 \$:10 \$:12 SAMPLE 10	(g1) 3.5 8.02 7.41 7.45 (9- CONTAINER 3 YOA	LABORATOR REFRIG. PRES	7 2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 TY INFORMATISERV. TYPE	(mg/L) 4.79 G HON LABORATORY Sequeria	ANALYSES TRAG, BTEX, MY (I (O)) A Nitrate	LEC (bbm)
\$:08 Y:10 \$:12 SAMPLE 10	(g1) 3.5 8.02 7.41 7.45 (9- CONTAINER 3 YOA	LABORATOR REFRIG. PRES	7 2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 TY INFORMATISERV. TYPE	(mg/L) 4.79 G HON LABORATORY Sequeria	ANALYSES THE STEX, MY	LEC (bbm)
\$:09 \$:10 \$:12 SAMPLE 10	(g1) 3.5 8.02 7.41 7.45 (9- CONTAINER 3 YOA	LABORATOR REFRIG. PRES	7 2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 7/2 TY INFORMATISERV. TYPE	(mg/L) 4.79 G HON LABORATORY Sequeria	ANALYSES TRAG, BTEX, MY (I (O)) A Nitrate	LBC

Client/ Facility #_53	25	·	Job#:	18006	
	20 Lakesho	ce Av	e Date:	12-12-	00
City: Os				er: Joe	
Well ID	<u>U-4</u>	Well	Condition:	O.K.	
Well Diameter	4 :	-	ocarbon	Amount Ba	-
Total Depth	20.15	<u> </u>	uтс 2° = 0.1		3
Depth to Water	9,50 +	Fac	ter (VF)	6" = 1.50	12" = 5.50
	10.65 x	vf <u>0.66</u>	=7.03 × 3 (case v	olume) = Estimated Po	irge Volume: 21 (cal.)
Purge Equipment:	Disposable Bailer Bailer	*	Sampling Equipment:	Disposable Ba	ilei
•	Stack Suction	·. •		Pressure Baile	er ·
•	Grundfos Other:	-		Grab Sample. 	<u>-</u>
Starting Time: Sampling Time: Purging Flow Ra Did well de-wate	te:	<u>(A.</u> m	Weather Condition Water Color: Sediment Descript If yes; Time:	ion: <u>ivexe</u>	Odor NOME
Time	Volume pH (gal.)		inctivity \ Tempe hos/cm Y -F		ORP Alkalinity (mV) (ppm)
6: 22	7 7.60			1 4.86	210
6'.26	14 7.40				
6:30	21 7.37		258 71.		
-					
		LABO	RATORY INFORMA		
SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
U-4	3404	Y	HCL_	Sequoia	TING BTEX, MTSE
•	1 plastic	11			1 Nitrate
					[phosphate
COMMENTS:				<u> </u>	
				·	
		•			

ient/ acility # <u>53</u> 7	25		Job#:	1800G		
ddrass: 327	to Lakeshore	A ye	Date:	12-12-6	0 0	
ity: Oak			Sampler	: Joe		
π						
Well ID	<u>U-5</u>	Well Cor	ndition:	O.K.		
/ell Diameter	4-	Hydroca Thicknes	1.4	Amount Bail	- 	igel)
otal Depth	20.05 -	Volume Factor (3" = 0.38 6" = 1.50	4" = 12" = 5.50	0.66
epth to Water	7.68 =					
	12.37 x VF	0.66 -2	8.16 x 3 (case vol	ume) = Estimated Pur	ge Volume:	S Icel I
Purge	Disposable Bailer	•	Sampling Equipment:	Disposable Bai	الخدساء	2
quipment:	Bailer [·] Stack		Mahinni	Bailer		
•	Suction			Pressure Bailer Grab Sample	•	
	Grundfos		· O:	ther:	ı,	
	Other:					
Species Time:	9:03		eather Conditions	Cainy		
Starting Time: Sampling Time: Purging Flow Rat	9:08	_ A.M Wa ⊾ Se	eather Conditions ater Color:	elean	Odor 19) \$
Sampling Time:	9'08 9'35 te: 2 000	_ A.M Wa ⊾ Se	eather Conditions ater Color:	clear	1) \$
Sampling Time: Purging Flow Rate Did well de-wate	9'08 9'35 te: 2'000 er? Volume pH	A.M Was See If Conduction	eather Conditions ater Color: diment Description yes; Time: tivity \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Volume D.O. (mg/L)	ORP (mV)	;
Sampling Time: Purging Flow Rate Did well de-wate	9'08 9'35 te: 2'000 er?	A.M Was See If Conducting	eather Conditions atter Color: diment Description yes; Time: tivity Temper for Y	Volume D.O. (mg/L)	ORP (mV)	Alkalinin
Sampling Time: Purging Flow Rate Did well de-wate Time	9'08 9'35 te: 2 oper	Conduction 13.4	eather Conditions atter Color: diment Description yes; Time: tivity Temper fom Y	Volume D.O. (mg/L)	ORP (mV)	Alkalinity
Sampling Time: Purging Flow Ran Did well de wate	9'08 9'35 te: 2 com er? Volume pH (gal.) 8 7.30	A.M Was See If Conducting	eather Conditions atter Color: diment Description yes; Time: tivity Temper fom Y	Volume D.O. (mg/L)	ORP (mV)	Alkalinin
Sampling Time: Purging Flow Ran Did well de-wate Time 9120	9'08 9'35 te: 2 oper	Conduction 13.4	eather Conditions atter Color: diment Description yes; Time: tivity Temper fom Y	Volume D.O. (mg/L)	ORP (mV)	Alkalinin
Sampling Time: Purging Flow Ran Did well de-wate Time 9 120	9'08 9'35 te: 2 oper	Conduction 13.4	eather Conditions atter Color: diment Description yes; Time: tivity Temper fom Y	Volume D.O. (mg/L)	ORP (mV)	Alkalinin
Sampling Time: Purging Flow Ran Did well de-wate Time 9 120	9'08 9'35 te: 2 oper	Conductive A. M. W. See H. Conductive A. M. A.	eather Conditions ater Color: diment Description yes; Time: tivity Temper fram Y	Volume Volume D.O. (mg/L) 7 4	ORP (mV)	Allcalinity (ppm)
Sampling Time: Purging Flow Ran Did well de-wate Time 9 120	9'08 9'35 te: 2 oper	Conductive A. M. W. See H. Conductive A. M. A.	eather Conditions ater Color: diment Description yes; Time: yes; Time: frampe: fram y frampe: fram y	Volume D.O. (mg/L) 7 3.53 7 4 TION LABORATORY	ORP (mV)	Allcalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 9'20 9'24 9'24	9'08 9'35 Re: 2 0000 Volume pH (gal.) 8 7.30 16 7.16 25 7.12	Concincing printed at 15 and 1	eather Conditions ater Color: codiment Description yes; Time: civity Temper /cm Y	TION LABORATORY Sequicia	ORP (mV) 122 ANAL TPRG_BTE	Allcalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 9'20 9'21 9'21	9'08 9'35 te: 2 0000 Volume pH (gal.) 8 7.30 16 7.16 25 7.12	Conduction of the conduction o	eather Conditions ater Color: diment Description yes; Time: yes; Time: frampe: fram y frampe: fram y	Volume D.O. (mg/L) 7 3.53 7 4 TION LABORATORY	ORP (mV) 122 ANAL TPRG, BTE	Allcalinity (ppm) YSES K, MTBE
Sampling Time: Purging Flow Rate Did well de-wate Time 9'20 9'21 9'21	9'08 9'35 te: 2 0000 Volume pH (gal.) 8 7.30 16 7.16 25 7.12	Conduction of the conduction o	eather Conditions ater Color: diment Description yes; Time: yes; Time: frampe: fram y frampe: fram y	TION LABORATORY Sequicia	ORP (mV) 122 ANAL TPMG.BTE	Allcalinity (ppm) YSES K, MTRE
Sampling Time: Purging Flow Rate Did well de-wate Time 9'20 9'21 9'21	9'08 9'35 te: 2 0000 Volume pH (gal.) 8 7.30 16 7.16 25 7.12	Conduction of the conduction o	eather Conditions ater Color: diment Description yes; Time: yes; Time: frampe: fram y frampe: fram y	TION LABORATORY Sequicia	ORP (mV) 122 ANAL TPMG.BTE	YSES K, MTBE
Sampling Time: Purging Flow Rate Did well de-wate Time 9'20 9'21 9'21	9'08 9'35 Re: 2 0000 PH (gal.) 8 7.30 16 7.16 25 7.12 (3) - CONTAINER 3 YOA 1 plustic	Conduction of the conduction o	eather Conditions ater Color: diment Description yes; Time: yes; Time: frampe: fram y frampe: fram y	TION LABORATORY Sequicia	ORP (mV) 122 ANAL TPMG.BTE	Allcalinity (ppm) YSES K, MTRE

Client/			Job#:	180061	
Facility #_ <u>53</u>	20 Lakeshore	Ave	- Date:	12-12-6	00
Address:	C La Resubie		Samole	r: <u>Joe</u>	
City: Oak	cand				
Well ID	U-6	Weil C	ondition:	0,4.	
Well Diameter	2	Hydroc Tnickr	carbon	Amount Bail	
Total Depth	23.80 ±	Volum Face	7 = 0.17 r (VF)	3° = 0.38 6° = 1.50	4" = 0.66 . 12" = 5.50
Depth to Water	7.74 =	L			
	16.06 x VF	<u>-17</u>	_2.73 × 3 (case ve	olume) = Estimated Pur	ge Volume: 81 Sign!
Purge	Disposable Bailer	•	Sampling Equipment:	Desposable Bai	
Equipment:	Bailer · Stack	•	Equipment	Bailer Pressure Bailer	
. •	Suction			Grab Sample	,
	Grundfos Other:	_	. (Other:	
			•		
Starting Time:	8:35	_ \	Weather Condition	s (ainy	
Sampling Time:	8.551		Water Color:	- elean	Odor Mild
	te: <u>l god</u>		Sediment Descript		per lexi.
Did well de-wat		-	If yes; Time: —	Volum	e:
Time	Volume pH (gal.)	Cond µmi	inctivity Temperoskan Y		ORP Alkalinity (mV) (ppm)
8:42	3.5 7.21		20 71.	 -	128
8,43	5.5 7.17		95 71.		<u> </u>
8:45	1.5. 7.17	<u> </u>	1.07 72	-0	
				\	
					
			RATORY INFORMA PRESERV. TYPE	ATION LABORATORY	analyses
SAMPLE ID	(1) - CONTAINER	REFRIG.	HCL	Sequoia	TPAG BTEX, MTEC
<u>U-6</u>	3404			11	(IION
	1 plastic				d Nitrate
·					[phosphate
<u> </u>		<u> </u>			· · · · · ·
COMMENTS					

					Tos											Cł	<u>jair</u>	-of	-Cı	usto	ody-Record
Toso Tosos Merkering 2000 Cow Carpor Ban Ramon, Callo	Company	Cone	Facility Litent Province Litent No. Litent Adrese	y Address pject Num me Ge 747 S	Und 32 ber_l ttler- lerra	(a)# 5 26 Lak 80061. Ryan Inc Court. S eanna L.)-551-755	She S G- uite Hardi	R Ind	ıbl.In	. CA	9456	- L L 8 s	.oboratory .oboratory Samples (Collection Signature .	Name Releas Collected Date	(Phone) Seq Numb by (No. 12-1	((((((((((915 Anal	ytica		323 013	2314 DO NOT BILL
Sample Number	Lab Sample Number	Humber of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type 6 = Grub C = Composite D = Discrete	Tkne	Sample Preservation	load (Year or No)	TPH Gas + BTEX W/MTBE (B016) (B020)	TPH Dissel (8015)	Off and Grease (5520)	Purpeable Holocarbons (9010)	Purgeable Arematics (8020)		coino	Metals Cd.Cr.Pb.Zn.Ni (ICAP or AA)	01	Nitrate hate	ł			TB-LB ANALYSIS Coufirm any VMTBE hit by 8260 Remorks
TB-LB U-1 U-2 U-3 U-4 U-5 U-6	01A 02A-D 03 04 05 06 07 V	70A 340A 1pl. 4 9 9		G / / / / / / / / / / / / / / / / / / /	11:00 10:15 8:22 6:45 41:35		Y , , , , , , , , , , , , , , , , , , ,	J J J J J J J J J J J J J J		\	N N	2				\frac{1}{3}	\(\sqrt{1} \sqrt{1} \sqrt{2}				Please filter from plain plastic and plessive for Ferrors From Jualysis.
Relinquished B	OMAN Signature	24	G Or	genization R Inc	2.	Date/Time 12.00 Date/Time 12/12/00 Date/Time 12	R	ealeved	By (Sign	nature)	By (Slo	nature	Organiza	otlon	Pr	ote/Time 2/12/0 2-19 2-19 10/Time	0) 1 Ce		Turn Are	24 45 5 10	ne (Circle Choloe) Hre. B Hre. Daye Daye Daye



9 January, 2001

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

RE: Tosco Sequoia Report W012314

Enclosed are the results of analyses for samples received by the laboratory on 12-Dec-00 12:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Charlie Westwater Project Manager

CA ELAP Certificate #1271



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

Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported: 09-Jan-01 07:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	W012314-01	Water	12-Dec-00 00:00	12-Dec-00 12:30
U-1	W012314-02	Water	12-Dec-00 11:00	12-Dec-00 12:30
•	W012314-03	Water	12-Dec-00 10:15	12-Dec-00 12:30
U-2	W012314-04	Water	12-Dec-00 08:22	12-Dec-00 12:30
U-3	W012314-05	Water	12-Dec-00 06:45	12-Dec-00 12:30
U-4	W012314-06	Water	12-Dec-00 09:35	12-Dec-00 12:30
U-5	W012314-07	Water	12-Dec-00 08:55	12-Dec-00 12:30
U-6	WU12314-07	AA CITET		

Sequoia Analytical - Walnut Creek

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.

Charlie Westwater, Project Manager



Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported: 09-Jan-01 07:29

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

TB-LB (W012314-01) Water Sampled: 12-Dec-00 00:00 Received: 12-Dec-00 12 Purgeable Hydrocarbons ND 50 ug/l 1 Benzene ND 0.50 " " Toluene ND 0.50 " " Ethylbenzene ND 0.50 " " Kylenes (total) ND 0.50 " " Methyl tert-butyl ether ND 2.5 " " Surrogate: a,a,a-Trifluorotoluene 117 % 70-130 Tol.1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:30 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " Toluene ND 100 " " Ethylbenzene 250 100 " " Kylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "	0L240	77 77 78 79	11 11 11 11	EPA 8015M/8020 "" ""	P-07
Purgeable Hydrocarbons ND 50 ug/l 1	0L240	11 11 11 11	** ** ** ** ** ** ** ** ** **	8015M/8020	
Toluene	11 12 14 14	77 18 19	17 14 11	" EPA	
Toluene ND 0.50 " Ethylbenzene ND 0.50 " " Xylenes (total) ND 0.50 " " Methyl tert-butyl ether ND 2.5 " " Surrogate: a,a,a-Triftuorotoluene 117 % 70-130 " " U-1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:30 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " " Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "	, m	77 18 19	11 11	" EPA	
Ethylbenzene ND 0.50 " " Xylenes (total) ND 0.50 " " Methyl tert-butyl ether ND 2.5 " " Surrogate: a,a,a-Trifiuorotoluene 117 % 70-130 T0-130 U-1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:30 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " " Toluene ND 100 " " " Ethylbenzene 250 100 " " " Xylenes (total) 1900 100 " " " Methyl tert-butyl ether 12000 500 " " "	, , , , , , , , , , , , , , , , , , ,	7 7	H H	" EPA	
Xylenes (total) ND 0.50 " Methyl tert-butyl ether ND 2.5 " " Surrogate: a,a,a-Trifiuorotoluene 117 % 70-130 U-1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:36 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 "	0	**	H	" EPA	
Methyl tert-butyl ether ND 2.5 " Surrogate: a,a,a-Triftuorotoluene 117 % 70-130 U-1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:30 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 "	9	"	7	" EPA	
Surrogate: a,a,a-Trifluorotoluene 117 % 70-130 U-1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:36 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "	0			EPA	P-07
U-1 (W012314-02) Water Sampled: 12-Dec-00 11:00 Received: 12-Dec-00 12:36 Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "		002 24-Dec-00	0 24-Dec-00		P-07
Purgeable Hydrocarbons 50000 10000 ug/l 20 Benzene ND 100 " " Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "		002 24-Dec-00	24-Dec-00		
Toluene				8015M/8020	
Toluene ND 100 " " Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "	, "	H .	#	H	
Ethylbenzene 250 100 " " Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "	, "	Ħ	н	H	
Xylenes (total) 1900 100 " " Methyl tert-butyl ether 12000 500 " "		H	II.	H	
Methyl tert-butyl ether 12000 500 " "	. 1	•	7	ia.	
· · · · · · · · · · · · · · · · · · ·		**	n	**************************************	CC-3
Surrogate: a,a,a-Trifluorotoluene 107 % 70-130	"	. "	n	**	
U-2 (W012314-03) Water Sampled: 12-Dec-00 10:15 Received: 12-Dec-00 12:30	0				P-01
	20 OL24	002 24-Dec-0	0 24-Dec-00	EPA 8015M/8020	
Benzene 17 10 "	н н		Ħ	#	
Toluene ND 10 "	- "	*	**	**	
	n 11	ı 19	n	•	
	"	•	*	H	
	m m			n	CC-3
Surrogate: a,a,a-Trifluorotoluene 104 % 70-130	н	y n	п	n	



Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Project: Tosco

Project Number: Tosco # 5325

Reported: 09-Jan-01 07:29

Dublin CA, 94568

Project Manager: Deanna L. Harding

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-3 (W012314-04) Water	Sampled: 12-Dec-00 08:22	Received:	12-Dec-0	0 12:30					
Purgeable Hydrocarbons	ND	50	ug/l	1	0L24002	24-Dec-00	24-Dec-00	EPA 8015M/8020	
Benzene	ND	0.50	•	#	Ħ	•	n		
Toluene	ND	0.50	#	*	•	π .	•		
Ethylbenzene	ND	0.50	**			*	•		
Xylenes (total)	ND	0.50		•				7	
Methyl tert-butyl ether	ND	2.5	•	7	*	•		H	CC-3
Surrogate: a,a,a-Trifluorota	oluene	99.3 %	70	-130	"	n .	*	*	
*	Sampled: 12-Dec-00 06:45	Received:	12-Dec-6	0 12:30					
Purgeable Hydrocarbons	ND	50	ug/l	1	0L24002	24-Dec-00	24-Dec-00	EPA 8015M/8020	
Benzene	ND	0.50	**			₩.			
Toluene	ND	0.50		•	•	Ħ	. "		1
Ethylbenzene	ND	0.50	*	н	•	# ·	Ħ	#	
Xylenes (total)	ND	0.50	*	*	*		•	#	
Methyl tert-butyl ether	ND	2.5	w			. •	H	*	
Surrogate: a,a,a-Trifluorot	oluene	107 %	70	-130	"	#		"	
	Sampled: 12-Dec-00 09:35	Received:	12-Dec-	DO 12:30					P-01
Purgeable Hydrocarbons		250		5	0L24002	24-Dec-00	24-Dec-00	EPA 8015M/8020	
Benzene	3.2	2.5		π		*		*	
Toluene	ND	2.5		*	#	Ħ	*		
Ethylbenzene	ND	2.5			#		**	•	
Xylenes (total)	ND	2.5		4		ч		ч	
Methyl tert-butyl ether	27	13		n	•	Ħ	₩	π	
Surrogate: a,a,a-Trifluoro	toluene	88.7 %	5 70	0-130	*	"	н	"	





Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported:

09-Jan-01 07:29

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-6 (W012314-07) Water Samp	led: 12-Dec-00 08:55	Received:	2-Dec-00	12:30				•	
Purgeable Hydrocarbons	ND	50	ug/l	1	0L24002	24-Dec-00	24-Dec-00	EPA 8015M/8020	
Benzene	ND	0.50	-	Ħ	**		#	•	
Toluene	ND	0.50	н	n	•	**	Ħ	H	
Ethylbenzene	ND	0.50	н	*	**	•	Ħ	#	
Xylenes (total)	ND	0.50	#	•		Ħ	*	н	
Surrogate: a,a,a-Trifluorotoluene		97.3 %	70-1	130	,	#	π	"	
U-6 (W012314-07RE1) Water S	ampled: 12-Dec-00 0	3:55 Receiv	ed: 12-De	ec-00 12:3	0				
Methyl tert-butyl ether	590	50	ug/l	20	0L24002	24-Dec-00	26-Jan-01	EPA 8015M/8020	
Surrogate: a.a.a-Trifluorotoluene		99.0 %	70-1	130	"	н	"	H	•





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported: 09-Jan-01 07:29

MTBE Confirmation by EPA Method 8260B

Sequoia Analytical - Walnut Creek

Analyte		Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (W012314-02) Water	Sampled: 12-Dec-	00 11:00	Received: 1	12-Dec-00	12:30					O-04
Methyl tert-butyl ether		15000	200	ug/l	100	1A08022	04-Jan-01	04-Jan-01	EPA 8260B	
Surrogate: Dibromofluoron	ethane		100 %	50-1	50	Ħ	"	*	*	
Surrogate: 1,2-Dichloroeth			98.0 %	50-1	50	#	Ħ	#	#	
U-2 (W012314-03) Water		-00 10:15	Received:	12-Dec-00	12:30					0-04
Methyl tert-butyl ether		7800	100	ug/l	50	1 A08022	04-Jan-01	05-Jan-01	EPA 8260B	
Surrogate: Dibromofluoron	ethone		94.0 %	50-1	50	#	н	*	u	
Surrogate: 1,2-Dichloroeth			102 %	50-1	50	*	Ħ	"	H	•
U-5 (W012314-06) Water		-00 09:35	Received:	12-Dec-00	12:30					0-04
Methyl tert-butyl ether		13	2.0	ug/l	1	1A08022	04-Jan-01	05-Jan-01	EPA 8260B	
Surrogate: Dibromofluoron	n <i>ethane</i>		96.0 %	50-1	50			*		
Surrogate: 1,2-Dichloroeth			96.0 %	50-2	50	*	r r	•	r r	
U-6 (W012314-07) Water		:-00 08 :55	Received:	12-Dec-00	12:30			· · ·		0-04
Methyl tert-butyl ether	<u> </u>	580	10	ug/l	5	1A08022	04-Jan-01	05-Jan-01	EPA 8260B	
Surrogate: Dibromofluoron	nethane		100 %	50-	150	*	n	*	*	
Surrogate: 1,2-Dichloroeth			96.0 %	50	150	*	•	*	*	

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Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported:

09-Jan-01 07:29

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (W012314-02) Water	Sampled: 12-Dec-00 11:00	Received:	12-Dec-00	12:30					<u> </u>
Ferrous Iron	0.49	0.010	mg/l	1	0L21022	21-Dec-00	04-Jan-01	EPA 6010A	
U-2 (W012314-03) Water	Sampled: 12-Dec-00 10:15	Received:	12-Dec-00	12:30					<u>. </u>
Ferrous Iron	2.7	0.010	mg/l	1	0L21022	21-Dec-00	04-Jan-01	EPA 6010A	
U-3 (W012314-04) Water	Sampled: 12-Dec-00 08:22	Received:	12-Dec-00	12:30					
Ferrous Iron	ND	0.010	mg/l	1	0L21022	21-Dec-00	04-Jan-01	EPA 6010A	
U-4 (W012314-05) Water	Sampled: 12-Dec-00 06:45	Received:	12-Dec-00	12:30				<u></u> _	
Ferrous Iron	ND	0.010	mg/l	1	0L21022	21-Dec-00	04-Jan-01	EPA 6010A	
U-5 (W012314-06) Water	Sampled: 12-Dec-00 09:35	Received:	12-Dec-00	12:30				<u> </u>	
Ferrous Iron	0.086	0.010	mg/l	1	0L21022	21-Dec-00	04-Jan-01	EPA 6010A	
U-6 (W012314-07) Water	Sampled: 12-Dec-00 08:55	Received:	12-Dec-00	12:30					
Ferrous Iron	ND	0.010	mg/l	1	0L21022	21-Dec-00	04-Jan-01	EPA 6010A	





Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported: 09-Jan-01 07:29

Anions by EPA Method 300.0 Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (W012314-02) Water	Sampled: 12-Dec-00 11:00	Received:	12-Dec-0	0 12:30					
Nitrate as NO3	ND	1.0	mg/l	10	0L14005	13-Dec-00	13-Dec-00	EPA 300.0	
Phosphate	16.0	5.00	•	*	•		13-Dec-00		
U-2 (W012314-03) Water	Sampled: 12-Dec-00 10:15	Received:	12-Dec-	0 12:30					
Nitrate as NO3	ND	1.0	mg/l	10	0L14005	13-Dec-00	13-Dec-00	EPA 300.0	
Phosphate	ND	5.00		*		Ħ	13-Dec-00	•	
U-3 (W012314-04) Water	Sampled: 12-Dec-00 08:22	Received:	12-Dec-(00 12:30	<u>.</u>				
Nitrate as NO3	31	1.0	mg/l	10	0L14005	13-Dec-00	13-Dec-00	EPA 300.0	
Phosphate	ND	5.00		Ħ		*	13-Dec-00	"	
U-4 (W012314-05) Water	Sampled: 12-Dec-00 06:45	Received:	12-Dec-	00 12:30					
Nitrate as NO3	30	1.0	mg/l	10	0L14005	13-Dec-00	13-Dec-00	EPA 300.0	
Phosphate	ND	5.00	**	#	*	**	13-Dec-00	•	
U-5 (W012314-06) Water	Sampled: 12-Dec-00 09:35	Received:	12-Dec-	00 12:30					
Nitrate as NO3	ND	1.0	mg/l	10	OL14005	13-Dec-00	13-Dec-00	EPA 300.0	
Phosphate	ND	5.00	#	#	" .	•	13-Dec-00	*	
U-6 (W012314-07) Water	Sampled: 12-Dec-00 08:55	Received:	12-Dec-	00 12:30					<u> </u>
Nitrate as NO3	2.7	1.0	mg/l	10	0L14005	13-Dec-00	13-Dec-00	EPA 300.0	
Phosphate	ND	5.00	7	ч	H	•	13-Dec-00		

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Gettler Ryan, Inc. - Dublin

6747 Sierra Court Suite J Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported:

09-Jan-01 07:29

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0L24002 - EPA 5030B [P/T]			-							
Blank (0L24902-BLK1)				Prepared	& Analyz	ed: 24-De	c-00			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	ч							
Toluene	ND	0.50	**							
Ethylbenzene	ND	0.50	н							
Xylenes (total)	ND	0.50	-							
Methyl tert-butyl ether	ND	2.5	н							
Surrogate: a,a,a-Trifluorotoluene	35.1		н	30.0		117	70-130			
LCS (0L24002-BS1)				Prepared	& Analyz	ed: 24-De	c-00			
Benzene	17.6	0.50	ug/l	20.0		88.0	70-130			
Toluene	17.6	0.50	Ħ	20.0		88.0	70-130			
Ethylbenzene	17.4	0.50	*	20.0		87.0	70-130			
Xylenes (total)	51.7	0.50	*	60.0		86.2	70-130			
Surrogate: a, a, a-Trifluorotoluene	29.1		~	30.0		97.0	70-130			
Matrix Spike (0L24002-MS1)	Se	ource: W0123	314-04	Prepared	& Analyz	ed: 24-De	ec-00		<u>:</u>	
Benzene	17.2	0.50	ug/l	20,0	ND	86.0	70-130			
Toluene	17.3	0.50	π	20.0	ND	86.5	70-130			
Ethylbenzene	17.1	0.50		20.0	ND	85.5	70-130			
Xylenes (total)	51.1	0.50		60.0	ND	85,2	70-130			
Surrogate: a, a, a-Trifluorotoluene	29.1		"	30.0		97.0	70-130			
Matrix Spike Dup (0L24002-MSD1)	S	ource: W012	314-04	Prepared	l & Analy	zed: 24-De	ec-00	<u>:</u> .		•
Benzene	18.3	0.50	ug/l	20.0	ND	91.5	70-130	6.20	20	
Toluene	18.4	0.50	**	20.0	ND	92.0	70-130	6.16	20	
Ethylbenzene	18.2	0.50	17	20.0	ND	91.0	70-130	6.23	20	-
Xylenes (total)	54.1	0.50	**	60.0	ND	90.2	70-130	5.70	20	
Surrogate: a, a, a-Trifluorotoluene	30.3		м	30.0		101	70-130			

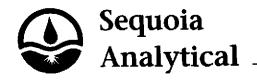
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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325 Project Manager: Deanna L. Harding Reported: 09-Jan-01 07:29

MTBE Confirmation by EPA Method 8260B - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1A08022 - EPA 5030B [P/T]									-	
Blank (1A08022-BLK1)				Prepared	& Analyz	ed: 04-Jan	-01			
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	48.0		. "	50.0		96.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	47.0		*	50.0		94.0	50-150	÷		
Blank (1A08022-BLK2)				Prepared	& Analyz	ed: 08-Jan	ı - 01			
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: Dibromofluoromethane	46.0		*	50.0		92.0	50-150		_	•
Surrogate: 1,2-Dichloroethane-d4	48.0		"	50.0		96.0	50-150			
LCS (1A68022-BS1)				Prepared	& Analyz	ed: 04-Jan	⊢ 01			
Methyl tert-butyl other	52.5	2.0	ug/i	50.0		105	70-130			
Surrogate: Dibromofluoromethane	47.0			50.0		94.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	46.0		ar .	50.0		92.0	50-150			
LCS Dup (1A08022-BSD1)				Prepared	& Analyz	ed: 08-Jar	ı-01			
Methyl tert-butyl ether	56.6	2.0	ug/l	50.0		113	70-130	7.52	25	
Surrogate: Dibromofluoromethane	48.0		н	50.0		96.0	50-150			
Surrogate: 1,2-Dichloroethane-d4	49.0		*	50.0		98.0	50-150			



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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported:

09-Jan-01 07:29

Total Metals by EPA 6000/7000 Series Methods - Quality Control Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0L21022 - 200.7							· -			·
Blank (0L21022-BLK1)				Prepared:	21-Dec-0	0 Analyze	:d: 04-Jan-	01		
Ferrous Iron	ND	0.010	mg/l							
LCS (0L21022-BS1)				Prepared	21-Dec-0	0 Analyze	d: 04-Jan	01		
Ferrous Iron	0.979	0.010	mg/l	1.00		97.9	80-120			
LCS Dup (0L21022-BSD1)				Prepared	: 21-Dec-0	0 Analyze	d: 04-Jan	-01		
Ferrous Iron	0.984	0.010	mg/l	1.00		98.4	80-120	0.509	20	



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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J Dublin CA, 94568

Project: Tosco

Project Number: Tosco # 5325 Project Manager: Deanna L. Harding

Reported: 09-Jan-01 07:29

Anions by EPA Method 300.0 - Quality Control

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0L14005 - General Preparation										·
Blank (0L14905-BLK1)				Prepared	& Analyz	ed: 13-De	c-00			
Nitrate as NO3	ND	0.10	mg/l							
Phosphate	ND	0.500	**							
LCS (0L14005-BS1)				Prepared	& Analyz	ed: 13-De				
Nitrate as NO3	10.2	0.10	mg/l	10.0	<u> </u>	102	80-120			
Phosphate	18.6	0.500		20.0		93.0	80-120			
Matrix Spike (0L14005-MS1)	Sc	urce: W0122	98-01	Prepared	& Analyz	ed: 13-De	ec-00			
Nitrate as NO3	14.2	0.40	mg/l	20.0	ND	71.0	75-125			Q-0:
Phosphate	72.6	2.00	•	40.0	34.6	95.0	75-125			
Matrix Spike Dup (0L14005-MSD1)	Source: W012298-01		Prepared	& Analyz	zed: 13-De	ec-00				
Nitrate as NO3	12.4	0.40	mg/l	20.0	ND	62.0	75-125	13.5	20	Q-0
Phosphate	72.8	2.00	Ħ	40.0	34.6	95.5	75-125	0.275	20	



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Gettler Ryan, Inc. - Dublin 6747 Sierra Court Suite J

6747 Sierra Court Suite J Dublin CA, 94568 Project: Tosco

Project Number: Tosco # 5325

Project Manager: Deanna L. Harding

Reported:

09-Jan-01 07:29

Notes and Definitions

CC-3	Continuing Calibration indicates that the quantitative result for this analyte includes a greater than 15%	degree of uncertainty.	The
	value as reported is within method acceptance.	•	

O-04 This sample was analyzed outside the EPA recommended holding time.

P-01 Chromatogram Pattern: Gasoline C6-C12

P-07 Chromatogram Pattern: Gasoline C6-C12 + Unidentified Hydrocarbons > C10

Q-02 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference