



GETTLER-RYAN INC. *MAY 16 2002*

AG

TRANSMITTAL

April 29, 2002
G-R #180012

STP 1713 ✓

TO: Mr. David B. De Witt
Phillips 66 Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

CC: Mr. Douglas J. 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) Service Station
#5484
18950 Lake Chabot Road
Castro Valley, California**

Review with [signature] 8/13/02

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	April 19, 2002	Groundwater Monitoring and Sampling Report Annual - Event of March 9, 2002

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 10, 2002**, this report will be distributed to the following:

cc: Alameda County Health Care Services, 1131 Harbor Bay Pkwy., Alameda, CA 94502

Enclosure

trans/5484-dbd



GETTLER-RYAN INC.

April 19, 2002
G-R Job #180012

Mr. David B. De Witt
Phillips 66 Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

MAY 16 2002

RE: Annual Event of March 9, 2002
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).

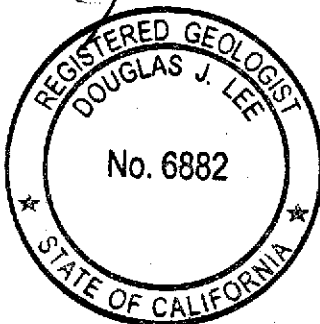
Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. A Potentiometric Map is included as Figure 1.

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.

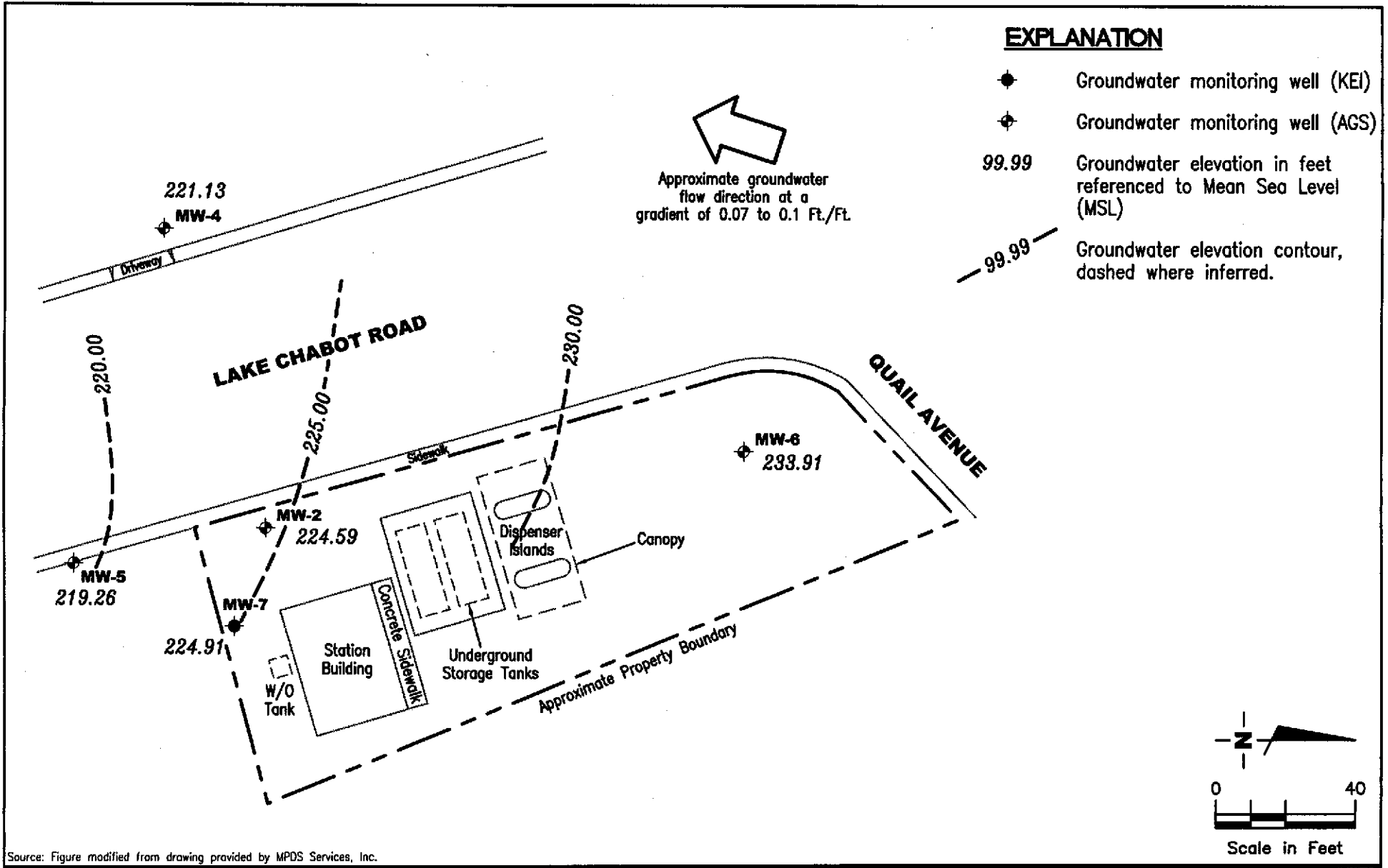
Sincerely,

Deanna L. Harding
Project Coordinator

Douglas J. Lee
Senior Geologist, R.G. No. 6882



- 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



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

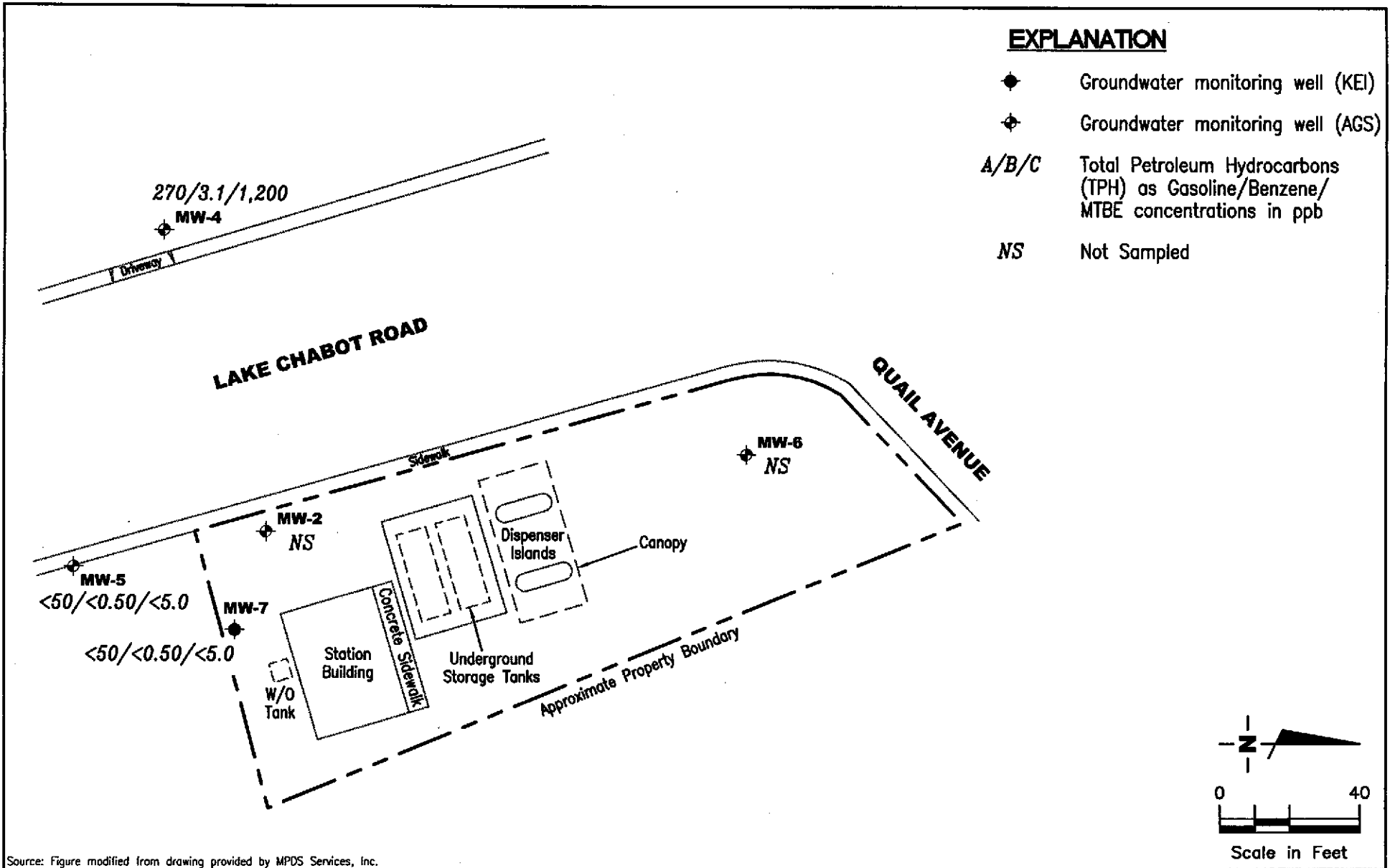
FIGURE
1

PROJECT NUMBER
 180012

REVIEWED BY

DATE
 March 9, 2002

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 9, 2002

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*(ft)	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	--	--	--	--	--	--	--
	03/09/02	4.29	224.59	--	--	--	--	--	--	--

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

Well ID/ TOC*(ft)	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	--
228.08	03/10/93	7.24	220.84	--	ND	ND	ND	ND	ND	--
	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
	03/09/02 ¹¹	6.64	221.13	--	270 ⁸	3.1	<1.0	5.0	<1.0	1,200

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

Well ID/ TOC*(ft)	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	--	--	--	--	--	--	--
	03/09/02	5.13	233.91	--	--	--	--	--	--	--
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*(ft)	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
	03/09/02	5.85	219.26	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0

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	12/01/94	--	ND	ND	2.5	1.0	--	--
(cont)	03/01/95 ⁴	--	ND	40	120	1.6	--	--
	06/01/95	--	ND	13	83	1.4	--	--
	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
	03/09/02 ⁸	--	<10	<5.0	<5.0	<0.50	<0.50	<0.50

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.

⁸ Results suggest that the sample voas for MW-4 and MW-7 may have been switched either in the field or in the laboratory.

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

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
	03/09/02 ⁸	--	<10	<5.0	<5.0	<2.5	<2.5	<2.5
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	
03/09/02	--	<10	<5.0	<5.0	<0.50	<0.50	<0.50	
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	--	--

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

DTW = Depth to Water

(ft.) = Feet

GWE = Groundwater Elevation

(msl) = Relative to mean sea level

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

ND = Not Detected

-- = Not Measured/Not Analyzed

* TOC elevations 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.

11 Results suggest that the sample voas for MW-4 and MW-7 may have been switched either in the field or in the laboratory.

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

Well ID/ TOC*(ft)	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
	03/09/02 ¹¹	6.48	224.91	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
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
	03/09/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0

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 Detection 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 Phillips 66 Company, the purge water and decontamination water generated during sampling activities is transported to Phillips 66 - San Francisco Refinery, located in Rodeo, California.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5484
Address: 18950 Lake Chabot Rd.
City: Castro Valley, CA

Job#: 180012
Date: 3-9-02
Sampler: Joc

Well ID: MW-2
Well Diameter: 2 in
Total Depth: 19.12 ft
Depth to Water: 4.29 ft

Well Condition: 0.1c
Hydrocarbon Thickness: 0 in
Amount Bailed (product/water): 0 (gal.)
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: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

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

LABORATORY INFORMATION

SAMPLE ID	(#)	CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
		3Yot	Y	HCL	Seq.	TPHG, BTEX, MTBE + 8010
		1Amb	"		"	8270

COMMENTS: M. only

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5484
Address: 18950 Lake Chabot Rd.
City: Castro Valley, CA

Job#: 180012
Date: 3-9-02
Sampler: Joc

Well ID: MW-4
Well Diameter: 4 in.
Total Depth: 27.25 ft.
Depth to Water: 6.64 ft.

Well Condition: OK
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 gal.
Volume Factor (VF):

2" = 0.17	3" = 0.38	4" = 0.66
6" = 1.50	12" = 5.80	

20.61 x VF 0.66 = 13.60 x 3 (case volume) = Estimated Purge Volume: 41 gal.

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

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

Starting Time: 8:18
Sampling Time: 8:46 AM (0846)
Purging Flow Rate: 3 gpm
Did well de-water? _____

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

Time	Volume (gal.)	pH	Conductivity μ mhos/cm $\times 10^2$	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>8:28</u>	<u>13</u>	<u>7.69</u>	<u>10.48</u>	<u>69.9</u>	_____	_____	_____
<u>8:32</u>	<u>26</u>	<u>7.60</u>	<u>10.42</u>	<u>70.0</u>	_____	_____	_____
<u>8:37</u>	<u>41</u>	<u>7.55</u>	<u>10.49</u>	<u>69.6</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>3 Yok</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE + 8010</u>
	<u>1 Amb</u>	<u>"</u>	<u>—</u>	<u>"</u>	<u>8270</u>

COMMENTS: Area is fenced-in & padlocked. Joel Greger (formerly of KEI/MPDS) let me have access to well area.
Beware of pit bull dog.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5484
Address: 18950 Lake Chabot Rd.
City: Castro Valley, CA

Job#: 180012
Date: 3-9-02
Sampler: Joc

Well ID: MW-5
Well Diameter: 4 in.
Total Depth: 23.79 ft.
Depth to Water: 5.85 ft.

Well Condition: 0.1c
Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)
Volume Factor (VF):
2" = 0.17 3" = 0.38 4" = 0.66
6" = 1.50 12" = 5.80

17.94 x VF 0.66 = 11.84 x 3 (case volume) = Estimated Purge Volume: 36 (gal.)

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

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

Starting Time: 7:22
Sampling Time: 7:55 Am (0755)
Purging Flow Rate: 3 gpm.
Did well de-water? _____

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

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \cdot \text{K}$	Temperature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>7:36</u>	<u>12</u>	<u>7.29</u>	<u>11.28</u>	<u>69.6</u>	_____	_____	_____
<u>7:39</u>	<u>24</u>	<u>7.39</u>	<u>11.33</u>	<u>69.4</u>	_____	_____	_____
<u>7:43</u>	<u>36</u>	<u>7.46</u>	<u>11.27</u>	<u>69.2</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE + 8010</u>
	<u>1 Amb</u>	<u>"</u>	<u>—</u>	<u>"</u>	<u>8270</u>

COMMENTS: _____

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5484
Address: 18950 Lake Chabot Rd.
City: Castro Valley, CA

Job#: 180012
Date: 3-9-02
Sampler: Joc

Well ID: MW-6
Well Diameter: 4 in.
Total Depth: 26.37 ft.
Depth to Water: 5.13 ft.

Well Condition: Broken box
Hydrocarbon Thickness: 0 in.
Amount Bailed (product/water): 0 gal.
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: _____
Sampling Time: _____
Purging Flow Rate: _____ gpm
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: _____
Sediment Description: _____
If yes; Time: _____ Volume: _____ gal.

Time	Volume (gal.)	pH	Conductivity (µmhos/cm)	Temperature (F)	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)

LABORATORY INFORMATION

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	3 Vol	Y	HCL	Seq.	TPHG, BTEX, MTBE + 8010
	1 Amb	"	—	"	8270

COMMENTS: M. only.
See enclosed picture of broken box.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

Client/
Facility # 5484
Address: 18950 Lake Chabot Rd.
City: Castro Valley, CA

Job#: 180012
Date: 3-9-02
Sampler: Joc

Well ID MW-7

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.54 ft.

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

Depth to Water 6.48 ft.

13.06 x VF 0.17 = 2.22 x 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 9:00
Sampling Time: 9:22 AM (0922)
Purging Flow Rate: 1 gpm.
Did well de-water? _____

Weather Conditions: clear
Water Color: clear Odor: yes
Sediment Description: _____
If yes; Time: _____ Volume: _____ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm} \times 10^2$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>9:08</u>	<u>2.5</u>	<u>6.95</u>	<u>4.10</u>	<u>72.1</u>			
<u>9:10</u>	<u>5</u>	<u>6.92</u>	<u>3.98</u>	<u>71.6</u>			
<u>9:12</u>	<u>7.5</u>	<u>6.94</u>	<u>3.95</u>	<u>71.5</u>			

LABORATORY INFORMATION

SAMPLE ID	#1 - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>3 Vol</u>	<u>Y</u>	<u>HCL</u>	<u>Seq.</u>	<u>TPHG, BTEX, MTBE + 8010</u>
	<u>1 Amb</u>	<u>"</u>	<u>—</u>	<u>"</u>	<u>8270</u>

COMMENTS: _____



Tosco Marketing Company
3200 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
 Consultant Name Gettler-Ryan Inc. (G-R Inc.)
 Address 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568
 Project Contact (Name) Deanna L. Harding
 (Phone) (925) 551-7555 (Fax Number) 925-551-7899

Contact (Name) MR. Dave DeWitt
 (Phone) 925-277-2384
 Laboratory Name Sequoia Analytical
 Laboratory Release Number _____
 Samples Collected by (Name) JOE A JEMIAN
 Collection Date 3-9-02
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S - Soil W - Water A - Air C - Charcoal	Type G - Grab C - Composite D - Discrete	Time	Sample Preservation	Ice (Yes or No)	Analysis To Be Performed										DO NOT BILL TB-LB ANALYSIS	Remarks			
								TPH Gas - BTX (8018)	TPH Diesel (8015)	Oil and Grease (8020)	Purgeable Hydrocarbons (8016)	Purgeable Aromatics (8022)	Purgeable Organics (8246)	Extractable Organics (8270)	Metals (COP, Pb, Zn, Ni) (CUP or AA)							
TB-LB	01	1	W	G	-	NCL	Y	✓														
MW-4	02	5	W	G	0846			✓							✓							
MW-5	03	"	"	"	0758			✓							✓							
MW-7	04	"	"	"	0922			✓							✓							

Relinquished By (Signature) <u>[Signature]</u>	Organization <u>G-R Inc.</u>	Date/Time <u>3-11-02</u>	Received By (Signature) <u>[Signature]</u>	Organization _____	Date/Time <u>3/11/02</u>	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5 Days 10 Days <u>As Contracted</u>
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
(650) 232-9600
FAX (650) 232-9612
www.sequoialabs.com

28 March, 2002

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

RECEIVED

MAR 21 2002

GETTLER-RYAN INC.
GENERAL CONTRACTOR

RE: Tosco(1)
Sequoia Report: L203042

Enclosed are the results of analyses for samples received by the laboratory on 03/11/02 18:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Wayne Stevenson
Project Manager

CA ELAP Certificate #2360



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

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

Reported:
03/28/02 14:46

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L203042-01	Water	03/09/02 00:00	03/11/02 18:50
MW-4	L203042-02	Water	03/09/02 08:46	03/11/02 18:50
MW-5	L203042-03	Water	03/09/02 07:55	03/11/02 18:50
MW-7	L203042-04	Water	03/09/02 09:20	03/11/02 18:50

Sequoia Analytical - San Carlos

Wayne Stevenson, Project Manager

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, Castro Valley
Project Manager: Deanna Harding

Reported:
03/28/02 14:46

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L203042-01) Water Sampled: 03/09/02 00:00 Received: 03/11/02 18:50									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030059	03/22/02	03/22/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		95.0 %	70-130		"	"	"	"	
MW-4 (L203042-02) Water Sampled: 03/09/02 08:46 Received: 03/11/02 18:50									
Purgeable Hydrocarbons as Gasoline	270	100	ug/l	2	2030059	03/22/02	03/22/02	EPA 8021B	P-02
Benzene	3.1	1.0	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	5.0	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	1200	50	"	10	"	"	"	"	M-04
<i>Surrogate: a,a,a-Trifluorotoluene</i>		85.7 %	70-130		"	"	"	"	
MW-5 (L203042-03) Water Sampled: 03/09/02 07:55 Received: 03/11/02 18:50									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030059	03/22/02	03/22/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		94.7 %	70-130		"	"	"	"	

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

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

Reported:
 03/28/02 14:46

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B
Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L203042-04) Water Sampled: 03/09/02 09:20 Received: 03/11/02 18:50									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030059	03/22/02	03/22/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		93.4 %		70-130	"	"	"	"	



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

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

Reported:
03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L203042-02) Water Sampled: 03/09/02 08:46 Received: 03/11/02 18:50									R-05
Bromodichloromethane	ND	2.5	ug/l	5	2030047	03/19/02	03/19/02	EPA 8260B	
Bromoform	ND	2.5	"	"	"	"	"	"	
Bromomethane	ND	2.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.5	"	"	"	"	"	"	
Chlorobenzene	ND	2.5	"	"	"	"	"	"	
Chloroethane	ND	2.5	"	"	"	"	"	"	
Chloroform	ND	2.5	"	"	"	"	"	"	
Chloromethane	ND	2.5	"	"	"	"	"	"	
Dibromochloromethane	ND	2.5	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.5	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.5	"	"	"	"	"	"	
Freon 113	ND	2.5	"	"	"	"	"	"	
Methylene chloride	ND	2.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.5	"	"	"	"	"	"	
Tetrachloroethene	ND	2.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.5	"	"	"	"	"	"	
Trichloroethene	ND	2.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	2.5	"	"	"	"	"	"	
Vinyl chloride	ND	2.5	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		98.9 %		63-118	"	"	"	"	
Surrogate: Toluene-d8		92.7 %		73-125	"	"	"	"	
Surrogate: 4-BFB		95.3 %		68-118	"	"	"	"	

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

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

Reported:
 03/28/02 14:46

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (L203042-03) Water Sampled: 03/09/02 07:55 Received: 03/11/02 18:50									
Bromodichloromethane	ND	0.50	ug/l	1	2030047	03/20/02	03/20/02	EPA 8260B	
Bromoform	ND	0.50	"	"	"	"	"	"	"
Bromomethane	ND	0.50	"	"	"	"	"	"	"
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	"
Chlorobenzene	ND	0.50	"	"	"	"	"	"	"
Chloroethane	ND	0.50	"	"	"	"	"	"	"
Chloroform	ND	0.50	"	"	"	"	"	"	"
Chloromethane	ND	0.50	"	"	"	"	"	"	"
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	"
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	"
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	"
Freon 113	ND	0.50	"	"	"	"	"	"	"
Methylene chloride	ND	0.50	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	"
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	"
Trichloroethene	ND	0.50	"	"	"	"	"	"	"
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	"
Vinyl chloride	ND	0.50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		93.6 %		63-118	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>		89.3 %		73-125	"	"	"	"	"
<i>Surrogate: 4-BFB</i>		91.5 %		68-118	"	"	"	"	"



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

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

Reported:
03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L203042-04) Water Sampled: 03/09/02 09:20 Received: 03/11/02 18:50									
Bromodichloromethane	ND	0.50	ug/l	1	2030047	03/19/02	03/19/02	EPA 8260B	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Freon 113	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	0.50	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	0.50	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		<i>100 %</i>	<i>63-118</i>						
<i>Surrogate: Toluene-d8</i>		<i>93.3 %</i>	<i>73-125</i>						
<i>Surrogate: 4-BFB</i>		<i>88.9 %</i>	<i>68-118</i>						

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

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

Reported:
 03/28/02 14:46

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Walnut Creek

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L203042-02) Water Sampled: 03/09/02 08:46 Received: 03/11/02 18:50									
Acenaphthene	ND	5.0	ug/l	1	2C12010	03/14/02	03/18/02	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	"	"	"	"	"	"	"



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

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

Reported:
03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (L203042-02) Water Sampled: 03/09/02 08:46 Received: 03/11/02 18:50									
Fluorene	ND	5.0	ug/l	1	2C12010	03/14/02	03/18/02	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	"	"	"	"	"	"	
<i>Surrogate: 2-Fluorophenol</i>		38 %		21-110	"	"	"	"	
<i>Surrogate: Phenol-d6</i>		27 %		10-110	"	"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>		84 %		35-114	"	"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>		79 %		43-116	"	"	"	"	
<i>Surrogate: 2,4,6-Tribromophenol</i>		98 %		10-123	"	"	"	"	
<i>Surrogate: p-Terphenyl-d14</i>		56 %		33-141	"	"	"	"	

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

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

Reported:
 03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (L203042-03) Water Sampled: 03/09/02 07:55 Received: 03/11/02 18:50									
Acenaphthene	ND	5.0	ug/l	1	2C12010	03/14/02	03/18/02	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	"	"	"	"	"	"	



Gettler-Ryan/Geostrategies(1)
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Project: Tosco(1)
Project Number: Tosco #5484, Castro Valley
Project Manager: Deanna Harding

Reported:
03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (L203042-03) Water Sampled: 03/09/02 07:55 Received: 03/11/02 18:50									
Fluorene	ND	5.0	ug/l	1	2C12010	03/14/02	03/18/02	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 %		21-110	"	"	"	"	
Surrogate: Phenol-d6		25 %		10-110	"	"	"	"	
Surrogate: Nitrobenzene-d5		78 %		35-114	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		74 %		43-116	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		97 %		10-123	"	"	"	"	
Surrogate: p-Terphenyl-d14		58 %		33-141	"	"	"	"	

Gettler-Ryan/Geostrategies(1)
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Project: Tosco(1)
Project Number: Tosco #5484, Castro Valley
Project Manager: Deanna Harding

Reported:
03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L203042-04) Water Sampled: 03/09/02 09:20 Received: 03/11/02 18:50									
Acenaphthene	ND	5.0	ug/l	1	2C12010	03/14/02	03/18/02	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	"	"	"	"	"	"	



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

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

Reported:
03/28/02 14:46

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (L203042-04) Water Sampled: 03/09/02 09:20 Received: 03/11/02 18:50									
Fluorene	ND	5.0	ug/l	1	2C12010	03/14/02	03/18/02	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	40 %		21-110		"	"	"	"	
Surrogate: Phenol-d6	29 %		10-110		"	"	"	"	
Surrogate: Nitrobenzene-d5	85 %		35-114		"	"	"	"	
Surrogate: 2-Fluorobiphenyl	80 %		43-116		"	"	"	"	
Surrogate: 2,4,6-Tribromophenol	97 %		10-123		"	"	"	"	
Surrogate: p-Terphenyl-d14	51 %		33-141		"	"	"	"	



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

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

Reported:
03/28/02 14:46

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - 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 2030059 - EPA 5030B (P/T)

Blank (2030059-BLK1)

Prepared & Analyzed: 03/22/02

Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	5.0	"							

Surrogate: a,a,a-Trifluorotoluene	8.49		"	10.0		84.9	70-130			
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LCS (2030059-BS1)

Prepared & Analyzed: 03/22/02

Benzene	7.93	0.50	ug/l	10.0		79.3	70-130			
Toluene	7.93	0.50	"	10.0		79.3	70-130			
Ethylbenzene	8.56	0.50	"	10.0		85.6	70-130			
Xylenes (total)	25.8	0.50	"	30.0		86.0	70-130			

Surrogate: a,a,a-Trifluorotoluene	9.86		"	10.0		98.6	70-130			
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LCS (2030059-BS2)

Prepared & Analyzed: 03/22/02

Purgeable Hydrocarbons as Gasoline	208	50	ug/l	250		83.2	70-130			
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Surrogate: a,a,a-Trifluorotoluene	8.81		"	10.0		88.1	70-130			
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Matrix Spike (2030059-MS1)

Source: L203042-03

Prepared & Analyzed: 03/22/02

Benzene	7.93	0.50	ug/l	10.0	ND	79.3	60-140			
Toluene	7.86	0.50	"	10.0	ND	78.6	60-140			
Ethylbenzene	8.49	0.50	"	10.0	ND	84.9	60-140			
Xylenes (total)	25.6	0.50	"	30.0	ND	85.3	60-140			

Surrogate: a,a,a-Trifluorotoluene	9.95		"	10.0		99.5	70-130			
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Matrix Spike Dup (2030059-MSD1)

Source: L203042-03

Prepared & Analyzed: 03/22/02

Benzene	7.72	0.50	ug/l	10.0	ND	77.2	60-140	2.68	25	
Toluene	7.58	0.50	"	10.0	ND	75.8	60-140	3.63	25	
Ethylbenzene	8.05	0.50	"	10.0	ND	80.5	60-140	5.32	25	
Xylenes (total)	24.3	0.50	"	30.0	ND	81.0	60-140	5.21	25	

Surrogate: a,a,a-Trifluorotoluene	9.65		"	10.0		96.5	70-130			
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Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco #5484, Castro Valley Project Manager: Deanna Harding	Reported: 03/28/02 14:46
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Volatile Organic 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 2030047 - EPA 5030B [P/T]
Blank (2030047-BLK1)

Prepared & Analyzed: 03/19/02

Bromodichloromethane	ND	0.50	ug/l							
Bromoform	ND	0.50	"							
Bromomethane	ND	0.50	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	0.50	"							
Chloroethane	ND	0.50	"							
Chloroform	ND	0.50	"							
Chloromethane	ND	0.50	"							
Dibromochloromethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichlorobenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,2-Dichloropropane	ND	0.50	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Freon 113	ND	0.50	"							
Methylene chloride	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.50	"							
1,1,1-Trichloroethane	ND	0.50	"							
1,1,2-Trichloroethane	ND	0.50	"							
Trichloroethene	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
Vinyl chloride	ND	0.50	"							
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Surrogate: 1,2-Dichloroethane-d4	9.34		"	10.0		93.4	63-118			
Surrogate: Toluene-d8	9.60		"	10.0		96.0	73-125			
Surrogate: 4-BFB	9.04		"	10.0		90.4	68-118			



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

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

Reported:
03/28/02 14:46

**Volatile Organic 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 2030047 - EPA 5030B [P/T]

Blank (2030047-BLK2)

Prepared & Analyzed: 03/20/02

Bromodichloromethane	ND	0.50	ug/l							
Bromoform	ND	0.50	"							
Bromomethane	ND	0.50	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	0.50	"							
Chloroethane	ND	0.50	"							
Chloroform	ND	0.50	"							
Chloromethane	ND	0.50	"							
Dibromochloromethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichlorobenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,2-Dichloropropane	ND	0.50	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Freon 113	ND	0.50	"							
Methylene chloride	ND	0.50	"							
1,1,2,2-Tetrachloroethane	ND	0.50	"							
Tetrachloroethene	ND	0.50	"							
1,1,1-Trichloroethane	ND	0.50	"							
1,1,2-Trichloroethane	ND	0.50	"							
Trichloroethene	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
Vinyl chloride	ND	0.50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	9.73		"	10.0		97.3	63-118			
<i>Surrogate: Toluene-d8</i>	9.04		"	10.0		90.4	73-125			
<i>Surrogate: 4-BFB</i>	8.97		"	10.0		89.7	68-118			



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

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

Reported:
03/28/02 14:46

Volatile Organic 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 2030047 - EPA 5030B [P/T]

LCS (2030047-BS1)

Prepared & Analyzed: 03/19/02

Chlorobenzene	19.0	0.50	ug/l	20.0		95.0	70-130			
1,1-Dichloroethene	18.8	0.50	"	20.0		94.0	65-135			
Trichloroethene	20.2	0.50	"	20.0		101	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>9.39</i>		"	<i>10.0</i>		<i>93.9</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>10.4</i>		"	<i>10.0</i>		<i>104</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>10.1</i>		"	<i>10.0</i>		<i>101</i>	<i>68-118</i>			

LCS (2030047-BS2)

Prepared & Analyzed: 03/20/02

Chlorobenzene	19.9	0.50	ug/l	20.0		99.5	70-130			
1,1-Dichloroethene	20.1	0.50	"	20.0		100	65-135			
Trichloroethene	21.2	0.50	"	20.0		106	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>9.88</i>		"	<i>10.0</i>		<i>98.8</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>10.1</i>		"	<i>10.0</i>		<i>101</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>10.2</i>		"	<i>10.0</i>		<i>102</i>	<i>68-118</i>			

Matrix Spike (2030047-MS1)

Source: L203042-03

Prepared & Analyzed: 03/19/02

Chlorobenzene	100	2.5	ug/l	100	ND	100	60-140			
1,1-Dichloroethene	98.0	2.5	"	100	ND	98.0	60-140			
Trichloroethene	106	2.5	"	100	ND	106	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.4</i>		"	<i>10.0</i>		<i>104</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.82</i>		"	<i>10.0</i>		<i>98.2</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>10.1</i>		"	<i>10.0</i>		<i>101</i>	<i>68-118</i>			

Matrix Spike Dup (2030047-MSD1)

Source: L203042-03

Prepared & Analyzed: 03/19/02

Chlorobenzene	99.2	2.5	ug/l	100	ND	99.2	60-140	0.803	25	
1,1-Dichloroethene	95.8	2.5	"	100	ND	95.8	60-140	2.27	25	
Trichloroethene	107	2.5	"	100	ND	107	60-140	0.939	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.4</i>		"	<i>10.0</i>		<i>104</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>10.2</i>		"	<i>10.0</i>		<i>102</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>10.1</i>		"	<i>10.0</i>		<i>101</i>	<i>68-118</i>			



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

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

Reported:
03/28/02 14:46

**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 2C12010 - EPA 3510B Sep Funnel

Blank (2C12010-BLK1)

Prepared: 03/12/02 Analyzed: 03/13/02

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	"							



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

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

Reported:
03/28/02 14:46

**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 2C12010 - EPA 3510B Sep Funnel

Blank (2C12010-BLK1)

Prepared: 03/12/02 Analyzed: 03/13/02

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	66.2		"	150		44	21-110			
Surrogate: Phenol-d6	42.8		"	150		29	10-110			
Surrogate: Nitrobenzene-d5	94.4		"	100		94	35-114			
Surrogate: 2-Fluorobiphenyl	92.6		"	100		93	43-116			
Surrogate: 2,4,6-Tribromophenol	145		"	150		97	10-123			

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

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

 Reported:
 03/28/02 14:46

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 2C12010 - EPA 3510B Sep Funnel
Blank (2C12010-BLK1)

Prepared: 03/12/02 Analyzed: 03/13/02

Surrogate: <i>p</i> -Terphenyl-d14	105		ug/l	100		105	33-141			
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Blank (2C12010-BLK2)

Prepared: 03/12/02 Analyzed: 03/13/02

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	"							



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

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

Reported:
03/28/02 14:46

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 2C12010 - EPA 3510B Sep Funnel

Blank (2C12010-BLK2)

Prepared: 03/12/02 Analyzed: 03/13/02

Dimethyl phthalate	ND	5.0	ug/l							
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	"							
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	66.0		"	150		44	21-110			
Surrogate: Phenol-d6	45.0		"	150		30	10-110			



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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 2C12010 - EPA 3510B Sep Funnel

Blank (2C12010-BLK2)

Prepared: 03/12/02 Analyzed: 03/13/02

Surrogate: Nitrobenzene-d5	94.1		ug/l	100		94	35-114			
Surrogate: 2-Fluorobiphenyl	88.0		"	100		88	43-116			
Surrogate: 2,4,6-Tribromophenol	144		"	150		96	10-123			
Surrogate: p-Terphenyl-d14	91.5		"	100		92	33-141			

Blank (2C12010-BLK3)

Prepared: 03/14/02 Analyzed: 03/15/02

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	"							



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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 2C12010 - EPA 3510B Sep Funnel

Blank (2C12010-BLK3)

Prepared: 03/14/02 Analyzed: 03/15/02

Diethyl phthalate	ND	5.0	ug/l
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	"
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	"

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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 2C12010 - EPA 3510B Sep Funnel
Blank (2C12010-BLK3)

Prepared: 03/14/02 Analyzed: 03/15/02

Surrogate: 2-Fluorophenol	64.7		ug/l	150		43	21-110			
Surrogate: Phenol-d6	42.6		"	150		28	10-110			
Surrogate: Nitrobenzene-d5	83.2		"	100		83	35-114			
Surrogate: 2-Fluorobiphenyl	78.4		"	100		78	43-116			
Surrogate: 2,4,6-Tribromophenol	134		"	150		89	10-123			
Surrogate: p-Terphenyl-d14	71.0		"	100		71	33-141			

LCS (2C12010-BS1)

Prepared: 03/12/02 Analyzed: 03/13/02

Acenaphthene	84.9	5.0	ug/l	100		85	46-118			
4-Chloro-3-methylphenol	123	5.0	"	150		82	23-97			
2-Chlorophenol	118	5.0	"	150		79	27-123			
1,4-Dichlorobenzene	74.6	10	"	100		75	36-97			
2,4-Dinitrotoluene	78.0	10	"	100		78	24-96			
4-Nitrophenol	41.2	10	"	150		27	10-80			
N-Nitrosodi-n-propylamine	83.1	5.0	"	100		83	41-116			
Pentachlorophenol	106	10	"	150		71	9-103			
Phenol	41.2	5.0	"	150		27	12-110			
Pyrene	89.2	5.0	"	100		89	26-127			
1,2,4-Trichlorobenzene	76.4	5.0	"	100		76	39-98			

Surrogate: 2-Fluorophenol	62.0		"	150		41	21-110			
Surrogate: Phenol-d6	41.6		"	150		28	10-110			
Surrogate: Nitrobenzene-d5	83.2		"	100		83	35-114			
Surrogate: 2-Fluorobiphenyl	83.3		"	100		83	43-116			
Surrogate: 2,4,6-Tribromophenol	139		"	150		93	10-123			
Surrogate: p-Terphenyl-d14	91.3		"	100		91	33-141			

LCS (2C12010-BS2)

Prepared: 03/14/02 Analyzed: 03/15/02

Acenaphthene	78.8	5.0	ug/l	100		79	46-118			
4-Chloro-3-methylphenol	118	5.0	"	150		79	23-97			
2-Chlorophenol	112	5.0	"	150		75	27-123			
1,4-Dichlorobenzene	69.8	10	"	100		70	36-97			
2,4-Dinitrotoluene	74.9	10	"	100		75	24-96			
4-Nitrophenol	41.4	10	"	150		28	10-80			
N-Nitrosodi-n-propylamine	84.2	5.0	"	100		84	41-116			
Pentachlorophenol	103	10	"	150		69	9-103			
Phenol	42.8	5.0	"	150		29	12-110			
Pyrene	78.5	5.0	"	100		78	26-127			
1,2,4-Trichlorobenzene	70.4	5.0	"	100		70	39-98			



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Reported:
03/28/02 14:46

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 2C12010 - EPA 3510B Sep Funnel

LCS (2C12010-BS2)

Prepared: 03/14/02 Analyzed: 03/15/02

Surrogate: 2-Fluorophenol	66.4		ug/l	150		44	21-110			
Surrogate: Phenol-d6	45.1		"	150		30	10-110			
Surrogate: Nitrobenzene-d5	82.2		"	100		82	35-114			
Surrogate: 2-Fluorobiphenyl	77.6		"	100		78	43-116			
Surrogate: 2,4,6-Tribromophenol	138		"	150		92	10-123			
Surrogate: p-Terphenyl-d14	74.4		"	100		74	33-141			

LCS Dup (2C12010-BSD1)

Prepared: 03/12/02 Analyzed: 03/13/02

Acenaphthene	84.8	5.0	ug/l	100		85	46-118	0.1	30	
4-Chloro-3-methylphenol	123	5.0	"	150		82	23-97	0	30	
2-Chlorophenol	116	5.0	"	150		77	27-123	2	30	
1,4-Dichlorobenzene	73.3	10	"	100		73	36-97	2	30	
2,4-Dinitrotoluene	73.6	10	"	100		74	24-96	6	30	
4-Nitrophenol	43.4	10	"	150		29	10-80	5	30	
N-Nitrosodi-n-propylamine	82.8	5.0	"	100		83	41-116	0.4	30	
Pentachlorophenol	110	10	"	150		73	9-103	4	30	
Phenol	42.0	5.0	"	150		28	12-110	2	30	
Pyrene	90.2	5.0	"	100		90	26-127	1	30	
1,2,4-Trichlorobenzene	77.2	5.0	"	100		77	39-98	1	30	
Surrogate: 2-Fluorophenol	63.8		"	150		43	21-110			
Surrogate: Phenol-d6	42.9		"	150		29	10-110			
Surrogate: Nitrobenzene-d5	83.1		"	100		83	35-114			
Surrogate: 2-Fluorobiphenyl	83.7		"	100		84	43-116			
Surrogate: 2,4,6-Tribromophenol	139		"	150		93	10-123			
Surrogate: p-Terphenyl-d14	90.1		"	100		90	33-141			



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03/28/02 14:46

Notes and Definitions

- M-04 MTBE was reported from second analysis.
- P-02 Chromatogram Pattern: Weathered Gasoline C6-C12
- R-05 The reporting limit(s) for this sample have been raised due to high levels of non-target interferents.
- 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