



GETTLER-RYAN INC.

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TRANSMITTAL

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May 7, 2001
G-R #: 180012

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

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

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

RE: Tosco (Unocal) SS #5484
18950 Lake Chabot Road
Castro Valley, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	May 1, 2001	Groundwater Monitoring and Sampling Report Annual - Event of March 28, 2001

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 18, 2001**, this report will be distributed to the following:

cc: ~~Alameda~~ Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94501

Enclosure

agency/5484-dbd



GETTLER - RYAN INC.

May 1, 2001
G-R Job #180012

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

RE: **Annual Event of March 28, 2001**
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5484
18950 Lake Chabot Road
Castro Valley, California

Dear Mr. De Witt:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

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. 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 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,

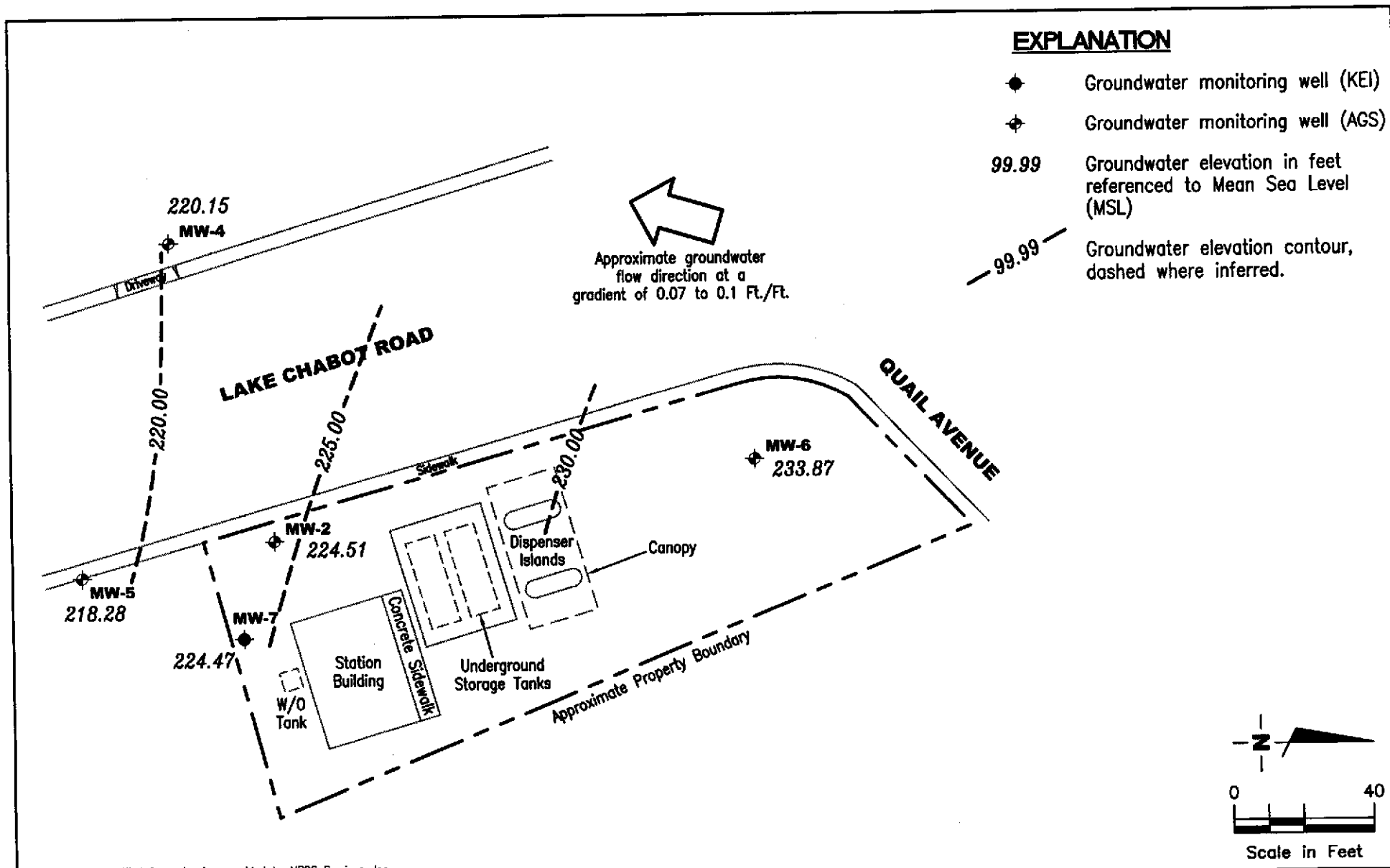
Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734



Figure 1: Potentiometric Map
Figure 2: Concentration Map
Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results
Table 3: Groundwater Analytical Results - Oxygenate Compounds
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

3885.qml



Source: Figure modified from drawing provided by MPDS Services, Inc.

GETTLER - RYAN INC.
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POTENTIOMETRIC MAP
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

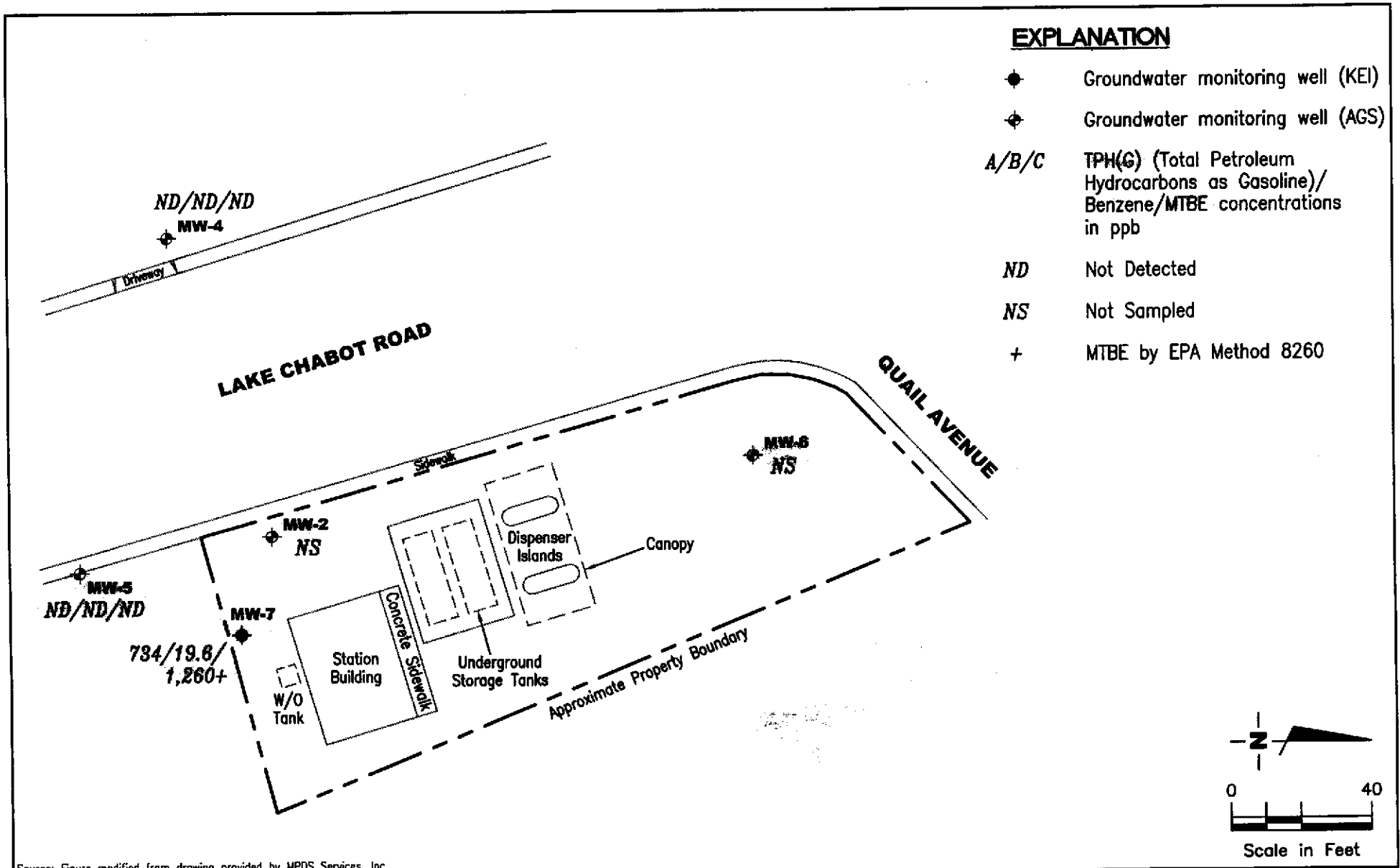
FIGURE
1

PROJECT NUMBER
 180012

REVIEWED BY

DATE
 March 28, 2001

REVISED DATE



Source: Figure modified from drawing provided by MPDS Services, Inc.

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CONCENTRATION MAP
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

FIGURE
2

PROJECT NUMBER
 180012

REVIEWED BY

DATE
 March 28, 2001

REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-2	05/23/91	--	--	--	ND	ND	ND	ND	ND	--	
	09/20/91	--	--	--	ND	ND	ND	ND	ND	--	
	12/19/91	--	--	--	140	0.66	ND	0.64	1.2	--	
	03/20/92	--	--	--	120	ND	ND	ND	ND	--	
	06/18/92	--	--	--	140 ¹	ND	ND	ND	ND	--	
	09/10/92	--	--	--	61 ¹	ND	ND	ND	ND	110	
	12/10/92	--	--	--	100 ¹	ND	ND	ND	ND	170	
229.47	03/10/93	4.69	224.78	--	110 ¹	ND	ND	ND	ND	350	
	06/09/93	5.85	223.62	--	120 ¹	ND	ND	ND	ND	300	
228.88	09/09/93	6.59	222.29	--	210 ¹	ND	ND	ND	ND	--	
	12/09/93	6.94	221.94	--	96 ¹	ND	ND	ND	ND	--	
	03/03/94	4.91	223.97	--	240 ¹	ND	ND	ND	ND	--	
	06/03/94	5.71	223.17	--	190 ¹	ND	ND	ND	ND	--	
	09/02/94	7.05	221.83	--	720	ND	ND	ND	4.6	--	
	12/01/94	6.98	221.90	--	200	0.70	ND	0.58	ND	--	
	03/01/95	4.60	224.28	--	ND	ND	ND	ND	ND	--	
	06/01/95	4.65	224.23	--	420 ¹	ND	ND	ND	ND	--	
	09/05/95	5.66	223.22	--	ND	ND	0.80	ND	0.74	-- ⁵	
	12/05/95	6.32	222.56	--	ND	ND	ND	ND	ND	390	
	04/11/96	4.22	224.66	NOT SAMPLED ⁶			--	--	--	--	--
	03/13/97	6.58	222.30	--	--	--	--	--	--	--	
	03/02/98	5.18	223.70	--	--	--	--	--	--	--	
	03/25/99	4.84	224.04	--	--	--	--	--	--	--	
	03/07/00	4.92	223.96	--	--	--	--	--	--	--	
	03/28/01	4.37	224.51	--	--	--	--	--	--	--	

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5484
18950 Lake Chabot Road
Castro Valley, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4	05/23/91	--	--	--	ND	ND	ND	ND	ND	--
	09/20/91	--	--	SAMPLED SEMI-ANNUALLY		--	--	--	--	--
	12/19/91	--	--	--	ND	ND	ND	ND	ND	--
	03/20/92	--	--	--	--	--	--	--	--	--
	06/18/92	--	--	--	ND	0.41	0.84	ND	0.55	--
	09/10/92	--	--	--	--	--	--	--	--	--
	12/10/92	--	--	--	ND	ND	ND	ND	ND	--
	03/10/93	7.24	220.84	--	ND	ND	ND	ND	ND	--
228.08	06/09/93	8.79	219.29	--	ND	ND	ND	ND	ND	--
227.77	09/09/93	9.91	217.86	--	ND	ND	ND	ND	ND	--
	12/09/93	INACCESSIBLE	--	--	--	--	--	--	--	--
	03/03/94	6.98	220.79	--	ND	ND	ND	ND	ND	--
	06/03/94	8.26	219.51	--	ND	ND	ND	ND	ND	--
	09/02/94	10.08	217.69	--	ND	ND	ND	ND	ND	--
	12/01/94	10.01	217.76	--	ND	ND	ND	ND	ND	--
	03/01/95	7.29	220.48	--	ND	ND	1.1	ND	0.75	--
	06/01/95	7.65	220.12	--	ND	ND	0.78	ND	1.7	--
	09/05/95	9.27	218.50	--	ND	ND	0.70	ND	0.71	--
	12/05/95	9.92	217.85	--	ND	ND	ND	ND	ND	0.68
	04/11/96	7.55	220.22	--	ND	ND	ND	ND	ND	ND
	03/13/97	9.84	217.93	--	ND	ND	ND	ND	ND	ND
	03/02/98	8.84	218.93	--	ND	ND	ND	ND	ND	ND
	03/25/99	7.46	220.31	--	ND	ND	ND	ND	ND	7.6
	03/07/00	7.58	220.19	--	ND	ND	1.11	ND	ND	ND
	03/28/01	7.62	220.15	--	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5	05/23/91	--	--	--	ND	ND	ND	ND	ND	--
	09/20/91	--	--	450	ND	ND	ND	ND	ND	--
	10/10/91	--	--	ND	--	--	--	--	--	--
	12/19/91	--	--	--	ND	ND	ND	ND	ND	--
	03/20/92	--	--	170	ND	ND	ND	ND	ND	--
	06/18/92	--	--	ND	ND	ND	ND	ND	ND	--
	09/10/92	--	--	110 ²	ND	ND	ND	ND	ND	--
	12/10/92	--	--	83 ³	ND	ND	ND	ND	ND	--
225.42	03/10/93	7.67	217.75	69 ²	ND	ND	ND	ND	ND	--
	06/09/93	8.57	216.85	64	ND	ND	ND	ND	ND	--
225.11	09/09/93	9.12	215.99	58 ³	ND	ND	ND	ND	ND	--
	12/09/93	9.97	215.14	87 ³	ND	ND	ND	ND	ND	--
	03/03/94	7.87	217.24	ND	ND	ND	ND	0.71	1.7	ND
	06/03/94	9.01	216.10	80 ³	ND	ND	ND	ND	ND	--
	09/02/94	9.23	215.88	130 ²	ND	ND	ND	ND	ND	--
	12/01/94	9.18	215.93	79 ²	ND	ND	ND	ND	ND	--
	03/01/95	7.98	217.13	ND	ND	ND	ND	ND	ND	--
	06/01/95	8.21	216.90	57 ²	ND	ND	ND	ND	ND	--
	09/05/95	9.57	215.54	210 ²	ND	ND	0.95	ND	0.87	-- ⁵
	12/05/95	9.60	215.51	170 ²	ND	ND	ND	ND	ND	27
	04/11/96	7.48	217.63	--	ND	ND	ND	ND	ND	56
	03/13/97	9.56	215.55	--	ND	ND	ND	ND	ND	ND
	03/02/98	8.96	216.15	--	ND	ND	ND	ND	ND	ND
	03/25/99	7.53	217.58	--	ND	ND	ND	ND	ND	3.9
	03/07/00	7.49	217.62	--	ND	ND	1.13	ND	ND	ND
	03/28/01	6.83	218.28	--	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-6	05/23/91	--	--	--	ND	ND	ND	ND	ND	--	
	09/20/91	--	--	SAMPLED SEMI-ANNUALLY		--	--	--	--	--	
	12/19/91	--	--	--	ND	ND	ND	ND	ND	--	
	06/18/92	--	--	--	ND	ND	ND	ND	ND	--	
	12/10/92	--	--	--	ND	ND	ND	ND	ND	--	
239.38	03/10/93	5.32	234.06	--	--	--	--	--	--	--	
	06/09/93	5.94	233.44	--	ND	ND	ND	ND	ND	--	
239.04	09/09/93	6.82	232.22	--	--	--	--	--	--	--	
	12/09/93	7.43	231.61	--	150	ND	ND	ND	1.7	--	
	03/03/94	6.45	232.59	--	--	--	--	--	--	--	
	06/03/94	5.81	233.23	--	ND	ND	ND	ND	ND	--	
	09/02/94	6.98	232.06	--	--	--	--	--	--	--	
	12/01/94	6.92	232.12	--	ND	ND	ND	ND	ND	--	
	03/01/95	5.17	233.87	--	--	--	--	--	--	--	
	06/01/95	4.76	234.28	--	ND	ND	0.70	ND	1.7	--	
	09/05/95	5.69	233.35	--	--	--	--	--	--	--	
	12/05/95	6.75	232.29	--	ND	ND	ND	ND	ND	1.4	
	04/11/96	4.28	234.76	NOT SAMPLED ⁶		--	--	--	--	--	
	03/13/97	7.05	231.99	--	--	--	--	--	--	--	
	03/02/98	5.14	233.90	--	--	--	--	--	--	--	
	03/25/99	5.05	233.99	--	--	--	--	--	--	--	
	03/07/00	5.15	233.89	--	--	--	--	--	--	--	
	03/28/01	5.17	233.87	--	--	--	--	--	--	--	
	MW-7	05/23/91	--	--	540	3,000	160	1.2	25	120	--
		09/20/91	--	--	580	1,400	160	0.75	89	130	--
		12/19/91	--	--	770	3,900	240	2.4	280	270	--
		03/20/92	--	--	3,200	11,000	980	ND	990	1,600	--
06/18/92		--	--	990 ²	5,500	340	4.2	380	410	--	

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-7	09/10/92	--	--	290 ²	2,100	160	1.9	140	150	--
(cont)	12/10/92	--	--	200 ³	1,200	28	ND	37	13	--
231.66	03/10/93	7.69	223.97	1,100 ²	4,400	310	ND	300	330	--
	06/09/93	8.59	223.07	830 ³	4,600	430	ND	510	430	--
231.39	09/09/93	10.11	221.28	550 ³	2,600 ⁴	160	19	250	120	--
	12/09/93	10.65	220.74	250 ²	980	54	4.6	71	5.6	--
	03/03/94	8.17	223.22	1,400 ²	9,300	290	ND	590	400	1.7
	06/03/94	8.73	222.66	2,000 ²	9,400	380	5.0	820	240	--
	09/02/94	11.00	220.39	490 ²	3,800	77	ND	180	42	--
	12/01/94	10.95	220.44	260 ²	3,100	80	ND	250	190	--
	03/01/95	8.03	223.36	1,900 ³	3,300	200	3.9	300	350	--
	06/01/95	7.92	223.47	1,600 ²	3,900	170	ND	400	430	--
	09/05/95	8.61	222.78	ND	710	32	ND	85	33	-- ⁵
	12/05/95	9.69	221.70	110 ²	400	23	ND	34	16	1,600
	12/08/95	9.59	221.80	--	--	--	--	--	--	--
	04/11/96	7.31	224.08	--	1,500	52	ND	160	130	1,500
	03/13/97	9.48	221.91	--	460	13	ND	31	4.0	430
	03/02/98	7.93	223.46	--	1,800	63	ND ⁷	240	60	790
	03/25/99	7.25	224.14	--	380	6.4	ND ⁷	10	4.9	1,200
	03/07/00	7.12	224.27	--	199 ⁸	3.51	ND	3.30	0.697	1,250
	03/28/01	6.92	224.47	--	734 ⁹	19.6	0.514	23.3	6.13	1,070/1,260 ¹⁰
Trip Blank										
TB-LB	03/02/98	--	--	--	ND	ND	ND	ND	ND	ND
	03/25/99	--	--	--	ND	ND	ND	ND	ND	ND
	03/07/00	--	--	--	ND	ND	ND	ND	ND	ND
	03/28/01	--	--	--	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station 5484
18950 Lake Chabot Road
Castro Valley, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 2, 1998, were provided 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-D = Total Petroleum Hydrocarbons as Diesel		
TPH-G = Total Petroleum Hydrocarbons as Gasoline		

- * TOC elevations are relative to Mean Sea Level (msl), per the Alameda County Benchmark (Elevation = 219.68 feet msl). Prior to September 9, 1993, DTW measurements were taken from the top of well covers.
- ¹ Laboratory reported that the hydrocarbons detected did not appear to be gasoline.
- ² Laboratory report indicates that the hydrocarbons detected did not appear to be diesel.
- ³ Laboratory report indicates that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- ⁴ Laboratory reported that 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.
- ⁶ Sampling discontinued per Alameda County Health Care Services letter dated April 1, 1996.
- ⁷ Detection limit raised. Refer to analytical reports.
- ⁸ Laboratory report indicates weathered gasoline C6-C12.
- ⁹ Laboratory report indicates gasoline C6-C12.
- ¹⁰ MTBE by EPA Method 8260.

Table 2
Groundwater Analytical Results
Tosco (Unocal) Service Station #5484
18950 Lake Chabot Road
Castro Valley, California

Well ID	Date	TOG (ppm)	Bis (2-ethylhexyl) phthalate (ppb)	2-Methyl- naphthalene (ppb)	Naphthalene (ppb)	1,2- Dichloroethane (ppb)	Chloroform (ppb)	Bromodich- loromethane (ppb)
MW-4	04/11/96	--	ND	ND	ND	ND	--	--
	03/13/97	--	ND	ND	ND	ND	--	--
	03/02/98 ⁶	--	--	--	--	ND	--	--
	03/25/99	--	ND	ND	ND	ND	--	--
	03/07/00	--	ND ⁷	ND ⁷	ND ⁷	ND ⁷	87.1	ND ⁷
	03/28/01	--	ND	ND	ND	ND	ND	ND
MW-5	03/10/93	--	ND	ND	ND	ND	--	--
	06/09/93	--	--	--	--	ND	--	--
	09/09/93	--	--	--	--	ND	--	--
	12/09/93	--	--	--	--	ND	--	--
	03/03/94	--	--	--	--	ND	--	--
	06/03/94	--	--	--	--	ND	--	--
	09/02/94	--	--	--	--	ND	--	--
	12/01/94	--	--	--	--	ND	--	--
	03/01/95	--	--	--	--	ND	--	--
	06/01/95	--	--	--	--	ND	--	--
	09/05/95	--	--	--	--	ND	--	--
	12/05/95	--	--	--	--	ND	--	--
	04/11/96	--	ND	ND	ND	ND	--	--
	03/13/97	--	740	ND	ND	ND	--	--
	03/02/98 ⁶	--	--	--	--	ND	--	--
	03/25/99	--	ND	ND	ND	ND	--	--
	03/07/00	--	ND ⁷	ND ⁷	ND ⁷	ND ⁷	69.7	7.16
03/28/01	--	ND	ND	ND	ND	ND	ND	
MW-7	05/23/91	ND	--	--	--	3.4	--	--
	09/20/91	ND	--	--	--	ND	--	--
	12/19/91	ND	--	--	--	3.1	--	--
	03/20/92	ND	--	--	--	ND	--	--
	06/18/92	ND	--	--	--	ND	--	--
	09/10/92	--	--	--	--	2.3	--	--
	12/10/92	--	--	--	--	2.0	--	--
	03/10/93 ¹	--	13	19	83	1.3	--	--
	06/09/93 ²	--	13	19	83	1.3	--	--
	09/09/93 ³	--	ND	11	48	1.5	--	--
	12/09/93	--	ND	ND	15	1.5	--	--
	03/03/94	--	ND	34	130	1.7	--	--
	06/03/94	--	ND	18	61	1.4	--	--
	09/02/94	--	ND	ND	ND	1.1	--	--
	12/01/94	--	ND	ND	2.5	1.0	--	--
03/01/95 ⁴	--	ND	40	120	1.6	--	--	

Table 2
Groundwater Analytical Results
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

Well ID	Date	TOG (ppm)	Bis (2-ethylhexyl) phthalate (ppb)	2-Methyl- naphthalene (ppb)	Naphthalene (ppb)	1,2- Dichloroethane (ppb)	Chloroform (ppb)	Bromodich- loromethane (ppb)
MW-7	06/01/95	--	ND	13	83	1.4	--	--
(cont)	09/05/95	--	ND	ND	7.0	1.8	--	--
	12/05/95 ⁵	--	--	--	--	ND	--	--
	12/08/95	--	ND	ND	14	--	--	--
	04/11/96	--	ND	7.6	42	0.75	--	--
	03/13/97	--	120	ND	9.0	ND	--	--
	03/02/98 ⁶	--	--	--	--	0.92	--	--
	03/25/99	--	ND	ND	ND	ND	--	--
	03/07/00	--	ND ⁷	ND ⁷	ND ⁷	ND ⁷	ND ⁷	ND ⁷
	03/28/01	--	ND	ND	7.7	ND	ND	ND

EXPLANATIONS:

Groundwater analytical results prior to March 2, 1998, were provided by MPDS Services, Inc.

TOG = Total Oil and Grease

(ppb) = Parts per billion

(ppm) = Parts per million

ND = Not Detected

-- = Not Analyzed

¹ Nine "tentatively identified compounds" were detected by the EPA Method 8270 open scan at concentrations ranging from 10 ppb to 59 ppb. Refer to laboratory analysis sheets for the specific compounds and concentrations.

² Ten "tentatively identified compounds" were detected by the EPA Method 8270 open scan at concentrations ranging from 14 ppb to 150 ppb. Refer to laboratory analysis sheets for the specified compounds and concentrations.

³ Seven "tentatively identified compounds" were detected by the EPA Method 8270 open scan at concentrations ranging from 11 ppb to 88 ppb. Refer to laboratory analysis sheets for the specific compounds and concentrations.

⁴ Phenol was detected at a concentration of 2.1 ppb.

⁵ Tetrachloroethene was detected at a concentration of 56 ppb.

⁶ EPA Method 8270 requested on chain of custody; laboratory inadvertently omitted testing.

⁷ Detection limit raised. Refer to analytical reports.

Note: All EPA Method 8010 and 8270 compounds were ND, except as listed above.

Table 3
Groundwater Analytical Results - Oxygenate Compounds
 Tosco (Unocal) Service Station #5484
 18950 Lake Chabot Road
 Castro Valley, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-7	03/28/01	ND ¹	ND ¹	1,260	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹

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

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

¹ Dectection limit raised. Refer to analytical reports.

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.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility # Tosco # 5484 Job #: 180012
 Address: 18950 Lake Chabot Rd. Date: 3/28/04
 City: Castro Valley, Ca. Sampler: Vaetky

Well ID: MW-2 Well Condition: OK
 Well Diameter: 2 in. Amount Bailed (product/water): 0 (gal.)
 Hydrocarbon Thickness: 0.00 in.
 Total Depth: 19.15 ft
 Depth to Water: 4.37 ft

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

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

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____
 Sampling Equipment: Disposable Bailer, Bailer, Pressure Bailer, Grab Sample, Other: _____

Starting Time: _____ Weather Conditions: _____
 Sampling Time: _____ Water Color: _____ Odor: _____
 Purging Flow Rate: _____ gpm Sediment Description: _____
 Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity μ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	X VDA VIAL	Y	HEC	SEQUOIA	TPH, BTEX, MTOE

COMMENTS: Monitor only

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/ Facility # Tosco # 5484 Job#: 180012
 Address: 18950 Lake Chabot Rd. Date: 3/28/01
 City: Castro Valley, Ca Sampler: Vartter

Well ID: MW-4 Well Condition: OK
 Well Diameter: 4 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 (gal.)
 Total Depth: 27.25 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66
 Depth to Water: 7.62 ft. Volume Factor (VF) 6" = 1.50 12" = 5.80

19.63 x VF 0.66 = 12.95 x 3 (case volume) = Estimated Purge Volume: 39.0 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____
 Sampling Equipment: Disposable Bailer, Bailer, Pressure Bailer, Grab Sample, Other: _____

Starting Time: 12:55 Weather Conditions: clear
 Sampling Time: 1:25 Water Color: clear Odor: no
 Purging Flow Rate: 2 gpm Sediment Description: _____
 Did well de-water? no If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1:01</u>	<u>13</u>	<u>7.55</u>	<u>1793</u>	<u>66.7</u>	_____	_____	_____
<u>1:08</u>	<u>26</u>	<u>7.42</u>	<u>1774</u>	<u>66.2</u>	_____	_____	_____
<u>1:14</u>	<u>39</u>	<u>7.39</u>	<u>1779</u>	<u>66.4</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPHG/BTEX/MTOE + 810</u>
<u>"</u>	<u>1 Amber</u>	<u>-</u>	<u>NONE</u>	<u>-</u>	<u>8270</u>
_____	_____	_____	_____	_____	_____

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility # Tosco # 5484 Job#: 180012
 Address: 18950 Lake Chabot Rd. Date: 3/28/01
 City: Castro Valley, Ca Sampler: Vatken

Well ID: MW-5 Well Condition: OK
 Well Diameter: 4 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 gal.
 Total Depth: 23.80 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66
 Depth to Water: 6.83 ft. Volume Factor (VF) 6" = 1.50 12" = 5.80

16.97 x VF 2.66 = 11.20 x 3 (case volume) = Estimated Purge Volume: 34.0 gal.

Purge Equipment: Disposable Bailer Bailer Stack Suction Grundfos Other: _____
 Sampling Equipment: Disposable Bailer Bailer Pressure Bailer Grab Sample Other: _____

Starting Time: 1:45 Weather Conditions: clear
 Sampling Time: 2:15 Water Color: clear Odor: no
 Purging Flow Rate: 2 gpm Sediment Description: _____
 Did well de-water? no If yes; Time: _____ Volume: _____ gal.

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1:50</u>	<u>11</u>	<u>7.80</u>	<u>795</u>	<u>66.7</u>	_____	_____	_____
<u>1:56</u>	<u>22.5</u>	<u>7.66</u>	<u>808</u>	<u>66.5</u>	_____	_____	_____
<u>2:02</u>	<u>34</u>	<u>7.60</u>	<u>812</u>	<u>66.8</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>5 x VOA VIAL</u>	<u>Y</u>	<u>HC</u>	<u>SEQUOIA</u>	<u>TPH6/BTEX/MTOE + 8010</u>
<u>11</u>	<u>1 Amber</u>	<u>u</u>	<u>NONE</u>	<u>~</u>	<u>8270</u>
_____	_____	_____	_____	_____	_____

COMMENTS: _____

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility # Tosco #5484 Job#: 180012
 Address: 18950 Lake Chabot Rd. Date: 3/28/01
 City: Castro Valley, Ca. Sampler: Varkler

Well ID MW-6 Well Condition: OK
 Well Diameter 4 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 (gal.)
 Total Depth 26.42 ft. Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66
 Depth to Water 5.17 ft. 6" = 1.50 12" = 5.80

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

Purge Equipment: Disposable Bailer Bailer Stack Suction Grundfos Other: _____
 Sampling Equipment: Disposable Bailer Bailer Pressure Bailer Grab Sample Other: _____

Starting Time: _____ Weather Conditions: _____
 Sampling Time: _____ Water Color: _____ Odor: _____
 Purging Flow Rate: _____ gpm. Sediment Description: _____
 Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	X VOA VIAL	Y	HCL	SEQUOIA	TPHG/BTEX/MTOE

COMMENTS: Monitor only

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility # TOSCO # 5484 Job #: 180012
 Address: 18950 Lake Chabot Rd. Date: 3/28/01
 City: Castro Valley, ca. Sampler: Vantle

Well ID: MW-7 Well Condition: OK
 Well Diameter: 2 in. Hydrocarbon Thickness: 0.00 in. Amount Bailed (product/water): 0 (gal.)
 Total Depth: 19.55 ft. Volume Factor (VF): 2" = 0.17, 3" = 0.38, 4" = 0.66
 Depth to Water: 6.92 ft. 6" = 1.50, 12" = 5.80

$12.63 \times \text{VF } 0.17 = 2.14 \times 3 \text{ (case volume)} = \text{Estimated Purge Volume: } 6.5 \text{ (gal.)}$

Purge Equipment: Disposable Bailer, Bailer, Stack, Suction, Grundfos, Other: _____
 Sampling Equipment: Disposable Bailer, Bailer, Pressure Bailer, Grab Sample, Other: _____

Starting Time: 2:33 Weather Conditions: clear
 Sampling Time: 2:50 Water Color: grayish Odor: wild
 Purging Flow Rate: 1 gpm. Sediment Description: SILT
 Did well de-water? NO If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>2:35</u>	<u>2</u>	<u>7.46</u>	<u>1469</u>	<u>69.2</u>	_____	_____	_____
<u>2:37</u>	<u>4</u>	<u>7.33</u>	<u>1442</u>	<u>68.3</u>	_____	_____	_____
<u>2:40</u>	<u>6.5</u>	<u>7.31</u>	<u>1438</u>	<u>68.0</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>7 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH, BTEX, MTBE + 8010</u> <u>(6)OCV's + 1,2,4-DAT + 03 (8260)</u>
<u>"</u>	<u>1 Amber</u>	<u>"</u>	<u>NONE</u>	<u>"</u>	<u>8270</u>

COMMENTS: _____



TOSCO

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

Facility Number TOSCO # 5484
 Facility Address 18950 Lake Chabot Rd. Castro Valley, Ca.
 Consultant Project Number 180012-85
 Consultant Name Gettler-Ryan Inc. (G-R Inc.)
 Address 6747 Sierra Court, Suite J, Dublin, CA 94568
 Project Contact (Name) Deanna L. Harding
 (Phone) 510-551-7555 (Fax Number) 510-551-7888

Contact (Name) Mr. David De Witt
 (Phone) 277-2384
 Laboratory Name Sequoia Analytical
 Laboratory Release Number _____
 Samples Collected by (Name) Vartkes Tashjian
 Collection Date 3/28/01
 Signature Vartkes Tashjian

Sample Number	Lab Sample Number	Number of Containers	Matrix		Time	Sample Preservation	Lead (Yes or No)	Analytes To Be Performed											DO NOT BILL TB-LB ANALYSIS	Remarks
			S = Soil	A = Air				TPH Gas + BTEX w/MIB	TPH Diesel	Oil and Grease	Purgeable Halocarbons	Purgeable Aromatics	Purgeable Organics	Extractable Organics	Metals	Other				
			W = Water	C = Charcoal				(8015)	(8015)	(5520)	(8010)	(8020)	(8240)	(8270)	Calc/Pb/Zn/NI	(Cd, Cr, or Ni)				
U03M9																				
TB-LB	01	1	W	A		HC	Y	X												
MW-4	02	6	W	A	12:30 PM		Y	X			X			X						
MW-5	03	6	W	A	2:15 PM		Y	X			X			X						
MW-7	04	8	W	A	2:50 PM		Y	X			X			X			X			

Relinquished By (Signature) <u>North</u>	Organization G-R Inc.	Date/Time <u>3/28/01</u>	Received By (Signature) <u>North</u>	Organization	Date/Time <u>3/28/01</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)	Organization	Date/Time	



Sequoia Analytical

1551 Industrial Road
San Carlos, CA 94070-4111
(650) 232-9600
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April 11 , 2001

Deanna Harding
Gettler-Ryan/Geostrategies(1)
6747 Sierra Court, Suite J
Dublin, CA 94568
RE: Tosco(1) / L103179

Enclosed are the results of analyses for samples received by the laboratory on 03/28/01. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt
Project Manager

CA ELAP Certificate Number 2360



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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L103179-01	Water	03/28/01 00:00	03/28/01 17:27
MW-4	L103179-02	Water	03/28/01 13:25	03/28/01 17:27
MW-5	L103179-03	Water	03/28/01 14:15	03/28/01 17:27
MW-7	L103179-04	Water	03/28/01 14:50	03/28/01 17:27

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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TB-LB (L103179-01) Water Sampled: 03/28/01 00:00 Received: 03/28/01 17:27

Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040024	04/06/01	04/07/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.2 %		70-130	"	"	"	"	

MW-4 (L103179-02) Water Sampled: 03/28/01 13:25 Received: 03/28/01 17:27

Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040024	04/06/01	04/07/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %		70-130	"	"	"	"	

MW-5 (L103179-03) Water Sampled: 03/28/01 14:15 Received: 03/28/01 17:27

Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l	1	1040024	04/06/01	04/07/01	DHS LUFT	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.00	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		101 %		70-130	"	"	"	"	

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L103179-04) Water Sampled: 03/28/01 14:50 Received: 03/28/01 17:27									
Purgeable Hydrocarbons as Gasoline	734	50.0	ug/l	1	1040025	04/06/01	04/06/01	DHS LUFT	P-01
Benzene	19.6	0.500	"	"	"	"	"	"	
Toluene	0.514	0.500	"	"	"	"	"	"	
Ethylbenzene	23.3	0.500	"	"	"	"	"	"	
Xylenes (total)	6.13	0.500	"	"	"	"	"	"	
Methyl tert-butyl ether	1070	100	"	20	"	"	"	"	M-04
Surrogate: a,a,a-Trifluorotoluene		161 %		70-130	"	"	"	"	S-04

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L103179-04) Water Sampled: 03/28/01 14:50 Received: 03/28/01 17:27									
Ethanol	ND	12500	ug/l	12.5	1040005	04/02/01	04/02/01	EPA 8260B	
1,2-Dibromoethane	ND	25.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	25.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25.0	"	"	"	"	"	"	
Methyl tert-butyl ether	1260	25.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	25.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	1250	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		88.8 %		76-114	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		96.6 %		88-110	"	"	"	"	

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Volatile Organic Compounds by EPA Method 8010B
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L103179-02) Water Sampled: 03/28/01 13:25 Received: 03/28/01 17:27									
Chloromethane	ND	2.0	ug/l	1	1D04016	04/05/01	04/05/01	EPA 8010B	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.2	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.60	"	"	"	"	"	"	
Freon 113	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.6	"	"	"	"	"	"	
Trichloroethene	ND	1.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.60	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.60	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.60	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
Surrogate: Dibromodifluoromethane		131 %		50-150	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.9 %		50-150	"	"	"	"	

Settler-Ryan/Geostrategies(1)
 6747 Sierra Court, Suite J
 Dublin CA, 94568

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Volatile Organic Compounds by EPA Method 8010B
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (L103179-03) Water Sampled: 03/28/01 14:15 Received: 03/28/01 17:27									
Chloromethane	ND	2.0	ug/l	1	1D04016	04/05/01	04/05/01	EPA 8010B	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.2	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.60	"	"	"	"	"	"	
Freon 113	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.6	"	"	"	"	"	"	
Trichloroethene	ND	1.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.60	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.60	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.60	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
Surrogate: Dibromodifluoromethane		130 %		50-150	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.7 %		50-150	"	"	"	"	

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Volatile Organic Compounds by EPA Method 8010B
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L103179-04) Water Sampled: 03/28/01 14:50 Received: 03/28/01 17:27									
Chloromethane	ND	2.0	ug/l	1	1D04016	04/05/01	04/05/01	EPA 8010B	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
Bromomethane	ND	1.2	"	"	"	"	"	"	
Chloroethane	ND	1.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.60	"	"	"	"	"	"	
Freon 113	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Methylene chloride	ND	1.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
Chloroform	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.6	"	"	"	"	"	"	
Trichloroethene	ND	1.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	1.0	"	"	"	"	"	"	
Bromodichloromethane	ND	1.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	1.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.60	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.60	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
Chlorobenzene	ND	1.0	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.60	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	1.2	"	"	"	"	"	"	
Surrogate: Dibromodifluoromethane		128 %		50-150	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.6 %		50-150	"	"	"	"	

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L103179-02) Water Sampled: 03/28/01 13:25 Received: 03/28/01 17:27									
Acenaphthene	ND	5.0	ug/l	1	1D03014	04/03/01	04/03/01	EPA 8270C	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
Benzo[a]pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	50	"	"	"	"	"	"	
4-Chloroaniline	ND	25	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.0	"	"	"	"	"	"	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	

Sequoia Analytical - San Carlos

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L103179-02) Water Sampled: 03/28/01 13:25 Received: 03/28/01 17:27									
Fluorene	ND	5.0	ug/l	1	1D03014	04/03/01	04/03/01	EPA 8270C	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	5.0	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Phenol	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		16.9 %		21-110	"	"	"	"	S-08
Surrogate: Phenol-d6		17.7 %		10-110	"	"	"	"	
Surrogate: Nitrobenzene-d5		69.9 %		35-114	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		71.9 %		43-116	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		18.9 %		10-123	"	"	"	"	
Surrogate: p-Terphenyl-d14		84.8 %		33-141	"	"	"	"	

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (L103179-03) Water Sampled: 03/28/01 14:15 Received: 03/28/01 17:27									
Acenaphthene	ND	5.0	ug/l	1	ID03014	04/03/01	04/03/01	EPA 8270C	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
Benzo[a]pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	50	"	"	"	"	"	"	
4-Chloroaniline	ND	25	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.0	"	"	"	"	"	"	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	

Sequoia Analytical - San Carlos

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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MW-5 (L103179-03) Water Sampled: 03/28/01 14:15 Received: 03/28/01 17:27

Fluorene	ND	5.0	ug/l	1	1D03014	04/03/01	04/03/01	EPA 8270C	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	5.0	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Phenol	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	

Surrogate: 2-Fluorophenol		36.3 %		21-110	"	"	"	"	
Surrogate: Phenol-d6		24.5 %		10-110	"	"	"	"	
Surrogate: Nitrobenzene-d5		62.6 %		35-114	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		64.4 %		43-116	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		48.9 %		10-123	"	"	"	"	
Surrogate: p-Terphenyl-d14		75.0 %		33-141	"	"	"	"	

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L103179-04) Water Sampled: 03/28/01 14:50 Received: 03/28/01 17:27									
Acenaphthene	ND	5.0	ug/l	1	1D03014	04/03/01	04/03/01	EPA 8270C	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	10	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
Benzo[a]pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	10	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Butyl benzyl phthalate	ND	50	"	"	"	"	"	"	
4-Chloroaniline	ND	25	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	10	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	10	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	10	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	5.0	"	"	"	"	"	"	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	10	"	"	"	"	"	"	
2,4-Dinitrotoluene	ND	10	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	10	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	10	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	

Sequoia Analytical - San Carlos

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)
6747 Sierra Court, Suite J
Dublin CA, 94568

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L103179-04) Water Sampled: 03/28/01 14:50 Received: 03/28/01 17:27									
Fluorene	ND	5.0	ug/l	1	1D03014	04/03/01	04/03/01	EPA 8270C	
Hexachlorobenzene	ND	10	"	"	"	"	"	"	
Hexachlorobutadiene	ND	10	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	10	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	10	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
Naphthalene	7.7	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	10	"	"	"	"	"	"	
3-Nitroaniline	ND	10	"	"	"	"	"	"	
4-Nitroaniline	ND	20	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	5.0	"	"	"	"	"	"	
4-Nitrophenol	ND	10	"	"	"	"	"	"	
N-Nitrosodimethylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	10	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Phenol	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		35.6 %		21-110	"	"	"	"	
Surrogate: Phenol-d6		24.0 %		10-110	"	"	"	"	
Surrogate: Nitrobenzene-d5		61.8 %		35-114	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		63.2 %		43-116	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		54.0 %		10-123	"	"	"	"	
Surrogate: p-Terphenyl-d14		50.8 %		33-141	"	"	"	"	

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040024 - EPA 5030B (P/T)										
Blank (1040024-BLK1)										
Prepared & Analyzed: 04/06/01										
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	5.00	"							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	7.83		"	10.0		78.3	70-130			
LCS (1040024-BS1)										
Prepared & Analyzed: 04/06/01										
Benzene	8.51	0.500	ug/l	10.0		85.1	70-130			
Toluene	8.53	0.500	"	10.0		85.3	70-130			
Ethylbenzene	8.54	0.500	"	10.0		85.4	70-130			
Xylenes (total)	26.0	0.500	"	30.0		86.7	70-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	8.02		"	10.0		80.2	70-130			
LCS (1040024-BS2)										
Prepared & Analyzed: 04/06/01										
Purgeable Hydrocarbons as Gasoline	264	50.0	ug/l	250		106	70-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	8.98		"	10.0		89.8	70-130			
Matrix Spike (1040024-MS1)										
Source: L104014-04 Prepared & Analyzed: 04/06/01										
Purgeable Hydrocarbons as Gasoline	267	50.0	ug/l	250	ND	107	60-140			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.8		"	10.0		108	70-130			
Matrix Spike Dup (1040024-MSD1)										
Source: L104014-04 Prepared & Analyzed: 04/06/01										
Purgeable Hydrocarbons as Gasoline	275	50.0	ug/l	250	ND	110	60-140	2.95	25	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.3		"	10.0		103	70-130			

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1040025 - EPA 5030B (P/T)										
Blank (1040025-BLK1)										
Prepared & Analyzed: 04/06/01										
Purgeable Hydrocarbons as Gasoline	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	0.500	"							
Methyl tert-butyl ether	ND	5.00	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.83		"	10.0		98.3	70-130			
LCS (1040025-BS1)										
Prepared & Analyzed: 04/06/01										
Benzene	9.78	0.500	ug/l	10.0		97.8	70-130			
Toluene	9.85	0.500	"	10.0		98.5	70-130			
Ethylbenzene	9.76	0.500	"	10.0		97.6	70-130			
Xylenes (total)	29.5	0.500	"	30.0		98.3	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.0		"	10.0		100	70-130			
LCS (1040025-BS2)										
Prepared & Analyzed: 04/06/01										
Purgeable Hydrocarbons as Gasoline	218	50.0	ug/l	250		87.2	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.89		"	10.0		98.9	70-130			
Matrix Spike (1040025-MS1)										
Source: L104014-07 Prepared: 04/06/01 Analyzed: 04/07/01										
Purgeable Hydrocarbons as Gasoline	242	50.0	ug/l	250	ND	96.8	60-140			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	12.5		"	10.0		125	70-130			
Matrix Spike Dup (1040025-MSD1)										
Source: L104014-07 Prepared: 04/06/01 Analyzed: 04/07/01										
Purgeable Hydrocarbons as Gasoline	237	50.0	ug/l	250	ND	94.8	60-140	2.09	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	12.2		"	10.0		122	70-130			

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1040005 - EPA 5030B [P/T]

Blank (1040005-BLK1)

Prepared & Analyzed: 04/02/01

Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	49.1		"	50.0		98.2	76-114			
Surrogate: Toluene-d8	48.2		"	50.0		96.4	88-110			

Blank (1040005-BLK2)

Prepared & Analyzed: 04/03/01

Ethanol	ND	1000	ug/l							
1,2-Dibromoethane	ND	2.00	"							
1,2-Dichloroethane	ND	2.00	"							
Di-isopropyl ether	ND	2.00	"							
Ethyl tert-butyl ether	ND	2.00	"							
Methyl tert-butyl ether	ND	2.00	"							
Tert-amyl methyl ether	ND	2.00	"							
Tert-butyl alcohol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	48.3		"	50.0		96.6	76-114			
Surrogate: Toluene-d8	46.1		"	50.0		92.2	88-110			

LCS (1040005-BS1)

Prepared & Analyzed: 04/02/01

Methyl tert-butyl ether	44.9	2.00	ug/l	50.0		89.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.3		"	50.0		96.6	76-114			
Surrogate: Toluene-d8	48.5		"	50.0		97.0	88-110			

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1040005 - EPA 5030B [P/T]

LCS (1040005-BS2)

Prepared & Analyzed: 04/03/01

Methyl tert-butyl ether	48.8	2.00	ug/l	50.0		97.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	49.8		"	50.0		99.6	76-114			
Surrogate: Toluene-d8	50.7		"	50.0		101	88-110			

Matrix Spike (1040005-MS1)

Source: L103167-07

Prepared & Analyzed: 04/02/01

Methyl tert-butyl ether	39.9	2.00	ug/l	50.0	ND	79.8	60-140			
Surrogate: 1,2-Dichloroethane-d4	45.8		"	50.0		91.6	76-114			
Surrogate: Toluene-d8	47.4		"	50.0		94.8	88-110			

Matrix Spike Dup (1040005-MSD1)

Source: L103167-07

Prepared & Analyzed: 04/02/01

Methyl tert-butyl ether	43.8	2.00	ug/l	50.0	ND	87.6	60-140	9.32	25	
Surrogate: 1,2-Dichloroethane-d4	45.4		"	50.0		90.8	76-114			
Surrogate: Toluene-d8	47.1		"	50.0		94.2	88-110			

Gottler-Ryan/Geostrategies(1)
 6747 Sierra Court, Suite J
 Dublin CA, 94568

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Volatile Organic Compounds by EPA Method 8010B - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D04016 - EPA 5030B [P/T]

Prepared & Analyzed: 04/04/01

Blank (1D04016-BLK1)

Chloromethane	ND	2.0	ug/l							
Vinyl chloride	ND	1.0	"							
Bromomethane	ND	1.2	"							
Chloroethane	ND	1.0	"							
Trichlorofluoromethane	ND	0.60	"							
Freon 113	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
Methylene chloride	ND	10	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
Chloroform	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Carbon tetrachloride	ND	1.0	"							
1,2-Dichloroethane	ND	1.6	"							
Trichloroethene	ND	1.1	"							
1,2-Dichloropropane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	0.60	"							
1,1,2-Trichloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.60	"							
Dibromochloromethane	ND	0.50	"							
1,2-Dibromoethane	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
Bromoform	ND	0.50	"							
1,2,3-Trichloropropane	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.60	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	1.2	"							
1,2-Dichlorobenzene	ND	1.2	"							
Surrogate: Dibromodifluoromethane	12.9		"	10.0		129	50-150			
Surrogate: 4-Bromofluorobenzene	10.0		"	10.0		100	50-150			

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Volatile Organic Compounds by EPA Method 8010B - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D04016 - EPA 5030B [P/T]

Blank (1D04016-BLK2)

Prepared & Analyzed: 04/05/01

Chloromethane	ND	2.0	ug/l							
Vinyl chloride	ND	1.0	"							
Bromomethane	ND	1.2	"							
Chloroethane	ND	1.0	"							
Trichlorofluoromethane	ND	0.60	"							
Freon 113	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
Methylene chloride	ND	10	"							
trans-1,2-Dichloroethene	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
Chloroform	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Carbon tetrachloride	ND	1.0	"							
1,2-Dichloroethane	ND	1.6	"							
Trichloroethene	ND	1.1	"							
1,2-Dichloropropane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	0.60	"							
1,1,2-Trichloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.60	"							
Dibromochloromethane	ND	0.50	"							
1,2-Dibromoethane	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
Bromoform	ND	0.50	"							
1,2,3-Trichloropropane	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.60	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	1.2	"							
1,2-Dichlorobenzene	ND	1.2	"							
Surrogate: Dibromodifluoromethane	9.69		"	10.0		96.9	50-150			
Surrogate: 4-Bromofluorobenzene	9.01		"	10.0		90.1	50-150			

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

**Volatile Organic Compounds by EPA Method 8010B - Quality Control
 Sequoia Analytical - Walnut Creek**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D04016 - EPA 5030B [P/T]

LCS (1D04016-BS1)										
Prepared & Analyzed: 04/04/01										
1,1-Dichloroethene	19.1	1.0	ug/l	20.0		95.5	65-135			
Trichloroethene	18.0	1.1	"	20.0		90.0	70-130			
Chlorobenzene	16.4	1.0	"	20.0		82.0	70-130			
Surrogate: Dibromodifluoromethane	11.9		"	10.0		119	50-150			
Surrogate: 4-Bromofluorobenzene	10.5		"	10.0		105	50-150			

LCS (1D04016-BS2)										
Prepared & Analyzed: 04/05/01										
1,1-Dichloroethene	18.8	1.0	ug/l	20.0		94.0	65-135			
Trichloroethene	16.5	1.1	"	20.0		82.5	70-130			
Chlorobenzene	16.1	1.0	"	20.0		80.5	70-130			
Surrogate: Dibromodifluoromethane	12.4		"	10.0		124	50-150			
Surrogate: 4-Bromofluorobenzene	10.8		"	10.0		108	50-150			

Matrix Spike (1D04016-MS1)										
Source: W103524-02 Prepared & Analyzed: 04/04/01										
1,1-Dichloroethene	17.9	1.0	ug/l	20.0	ND	89.5	60-140			
Trichloroethene	17.3	1.1	"	20.0	ND	86.5	60-140			
Chlorobenzene	15.4	1.0	"	20.0	ND	77.0	60-140			
Surrogate: Dibromodifluoromethane	12.1		"	10.0		121	50-150			
Surrogate: 4-Bromofluorobenzene	10.5		"	10.0		105	50-150			

Matrix Spike Dup (1D04016-MSD1)										
Source: W103524-02 Prepared & Analyzed: 04/04/01										
1,1-Dichloroethene	19.5	1.0	ug/l	20.0	ND	97.5	60-140	8.56	25	
Trichloroethene	18.3	1.1	"	20.0	ND	91.5	60-140	5.62	25	
Chlorobenzene	16.8	1.0	"	20.0	ND	84.0	60-140	8.70	25	
Surrogate: Dibromodifluoromethane	12.3		"	10.0		123	50-150			
Surrogate: 4-Bromofluorobenzene	10.8		"	10.0		108	50-150			

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

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D03014 - EPA 3510B Sep Funnel

Blank (1D03014-BLK1)

Prepared & Analyzed: 04/03/01

Acenaphthene	ND	5.0	ug/l							
Acenaphthylene	ND	5.0	"							
Aniline	ND	5.0	"							
Anthracene	ND	5.0	"							
Benzoic acid	ND	10	"							
Benzo (a) anthracene	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzo (ghi) perylene	ND	5.0	"							
Benzo[a]pyrene	ND	5.0	"							
Benzyl alcohol	ND	5.0	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
Bis(2-ethylhexyl)phthalate	ND	10	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Butyl benzyl phthalate	ND	50	"							
4-Chloroaniline	ND	25	"							
2-Chloronaphthalene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Chlorophenol	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Chrysene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	10	"							
Dibenzofuran	ND	5.0	"							
Di-n-butyl phthalate	ND	10	"							
1,2-Dichlorobenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	10	"							
3,3'-Dichlorobenzidine	ND	10	"							
2,4-Dichlorophenol	ND	5.0	"							
Diethyl phthalate	ND	5.0	"							
2,4-Dimethylphenol	ND	5.0	"							
Dimethyl phthalate	ND	5.0	"							
4,6-Dinitro-2-methylphenol	ND	10	"							
2,4-Dinitrophenol	ND	10	"							

Sequoia Analytical - San Carlos

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

Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D03014 - EPA 3510B Sep Funnel

Blank (1D03014-BLK1)

Prepared & Analyzed: 04/03/01

2,4-Dinitrotoluene	ND	10	ug/l							
2,6-Dinitrotoluene	ND	10	"							
Di-n-octyl phthalate	ND	10	"							
Fluoranthene	ND	5.0	"							
Fluorene	ND	5.0	"							
Hexachlorobenzene	ND	10	"							
Hexachlorobutadiene	ND	10	"							
Hexachlorocyclopentadiene	ND	10	"							
Hexachloroethane	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	10	"							
Isophorone	ND	5.0	"							
2-Methylnaphthalene	ND	5.0	"							
2-Methylphenol	ND	5.0	"							
4-Methylphenol	ND	5.0	"							
Naphthalene	ND	5.0	"							
2-Nitroaniline	ND	10	"							
3-Nitroaniline	ND	10	"							
4-Nitroaniline	ND	20	"							
Nitrobenzene	ND	5.0	"							
2-Nitrophenol	ND	5.0	"							
4-Nitrophenol	ND	10	"							
N-Nitrosodimethylamine	ND	5.0	"							
N-Nitrosodiphenylamine	ND	5.0	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Pentachlorophenol	ND	10	"							
Phenanthrene	ND	5.0	"							
Phenol	ND	5.0	"							
Pyrene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
2,4,5-Trichlorophenol	ND	10	"							
2,4,6-Trichlorophenol	ND	10	"							
Surrogate: 2-Fluorophenol	71.5		"	150		47.7	21-110			
Surrogate: Phenol-d6	46.2		"	150		30.8	10-110			
Surrogate: Nitrobenzene-d5	75.0		"	100		75.0	35-114			
Surrogate: 2-Fluorobiphenyl	74.8		"	100		74.8	43-116			

Sequoia Analytical - San Carlos

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Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
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Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D03014 - EPA 3510B Sep Funnel

Blank (1D03014-BLK1)

Prepared & Analyzed: 04/03/01

Surrogate: 2,4,6-Tribromophenol	92.3		ug/l	150		61.5	10-123			
Surrogate: p-Terphenyl-d14	82.5		"	100		82.5	33-141			

LCS (1D03014-BS1)

Prepared & Analyzed: 04/03/01

Acenaphthene	65.5	5.0	ug/l	100		65.5	46-118			
4-Chloro-3-methylphenol	89.7	5.0	"	150		59.8	23-97			
2-Chlorophenol	89.8	5.0	"	150		59.9	27-123			
1,4-Dichlorobenzene	54.2	10	"	100		54.2	36-97			
2,4-Dinitrotoluene	61.0	10	"	100		61.0	24-96			
4-Nitrophenol	40.4	10	"	150		26.9	10-80			
N-Nitrosodi-n-propylamine	73.1	5.0	"	100		73.1	41-116			
Pentachlorophenol	108	10	"	150		72.0	9-103			
Phenol	43.3	5.0	"	150		28.9	12-110			
Pyrene	84.5	5.0	"	100		84.5	26-127			
1,2,4-Trichlorobenzene	57.6	5.0	"	100		57.6	39-98			
Surrogate: 2-Fluorophenol	70.8		"	150		47.2	21-110			
Surrogate: Phenol-d6	44.4		"	150		29.6	10-110			
Surrogate: Nitrobenzene-d5	74.5		"	100		74.5	35-114			
Surrogate: 2-Fluorobiphenyl	72.8		"	100		72.8	43-116			
Surrogate: 2,4,6-Tribromophenol	94.4		"	150		62.9	10-123			
Surrogate: p-Terphenyl-d14	81.2		"	100		81.2	33-141			

LCS Dup (1D03014-BS1)

Prepared & Analyzed: 04/03/01

Acenaphthene	67.7	5.0	ug/l	100		67.7	46-118	3.30	30	
4-Chloro-3-methylphenol	96.4	5.0	"	150		64.3	23-97	7.20	30	
2-Chlorophenol	94.6	5.0	"	150		63.1	27-123	5.21	30	
1,4-Dichlorobenzene	55.7	10	"	100		55.7	36-97	2.73	30	
2,4-Dinitrotoluene	63.2	10	"	100		63.2	24-96	3.54	30	
4-Nitrophenol	40.4	10	"	150		26.9	10-80	0	30	
N-Nitrosodi-n-propylamine	78.1	5.0	"	100		78.1	41-116	6.61	30	
Pentachlorophenol	110	10	"	150		73.3	9-103	1.83	30	
Phenol	46.8	5.0	"	150		31.2	12-110	7.77	30	
Pyrene	88.2	5.0	"	100		88.2	26-127	4.28	30	
1,2,4-Trichlorobenzene	59.7	5.0	"	100		59.7	39-98	3.58	30	
Surrogate: 2-Fluorophenol	71.5		"	150		47.7	21-110			
Surrogate: Phenol-d6	44.7		"	150		29.8	10-110			

Sequoia Analytical - San Carlos

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 6747 Sierra Court, Suite J
 Dublin CA, 94568

Project: Tosco(1)
 Project Number: Tosco #5484
 Project Manager: Deanna Harding

Reported:
 04/11/01 13:15

Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1D03014 - EPA 3510B Sep Funnel

LCS Dup (1D03014-BSD1)

Prepared & Analyzed: 04/03/01

Surrogate: Nitrobenzene-d5	75.7		ug/l	100		75.7	35-114			
Surrogate: 2-Fluorobiphenyl	72.7		"	100		72.7	43-116			
Surrogate: 2,4,6-Tribromophenol	94.0		"	150		62.7	10-123			
Surrogate: p-Terphenyl-d14	83.8		"	100		83.8	33-141			

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Project: Tosco(1)
Project Number: Tosco #5484
Project Manager: Deanna Harding

Reported:
04/11/01 13:15

Notes and Definitions

- M-04 MTBE was reported from second analysis.
- P-01 Chromatogram Pattern: Gasoline C6-C12
- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- S-08 Surrogate recovery does not meet acceptance criteria. According to US EPA CLP protocol, the sample quality control is within compliance based on the acceptance of the additional surrogates.
- 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