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**IT Corporation**  
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San Jose, CA 95131-1721  
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A Member of The IT Group

January 18, 2002  
Project 311-038.1A

01-23-02A10:00 RCVD

Mr. Chuck Headlee  
Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, California 94612

Re: 76 Service Station 5430  
Quarterly Summary Report  
Fourth Quarter 2001

Dear Mr. Headlee:

As directed by Mr. David DeWitt of Phillips 66 Company, formerly Tosco Marketing Company, IT Corporation (IT) is forwarding the quarterly summary report for the following location:

<u>Service Station</u>	<u>Location</u>
5430	1935 Washington Avenue, San Leandro

If you have questions or comments, please do not hesitate to contact our office at (408) 453-7300.

Sincerely,

**IT Corporation**

Timothy L. Ripp  
Project Geologist

Enclosure

cc: Mr. David DeWitt, Phillips 66 Company  
✓ Mr. Tom Peacock, Alameda County Environmental Health Care Services

## Quarterly Summary Report Fourth Quarter 2001

76 Service Station 5430  
1935 Washington Avenue at Castro Street  
San Leandro, California

County STID #: 1747  
County: Alameda

### BACKGROUND

Unocal files suggest that a product line leak occurred in June 1976, and that one of the original underground gasoline storage tanks failed a precision test in October 1981. In December 1981, the two original steel gasoline storage tanks were replaced with two fiberglass gasoline storage tanks. There are currently six on-site groundwater monitoring wells and one off-site groundwater monitoring well in use at the site. In July 1997, three off-site exploratory borings were drilled on the property to the south of the 76 station. Based on the findings of that investigation, the lateral extent of hydrocarbon impact to groundwater is considered delineated. The product dispensers and associated underground product piping were replaced in July and August 1998. The underground waste oil storage tank was also removed and replaced with an aboveground waste oil storage tank.

### RECENT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities were reported in November 2001. A case closure request was submitted to the Alameda County Environmental Health Care Services Agency.

### NEXT QUARTER ACTIVITIES

Semi-annual groundwater monitoring and sampling activities will be performed in March 2002. Case closure will be pursued.

### CHARACTERIZATION/REMEDIAL STATUS

Soil contamination delineated? Yes.  
Dissolved groundwater delineated? Yes.  
Free product delineated? Not applicable.  
Amount of groundwater contaminant recovered this quarter? None.  
Soil remediation in progress? Not applicable.  
Anticipated start date? Not applicable.  
Anticipated completion date? Not applicable.  
Dissolved/free product remediation in progress? No.  
Anticipated start? Unknown.  
Anticipated completion? Unknown.

CONSULTANT: IT Corporation



# GETTLER-RYAN INC.

## TRANSMITTAL

MAY 2 0 2002

May 1, 2002  
G-R #180107

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

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

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

RE: **Tosco (Unocal) Service Station  
#5430  
1935 Washington Avenue  
San Leandro, California**

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	April 29, 2002	Groundwater Monitoring and Sampling Report First Semi-Annual - Event of March 18, 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 15, 2002**, this report will be distributed to the following:

cc: Mr. Scott Seery, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94501  
Mr. Michael Bakaldin, City of San Leandro Fire Dept., 835 East 14th Street, San Leandro, CA 94577

Enclosure



# GETTLER-RYAN INC.

April 29, 2002  
G-R Job #180107

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

MAY 20 2002

**RE: First Semi-Annual Event of March 18, 2002**  
Groundwater Monitoring & Sampling Report  
Tosco (Unocal) Service Station #5430  
1935 Washington Avenue  
San Leandro, 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 and 2. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

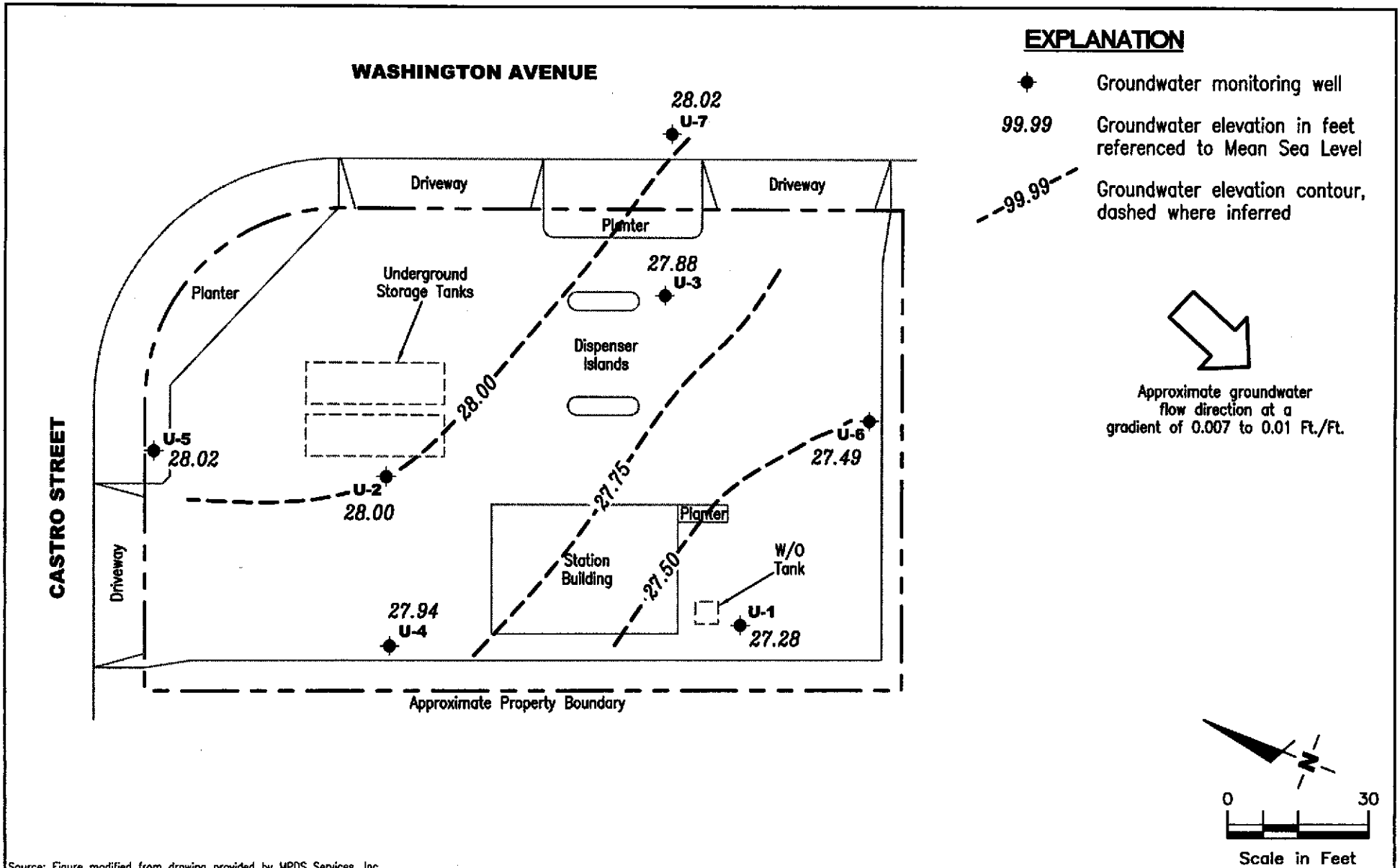
Deanna L. Harding  
Project Coordinator

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 - Oxygenate Compounds
- Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports

5430.qml

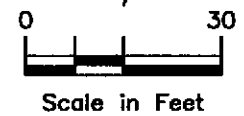


**EXPLANATION**

- ◆ Groundwater monitoring well
- 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- - - 99.99 - - - Groundwater elevation contour, dashed where inferred



Approximate groundwater flow direction at a gradient of 0.007 to 0.01 Ft./Ft.



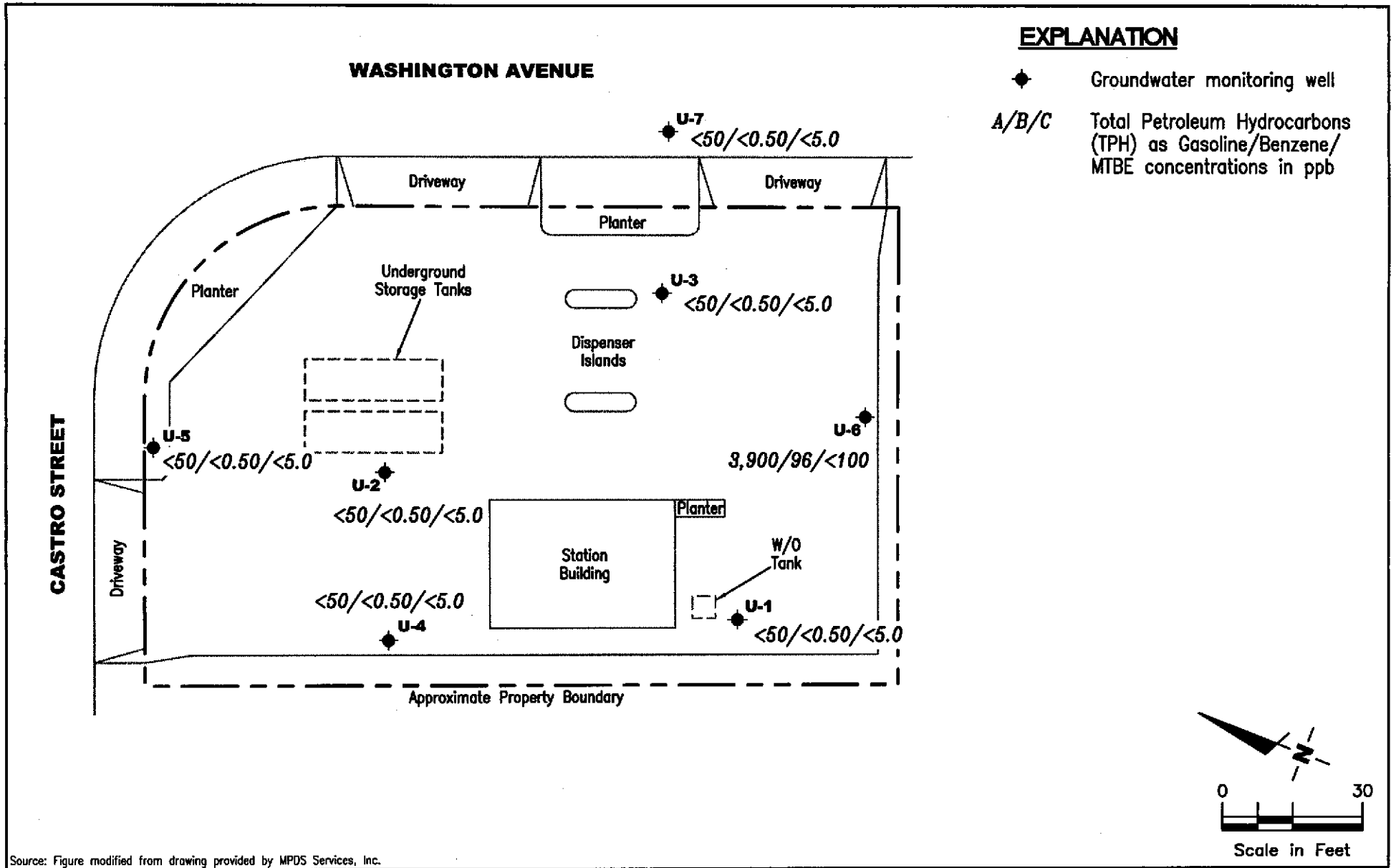
Source: Figure modified from drawing provided by MPDS Services, Inc.

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

**POTENTIOMETRIC MAP**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

FIGURE  
**1**

PROJECT NUMBER <b>180107</b>	REVIEWED BY	DATE <b>March 18, 2002</b>	REVISED DATE
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Source: Figure modified from drawing provided by MPDS Services, Inc.

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

**CONCENTRATION MAP**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

FIGURE  
**2**

PROJECT NUMBER  
 180107

REVIEWED BY

DATE  
 March 18, 2002

REVISED DATE

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	SL (ft.bgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-1													
56.58	08/13/93 <sup>1</sup>	31.60	20.0-40.0	24.98	50 <sup>2</sup>	310	0.84	ND	2.6	1.0	--	--	--
	09/07/93	31.60		24.98	--	--	--	--	--	--	--	--	--
56.10	12/16/93 <sup>1</sup>	33.19		22.91	130 <sup>3</sup>	ND	ND	ND	ND	ND	--	--	--
	01/13/94	33.06		23.04	--	--	--	--	--	--	--	--	--
	02/09/94	32.70		23.40	--	--	--	--	--	--	--	--	--
	03/25/94 <sup>1</sup>	31.07		25.03	57 <sup>3</sup>	58	0.63	0.79	ND	0.65	--	--	--
	05/18/94	31.76		24.34	--	--	--	--	--	--	--	--	--
	06/19/94 <sup>1</sup>	32.26		23.84	61 <sup>3</sup>	51	ND	1.4	ND	2.7	--	ND	7.4
	07/27/94	33.07		23.03	--	--	--	--	--	--	--	--	--
	08/18/94	33.50		22.60	--	--	--	--	--	--	--	--	--
	09/15/94 <sup>1</sup>	33.93		22.17	83 <sup>3</sup>	ND	0.50	0.85	ND	0.77	--	ND	9.5
	10/11/94	33.25		22.85	--	--	--	--	--	--	--	--	--
	11/08/94	34.05		22.05	--	--	--	--	--	--	--	--	--
	12/06/94 <sup>1</sup>	32.37		23.73	ND	ND	ND	ND	ND	ND	--	ND	5.8
	01/10/95	31.29		24.81	--	--	--	--	--	--	--	--	--
56.09	03/14/95	27.86		28.23	71 <sup>3</sup>	380	20	ND	ND	10	--	--	--
	06/20/95	28.20		27.89	170 <sup>3</sup>	500	50	ND	ND	4.4	--	--	--
	09/18/95	30.65		25.44	72.00	57	1.2	0.75	0.57	2.2	-- <sup>6</sup>	--	--
	12/14/95	32.20		23.89	ND	ND	0.72	1.4	1.2	3.6	--	ND	3.8
	03/06/96	26.53		29.56	ND	96	4.5	ND	ND	3.7	ND	--	--
	06/04/96	27.43		28.66	170 <sup>3</sup>	410	48	ND	3.4	7.9	ND	--	--
	09/06/96	30.25		25.84	ND	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	26.03		30.06	--	ND	ND	ND	ND	ND	ND	ND	43
	09/04/97	31.56		24.53	--	ND	ND	ND	ND	ND	ND	ND	4.5
	03/09/98	20.63		35.46	--	ND	ND	ND	ND	ND	ND	ND	ND
	09/01/98	27.82		28.27	--	ND	0.59	ND	ND	ND	3.1	ND	8.9
	03/02/99	26.83		29.26	--	ND	ND	ND	ND	ND	ND	ND	4.5
	09/07/99	28.03		28.06	--	ND	ND	ND	ND	ND	ND	ND	ND
	03/09/00	25.50		30.59	--	ND	ND	ND	ND	ND	ND	ND	1.32
	09/11/00 <sup>16</sup>	28.16		27.93	--	ND	ND	0.592	ND	ND	ND	ND <sup>9</sup>	ND <sup>9</sup>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID/ TOC* (ft)	DATE	DTW (ft.)	S.L. (ft.bgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-1	03/26/01 <sup>17</sup>	27.02	20.0-40.0	29.07	--	ND	ND	ND	ND	ND	ND	ND	2.50
(cont)	09/04/01 <sup>19</sup>	31.67		24.42	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	2.4
	03/18/02 <sup>21</sup>	28.81		27.28	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50 <sup>18</sup>	4.4 <sup>18</sup>
U-2													
55.77	08/13/93	30.87	20.0-40.0	24.90	--	1,400	ND	ND	ND	ND	--	--	--
	09/07/93	30.87		24.90	--	--	--	--	--	--	--	--	--
55.27	12/16/93	32.19		23.08	--	330	1.7	ND	11	8.5	--	--	--
	01/13/94	32.13		23.14	--	--	--	--	--	--	--	--	--
	02/09/94	33.50		21.77	--	--	--	--	--	--	--	--	--
	03/25/94	30.09		25.18	--	130	0.70	0.78	0.65	0.64	--	ND	11
(D)	03/25/94	--		--	--	--	--	--	--	--	--	ND	ND
	05/18/94	30.73		24.54	--	--	--	--	--	--	--	--	--
	06/19/94	31.31		23.96	--	180 <sup>4</sup>	ND	ND	ND	0.86	--	ND	0.54
	07/27/94	32.12		23.15	--	--	--	--	--	--	--	--	--
	08/18/94	32.50		22.77	--	--	--	--	--	--	--	--	--
	09/15/94	33.00		22.27	--	1,000 <sup>5</sup>	44	ND	ND	ND	--	ND	0.66
	10/11/94	32.35		22.92	--	--	--	--	--	--	--	--	--
	11/08/94	33.09		22.18	--	--	--	--	--	--	--	--	--
	12/06/94	31.44		23.83	--	250	19	ND	ND	ND	--	ND	ND
	01/10/95	30.25		25.02	--	--	--	--	--	--	--	--	--
55.29	03/14/95	26.36		28.93	--	89	ND	ND	ND	1.2	--	--	--
	06/20/95	26.74		28.55	--	ND	ND	0.58	ND	1.7	--	--	--
	09/18/95	29.65		25.64	--	ND	ND	ND	ND	0.85	-- <sup>6</sup>	--	--
	12/14/95	31.10		24.19	--	ND	ND	0.89	ND	2.0	-- <sup>7</sup>	ND	ND
	03/06/96	25.17		30.12	--	ND	ND	ND	ND	ND	80	--	--
	06/04/96	26.03		29.26	--	ND	ND	ND	ND	ND	110	--	--
	09/06/96	29.18		26.11	--	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	24.64		30.65	--	ND	ND	ND	ND	ND	42	--	--
	09/04/97	30.59		24.70	--	ND	ND	ND	ND	ND	46	--	--
	03/09/98	19.22		36.07	--	ND	ND	ND	ND	ND	4.4	--	--



**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-2	09/01/98	26.40	20.0-40.0	28.89	--	ND	ND	ND	ND	ND	25	--	--
(cont)	03/02/99	25.48		29.81	--	ND	ND	ND	ND	ND	16	--	--
	09/07/99	26.51		28.78	--	ND	ND	ND	ND	ND	20	--	--
	03/09/00	23.95		31.34	--	ND	ND	ND	ND	ND	ND	--	--
	09/11/00	26.75		28.54	--	ND	ND	0.635	ND	ND	ND	--	--
	03/26/01	25.64		29.65	--	ND	ND	ND	ND	ND	ND	--	--
	09/04/01	30.47		24.82	--	<50	<0.50	0.69	<0.50	<0.50	<5.0	--	--
	03/18/02	27.29		28.00	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
U-3													
55.66	08/13/93	30.70	20.0-40.0	24.96	--	23,000	1,000	ND	1,700	1,600	--	--	--
	09/07/93	30.70		24.96	--	--	--	--	--	--	--	--	--
55.24	12/16/93	32.08		23.16	--	15,000	570	ND	940	670	--	--	--
	01/13/94	31.98		23.26	--	--	--	--	--	--	--	--	--
	02/09/94	33.82		21.42	--	--	--	--	--	--	--	--	--
	03/25/94	30.03		25.21	--	18,000	560	40	1,000	770	--	ND	480
	05/18/94	30.66		24.58	--	--	--	--	--	--	--	--	--
	06/19/94	31.19		24.05	--	17,000	580	ND	1,300	90	--	ND	410
	07/27/94	31.98		23.26	--	--	--	--	--	--	--	--	--
	08/18/94	32.39		22.85	--	--	--	--	--	--	--	--	--
	09/15/94	32.84		22.40	--	12,000	370	ND	970	610	--	ND	420
	10/11/94	32.20		23.04	--	--	--	--	--	--	--	--	--
	11/08/94	33.01		22.23	--	--	--	--	--	--	--	--	--
	12/06/94	31.34		23.90	--	17,000	390	ND	990	560	--	ND	430
	01/10/95	30.23		25.01	--	--	--	--	--	--	--	--	--
55.23	03/14/95	25.44		29.79	--	13,000	860	120	1,300	1,700	--	--	--
	06/20/95	26.70		28.53	--	9,800	590	ND	800	1,000	--	--	--
	09/18/95	29.55		25.68	--	9,800	600	ND	1,000	760	-- <sup>6</sup>	--	--
	12/14/95	31.02		24.21	--	10,000	520	ND	920	630	-- <sup>7</sup>	ND	240
	03/06/96	25.25		29.98	--	19,000	1,400	ND	1,800	3,000	73	--	--
	06/04/96	26.00		29.23	--	8,800	510	ND	600	830	ND	--	--

**Table 1**  
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 San Leandro, California

WELL ID/ TOC* (ft)	DATE	DTW (ft.)	S.L. (ft.bgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-3 (cont)	09/06/96	29.06	20.0-40.0	26.17	--	15,000	360	20	540	450	ND	--	--
	03/08/97	24.65		30.58	--	3,500	310	ND	230	630	ND	ND	100
	09/04/97	30.44		24.79	--	700	27	ND	48	34	ND	ND	160
	03/09/98	19.20		36.03	--	410	22	1.2	ND <sup>9</sup>	6.1	24	ND	4.4
	09/01/98	26.33		28.90	--	ND	ND	ND	ND	ND	6.1	ND	ND
	03/02/99	25.50		29.73	--	2,100	110	2.6	ND <sup>9</sup>	240	39	ND	6.7
	09/07/99 <sup>13</sup>	27.63		27.60	--	2,400 <sup>12</sup>	67	ND <sup>9</sup>	150	150	ND <sup>9</sup>	ND	1.1
	03/09/00	24.05		31.18	--	3,250 <sup>12</sup>	143	ND <sup>9</sup>	59.0	326	ND <sup>9</sup>	ND <sup>9</sup>	ND <sup>9</sup>
	09/11/00 <sup>17</sup>	27.83		27.40	--	ND	ND	ND	ND	ND	ND	ND	1.17
	03/26/01 <sup>17</sup>	25.75		29.48	--	ND	ND	ND	ND	ND	ND	ND	ND
	09/04/01 <sup>19</sup>	30.41		24.82	--	5,400 <sup>15</sup>	110	<10	800	220	<100	<5.0	<5.0
	03/18/02 <sup>21</sup>	27.35		27.88	--	<50	<0.50	<0.50	0.55	1.2	<5.0	<0.50 <sup>18</sup>	<0.50 <sup>18</sup>
	U-4 55.39	03/14/95		26.52	25.0-40.0	28.87	--	490	3.2	2.1	0.79	1.2	--
06/20/95		26.90	28.49	--		ND	ND	ND	ND	1.5	--	--	--
09/18/95		29.79	25.60	--		ND	ND	ND	ND	ND	-- <sup>6</sup>	--	--
12/14/95		31.23	24.16	--		ND	ND	0.59	ND	0.79	-- <sup>7</sup>	ND	ND
03/06/96		25.30	30.09	--		ND	ND	ND	ND	0.62	50	--	--
06/04/96		26.19	29.20	--		ND	ND	ND	ND	ND	290	--	--
09/06/96		29.32	26.07	--		ND	ND	ND	ND	ND	ND	--	--
03/08/97		24.79	30.60	--		ND	ND	ND	ND	ND	ND	--	--
09/04/97		30.71	24.68	--		ND	ND	ND	ND	ND	18	--	--
03/09/98		19.37	36.02	--		ND	ND	ND	ND	ND	ND	--	--
09/01/98		26.56	28.83	--		ND	ND	ND	ND	ND	ND	--	--
03/02/99		25.62	29.77	--		110	0.89	0.53	ND	0.79	4.9	--	--
09/07/99		26.82	28.57	--		ND	ND	ND	ND	ND	3.0	--	--
03/09/00		24.07	31.32	--		ND	ND	0.615	ND	1.05	ND	--	--
09/11/00		26.48	28.91	--		ND	ND	0.686	ND	ND	ND	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-4	03/26/01	25.69		29.70	--	ND	ND	ND	ND	ND	ND	--	--
(cont)	09/04/01	30.60		24.79	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
	03/18/02	27.45		27.94	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
<b>U-5</b>													
54.18	03/14/95	25.20	25.0-40.0	28.98	--	ND	ND	ND	ND	1.2	--	ND	ND
	06/20/95	25.60		28.58	--	ND	ND	ND	ND	1.6	--	--	--
	09/18/95	28.55		25.63	--	ND	ND	ND	ND	0.66	--	--	--
	12/14/95	29.94		24.24	--	ND	ND	ND	ND	ND	--	ND	ND
	03/06/96	24.03		30.15	--	ND	ND	ND	ND	ND	ND	--	--
	06/04/96	24.91		29.27	--	ND	ND	ND	ND	ND	ND	--	--
	09/06/96	28.06		26.12	--	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	23.49		30.69	--	ND	ND	ND	ND	ND	ND	--	--
	09/04/97	29.46		24.72	--	ND	ND	ND	ND	ND	ND	--	--
	03/09/98	18.10		36.08	--	ND	ND	ND	ND	ND	ND	--	--
	09/01/98	25.27		28.91	--	ND	ND	ND	ND	ND	ND	--	--
	03/02/99	24.35		29.83	--	ND	ND	ND	ND	ND	ND	--	--
	09/07/99	26.39		27.79	--	ND	ND	ND	ND	ND	ND	--	--
	03/09/00	22.81		31.37	--	ND	ND	ND	ND	ND	ND	--	--
	09/11/00	25.36		28.82	--	ND	ND	0.640	ND	ND	ND	--	--
	03/26/01	24.55		29.63	--	ND	ND	ND	ND	ND	ND	--	--
	09/04/01	29.34		24.84	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
	03/18/02	26.16		28.02	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
<b>U-6</b>													
55.36	03/14/95	26.94	25.0-40.0	28.42	--	14,000	170	36	790	1,500	--	ND	210
	06/20/95	27.15		28.21	--	8,500	170	11	950	1,300	--	--	--
	09/18/95	29.95		25.41	--	9,500	260	ND	1,400	1,800	-- <sup>6</sup>	--	--
	12/14/95	31.32		24.04	--	15,000	240	ND	1,400	1,700	-- <sup>7</sup>	ND	370
	03/06/96	25.71		29.65	--	2,400	54	ND	170	250	ND	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.L. (ft.lgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-6	06/04/96	26.52	25.0-40.0	28.84	--	4,600	83	ND	400	520	46	--	--
(cont)	09/06/96	29.41		25.95	--	12,000	180	6.4	690	600	95	--	--
	03/08/97	25.25		30.11	--	2,000	180	ND	96	290	ND	--	--
	09/04/97	30.75		24.61	--	680	17	ND	52	39	ND	--	--
	03/09/98	19.84		35.52	--	690	41	8.5	3.2	140	16	--	--
	09/01/98	INACCESSIBLE (PAVED OVER)			--	--	--	--	--	--	--	--	--
	03/02/99	25.95		29.41	--	3,900	240	ND <sup>9</sup>	650	430	45	--	--
	09/07/99	28.19		27.17	--	320 <sup>12</sup>	14	ND <sup>9</sup>	5.2	ND <sup>9</sup>	10	--	--
	03/09/00	24.64		30.72	--	4,980 <sup>12</sup>	193	ND <sup>9</sup>	520	365	ND <sup>9</sup>	--	--
	09/11/00	28.35		27.01	--	538 <sup>15</sup>	22.8	ND	13.8	3.11	ND	--	--
	10/13/00	29.67		25.69	--	--	--	--	--	--	--/ND <sup>18</sup>	--	--
	03/26/01	26.88		28.48	--	16,400 <sup>12</sup>	412	ND <sup>9</sup>	2,010	1,010	ND <sup>9</sup>	--	--
	09/04/01	30.81		24.55	--	8,000 <sup>15</sup>	200	<25	1,100	250	<250	--	--
	03/18/02	27.87		27.49	--	3,900 <sup>15</sup>	96	<10	590	210	<100	--	--
U-7													
55.05	03/14/95	26.13	25.0-40.0	28.92	--	ND	ND	ND	ND	ND	--	ND	ND
	06/20/95	26.38		28.67	--	ND	ND	ND	ND	ND	--	--	--
	09/18/95	29.21		25.84	--	ND	ND	ND	ND	ND	--	--	--
	12/14/95	30.75		24.30	--	ND	ND	ND	ND	0.88	--	ND	ND
	03/06/96	25.10		29.95	--	ND	ND	ND	ND	ND	ND	--	--
	06/04/96	25.67		29.38	--	ND	ND	ND	ND	ND	ND	--	--
	09/06/96	28.75		26.30	--	ND	ND	ND	ND	ND	ND	--	--
	03/08/97	24.33		30.72	--	ND	ND	ND	ND	ND	ND	ND	ND
	09/04/97 <sup>8</sup>	30.16		24.89	--	ND	ND	ND	ND	ND	ND	ND	ND
	03/09/98	18.91		36.14	--	ND	ND	ND	ND	ND	ND	ND	ND
	09/01/98 <sup>10</sup>	26.04		29.01	--	88	ND	ND	ND	ND	2.9	ND	ND
	03/02/99 <sup>11</sup>	25.30		29.75	--	ND	ND	ND	ND	ND	ND	ND	ND
	09/07/99	27.27		27.78	--	ND	ND	ND	ND	ND	ND	ND	ND
	03/09/00 <sup>14</sup>	23.76		31.29	--	ND	ND	ND	ND	1.09	ND	ND	ND
	09/11/00 <sup>17</sup>	27.19		27.86	--	ND	ND	ND	ND	ND	ND	ND	ND

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID/ TOC* (ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	1,2-DCB (ppb)	1,2-DCA (ppb)
U-7	03/26/01 <sup>17</sup>	25.61		29.44	--	ND	ND	ND	ND	ND	ND	ND	ND
(cont)	09/04/01 <sup>20</sup>	30.10		24.95	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50
	03/18/02 <sup>22</sup>	27.03		28.02	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50 <sup>18</sup>	<0.50 <sup>18</sup>
<b>Trip Blank</b>													
TB-LB	03/09/98	--	--	--	--	ND	ND	0.53	ND	ND	ND	--	--
	09/01/98	--	--	--	--	ND	ND	ND	ND	ND	5.0	--	--
	03/02/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	09/07/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	03/09/00	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	09/11/00	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	10/13/00	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	03/26/01	--	--	--	--	ND	ND	ND	ND	ND	ND	--	--
	09/04/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
	03/18/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

**EXPLANATIONS:**

Groundwater monitoring data and laboratory analytical results prior to March 9, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing	TPH-G = Total Petroleum Hydrocarbons as Gasoline	1,2-DCA = 1,2-Dichloroethane
DTW = Depth to Water	B = Benzene	(ppb) = Parts per billion
(ft.) = Feet	T = Toluene	ND = Not Detected
S.I. = Screen Interval	E = Ethylbenzene	-- = Not Measured/Not Analyzed
(ft.bgs) = Feet Below Ground Surface	X = Xylenes	(D) = Duplicate
GWE = Groundwater Elevation	MTBE = Methyl tertiary butyl ether	
TPH-D = Total Petroleum Hydrocarbons as Diesel	1,2-DCB = 1,2-Dichlorobenzene	

\* TOC elevations were surveyed March 1995, based on Benchmark provided by City of San Leandro, City Engineers Office, Datum 1929, USGS adjusted. Prior to December 16, 1993, the DTW measurements were taken from the top of well covers.

- 1 Total Oil and Grease (TOG) was ND.
- 2 Not a typical diesel pattern; lower boiling hydrocarbons in the boiling range of stoddard calculated as diesel.
- 3 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 4 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 5 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 6 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.
- 7 Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well.
- 8 Carbon tetrachloride was detected at a concentration of 1.3 ppb.
- 9 Detection limit raised. Refer to analytical reports.
- 10 Carbon tetrachloride was detected at a concentration of 2.0 ppb, and Chloroform was detected at a concentration of 0.60 ppb.
- 11 Carbon tetrachloride was detected at a concentration of 1.2 ppb.
- 12 Laboratory report indicates gasoline C6-C12.
- 13 Bromodichloromethane was detected at 1.4 ppb and Chloroform was detected at 31 ppb. All EPA Method 8010 reanalyzed by an alternate column or method to confirm the identification and/or concentration of these results.
- 14 Laboratory report indicates Carbon tetrachloride was detected at 0.801 ppb.
- 15 Laboratory report indicates weathered gasoline C6-C12.
- 16 All other Volatile Organic Compounds (VOCs) by EPA Method 8010 were ND with a raised detection limit, except for Bromadichloromethane was detected at 3.58 ppb and Chloroform was detected at 75.2 ppb.
- 17 All other VOCs by EPA Method 8010 were ND.
- 18 Analysis by EPA Method 8260.
- 19 All other VOCs by EPA Method 8021 were less than the reporting limit.
- 20 All other VOCs by EPA Method 8021 were less than the reporting limit, except for Carbon tetrachloride was detected at 0.60 ppb.
- 21 All other VOCs by EPA Method 8260 were less than the reporting limit.

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Tosco (Unocal) Service Station #5430  
1935 Washington Avenue  
San Leandro, California

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**EXPLANATIONS:** (cont)

<sup>22</sup> All other VOCs by EPA Method 8260 were less than the reporting limit, except for Carbon Tetrachloride was detected at 0.65 ppb and Chloroform at 1.5 ppb.

Note: All EPA Method 8010/8021/8260 constituents were ND, except as indicated above.

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
 Tosco (Unocal) Service Station #5430  
 1935 Washington Avenue  
 San Leandro, California

WELL ID	DATE	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
U-6	10/13/00	ND	ND	ND	ND	ND	ND	ND

**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 = Ethylene Dibromide/1,2-Dibromoethane  
 (ppb) = Parts per billion  
 ND = Not Detected

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds



## 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 # Tosco #5430 Job#: 180107.85  
 Address: 1935 Washington Ave. Date: 3/18/02  
 City: San Leandro, CA Sampler: Valko

Well ID U-1 Well Condition: OK  
 Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
 Total Depth 39.65 ft.  
 Depth to Water 28.81 ft.

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

10.84 x VF 0.17 = 1.84 x 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

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

Starting Time: 1140 Weather Conditions: clear  
 Sampling Time: 1200 Water Color: brn. Odor: no  
 Purging Flow Rate: 1 gpm. Sediment Description: SH  
 Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1142</u>	<u>2</u>	<u>7.70</u>	<u>927</u>	<u>69.2</u>			
<u>1144</u>	<u>4</u>	<u>7.55</u>	<u>940</u>	<u>68.9</u>			
<u>1146</u>	<u>5.5</u>	<u>7.50</u>	<u>944</u>	<u>68.7</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-1</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 2010</u>

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

Client/  
Facility # Tosco #5430 Job#: 180107.85  
Address: 1935 Washington Ave. Date: 3/18/02  
City: San Leandro, CA Sampler: Verthas

Well ID U-2 Well Condition: OK  
Well Diameter 2 in. Hydrocarbon Amount Bailed  
Thickness: 0.00 (feet) (product/water): Ø (Gallons)  
Total Depth 39.35 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66  
Depth to Water 27.29 ft. Factor (VF) 6" = 1.50 12" = 5.80

12.06 x VF 0.17 = 2.05 x 3 (case volume) = Estimated Purge Volume: 6.5 (gal.)

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

Starting Time: 1020 Weather Conditions: clear  
Sampling Time: 1040 Water Color: clear Odor: no  
Purging Flow Rate: 1 gpm. Sediment Description: \_\_\_\_\_  
Did well de-water? no If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1022</u>	<u>2</u>	<u>7.74</u>	<u>653</u>	<u>67.3</u>			
<u>1024</u>	<u>4</u>	<u>7.60</u>	<u>642</u>	<u>67.8</u>			
<u>1027</u>	<u>6.5</u>	<u>7.56</u>	<u>639</u>	<u>67.8</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-2</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

Client/  
Facility # Tosco #5430 Job#: 180107.85  
Address: 1935 Washington Ave. Date: 3/18/02  
City: San Leandro, CA Sampler: Van Allen

Well ID U-3 Well Condition: ON  
Well Diameter 2 in. Hydrocarbon Thickness: 0.00 (feet) Amount Bailed (product/water): 0 (Gallons)  
Total Depth 38.55 ft. Volume 2" = 0.17 3" = 0.38 4" = 0.66  
Depth to Water 27.35 ft. Factor (VF) 6" = 1.50 12" = 5.80

11.20 x VF 0.17 = 1.90 x 3 (case volume) = Estimated Purge Volume: 6 (gal.)

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

Starting Time: 1215 Weather Conditions: clear  
Sampling Time: 1230 Water Color: clear Odor: no  
Purging Flow Rate: 1 gpm. Sediment Description:  
Did well de-water? no If yes; Time: Volume: (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1217</u>	<u>2</u>	<u>7.50</u>	<u>1080</u>	<u>69.7</u>			
<u>1219</u>	<u>4</u>	<u>7.40</u>	<u>1087</u>	<u>69.3</u>			
<u>1221</u>	<u>6</u>	<u>7.34</u>	<u>1091</u>	<u>69.2</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-3</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 8010</u>

COMMENTS: \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

Client/  
Facility # Tosco #5430 Job#: 180107.85  
Address: 1935 Washington Ave. Date: 3/18/02  
City: San Leandro, CA Sampler: Vetter

Well ID U-4 Well Condition: OK  
Well Diameter 2 in. Hydrocarbon Amount Bailed  
Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
Total Depth 38.90 ft.  
Depth to Water 27.45 ft.

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

11.45 x VF 0.17 = 1.94 x 3 (case volume) = Estimated Purge Volume: 6 (gal.)

Purge Equipment: Disposable Bailer  
Stack  
Bailer  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 0950 Weather Conditions: clear  
Sampling Time: 1005 Water Color: clear Odor: no  
Purging Flow Rate: 1 gpm. Sediment Description: \_\_\_\_\_  
Did well de-water? no If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>0952</u>	<u>2</u>	<u>7.69</u>	<u>717</u>	<u>67.5</u>			
<u>0954</u>	<u>4</u>	<u>7.53</u>	<u>708</u>	<u>67.8</u>			
<u>0956</u>	<u>6</u>	<u>7.50</u>	<u>702</u>	<u>68.0</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-4</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

Client/  
Facility # Tosco #5430 Job#: 180107.85  
Address: 1935 Washington Ave. Date: 3/18/02  
City: San Leandro, CA Sampler: Vantho

Well ID U-5 Well Condition: OK  
Well Diameter 2 in. Hydrocarbon Amount Bailed  
Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
Total Depth 38.35 ft.  
Depth to Water 26.16 ft.

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

12.19 X VF 0.17 = 2.07 X 3 (case volume) = Estimated Purge Volume: 6.5 (gal.)

Purge Equipment: Disposable Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 0920 Weather Conditions: clear  
Sampling Time: 0925 Water Color: clear Odor: no  
Purging Flow Rate: 1 gpm. Sediment Description: \_\_\_\_\_  
Did well de-water? \_\_\_\_\_ If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ hos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>0922</u>	<u>2</u>	<u>7.73</u>	<u>602</u>	<u>67.2</u>			
<u>0924</u>	<u>4</u>	<u>7.60</u>	<u>590</u>	<u>67.6</u>			
<u>0926</u>	<u>6.5</u>	<u>7.58</u>	<u>584</u>	<u>67.8</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-5</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe</u>

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

Client/Facility # Tosco #5430 Job#: 180107.85  
 Address: 1935 Washington Ave. Date: 3/18/02  
 City: San Leandro, CA Sampler: Weather

Well ID U-6 Well Condition: OK  
 Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0.00 (feet) (product/water): \$ (Gallons)  
 Total Depth 40.00 ft.  
 Depth to Water 27.87 ft.

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

12.13 x VF 0.17 = 2.06 x 3 (case volume) = Estimated Purge Volume: 6.5 (gal.)

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

Starting Time: 1245 Weather Conditions: clear  
 Sampling Time: 1300 Water Color: grayish Odor: Y  
 Purging Flow Rate: 1 gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? NO If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1247</u>	<u>2</u>	<u>7.48</u>	<u>1097</u>	<u>69.6</u>			
<u>1249</u>	<u>4</u>	<u>7.32</u>	<u>1108</u>	<u>69.2</u>			
<u>1252</u>	<u>6.5</u>	<u>7.28</u>	<u>1110</u>	<u>69.3</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-6</u>	<u>3 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe</u>

COMMENTS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**WELL MONITORING/SAMPLING  
FIELD DATA SHEET.**

Client/  
Facility # Tosco #5430 Job#: 180107.85  
Address: 1935 Washington Ave. Date: 3/18/02  
City: San Leandro, CA Sampler: Vartkes

Well ID U-7 Well Condition: OK  
Well Diameter 2 in. Hydrocarbon Amount Bailed  
Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
Total Depth 37.75 ft.  
Depth to Water 27.03 ft.

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

10.72 x VF 0.17 = 1.82 x 3 (case volume) = Estimated Purge Volume: 5.5 (gal.)

Purge Equipment: Disposable Bailer  
Bailer  
Stack  
Suction  
Grundfos  
Other: \_\_\_\_\_

Sampling Equipment: Disposable Bailer  
Bailer  
Pressure Bailer  
Grab Sample  
Other: \_\_\_\_\_

Starting Time: 1103 Weather Conditions: clear  
Sampling Time: 1125 Water Color: clear Odor: no  
Purging Flow Rate: 1 gpm. Sediment Description: \_\_\_\_\_  
Did well de-water? no If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu$ mhos/cm	Temperature $^{\circ}$ F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1105</u>	<u>2</u>	<u>7.80</u>	<u>644</u>	<u>68.1</u>			
<u>1107</u>	<u>4</u>	<u>7.68</u>	<u>633</u>	<u>68.4</u>			
<u>1109</u>	<u>5.5</u>	<u>7.62</u>	<u>630</u>	<u>68.7</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>U-7</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe + 8010</u>

COMMENTS: \_\_\_\_\_





Tosco Marketing Company  
2000 Oros Canyon Pl, Ste. 420  
San Ramon, California 94583

Facility Number Tosco #5430  
 Facility Address 1935 Washington Ave., San Leandro, CA  
 Consultant Project Number 180107.85  
 Consultant Home Gertler-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) Varitas Talhjian  
 Collection Date 3/18/02  
 Signature [Signature]

C203087

Sample Number	Lab Sample Number	Number of Containers	Media S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Load (Yes or No)	Analysis To Be Performed											DO NOT BILL TB-LB ANALYSIS					
								TPH Gas + BTX (M101)	TPH Dissolved (M015)	Oil and Grease (M200)	Purgeable Halocarbons (M010)	Purgeable Aromatics (M205)	Purgeable Organics (M240)	Extractable Organics (M270)	Metals Cd, Cr, Pb, Zn, Ni (M040 or M4)	Remarks								
TB-LB	01	1	W	G		HCL	Y	X																
U-1	02	5	"	"	1200	"	"	X				X												
U-2	03	3	"	"	1040	"	"	X				X												
U-3	04	5	"	"	1230	"	"	X				X												
U-4	05	3	"	"	1005	"	"	X																
U-5	06	3	"	"	0935	"	"	X																
U-6	07	3	"	"	1300	"	"	X																
U-7	08	5	"	"	1125	"	"	X				X												

Relinquished By (Signature) <u>[Signature]</u>	Organization G-R Inc.	Date/Time 3/18/02	Received By (Signature) <u>[Signature]</u>	Organization Pagnotti	Date/Time 3/18/02	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 5-Days <u>10 Days</u>
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	



**Sequoia  
Analytical**

1551 Industrial Road  
San Carlos, CA 94070  
(650) 232-9600  
FAX (650) 232-9612  
www.sequoialabs.com

2 April, 2002

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

RECEIVED

APR 2 2002

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

RE: Tosco(1)  
Sequoia Report: L203084

Enclosed are the results of analyses for samples received by the laboratory on 03/18/02 18:45. 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 #5430, San Leandro  
Project Manager: Deanna Harding

**Reported:**  
04/02/02 13:53

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L203084-01	Water	03/18/02 00:00	03/18/02 18:45
U-1	L203084-02	Water	03/18/02 12:00	03/18/02 18:45
U-2	L203084-03	Water	03/18/02 10:40	03/18/02 18:45
U-3	L203084-04	Water	03/18/02 12:30	03/18/02 18:45
U-4	L203084-05	Water	03/18/02 10:05	03/18/02 18:45
U-5	L203084-06	Water	03/18/02 09:35	03/18/02 18:45
U-6	L203084-07	Water	03/18/02 13:00	03/18/02 18:45
U-7	L203084-08	Water	03/18/02 11:25	03/18/02 18:45

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.*

Wayne Stevenson, Project Manager



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

Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

**Reported:**  
04/02/02 13:53

**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
<b>TB-LB (L203084-01) Water Sampled: 03/18/02 00:00 Received: 03/18/02 18:45</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030073	03/26/02	03/27/02	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>		97.6 %	70-130		"	"	"	"	
<b>U-1 (L203084-02) Water Sampled: 03/18/02 12:00 Received: 03/18/02 18:45</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030073	03/26/02	03/27/02	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>		96.8 %	70-130		"	"	"	"	
<b>U-2 (L203084-03) Water Sampled: 03/18/02 10:40 Received: 03/18/02 18:45</b>									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030073	03/26/02	03/27/02	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>		100 %	70-130		"	"	"	"	

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

 Project: Tosco(1)  
 Project Number: Tosco #5430, San Leandro  
 Project Manager: Deanna Harding

 Reported:  
 04/02/02 13:53

**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
<b>U-3 (L203084-04) Water</b> Sampled: 03/18/02 12:30 Received: 03/18/02 18:45									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030077	03/27/02	03/27/02	EPA 8021B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	0.55	0.50	"	"	"	"	"	"	
Xylenes (total)	1.2	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	70-130		"	"	"	"	
<b>U-4 (L203084-05) Water</b> Sampled: 03/18/02 10:05 Received: 03/18/02 18:45									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030073	03/26/02	03/27/02	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>		97.9 %	70-130		"	"	"	"	
<b>U-5 (L203084-06) Water</b> Sampled: 03/18/02 09:35 Received: 03/18/02 18:45									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030077	03/27/02	03/27/02	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>		116 %	70-130		"	"	"	"	



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

Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

Reported:  
04/02/02 13:53

**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
<b>U-6 (L203084-07) Water</b> Sampled: 03/18/02 13:00 Received: 03/18/02 18:45									
Purgeable Hydrocarbons as Gasoline	3900	1000	ug/l	20	2030076	03/27/02	03/27/02	EPA 8021B	P-02
Benzene	96	10	"	"	"	"	"	"	"
Toluene	ND	10	"	"	"	"	"	"	"
Ethylbenzene	590	10	"	"	"	"	"	"	"
Xylenes (total)	210	10	"	"	"	"	"	"	"
Methyl tert-butyl ether	ND	100	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		95.4 %	70-130	"	"	"	"	"	"
<b>U-7 (L203084-08) Water</b> Sampled: 03/18/02 11:25 Received: 03/18/02 18:45									
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030077	03/27/02	03/27/02	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>		110 %	70-130	"	"	"	"	"	"



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

Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

Reported:  
04/02/02 13:53

**Volatile Organic Compounds by EPA Method 8260B**

**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-1 (L203084-02) Water Sampled: 03/18/02 12:00 Received: 03/18/02 18:45									A-04
Bromodichloromethane	ND	0.50	ug/l	1	2030070	03/27/02	03/27/02	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	4.4	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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		101 %		63-118	"	"	"	"	
Surrogate: Toluene-d8		101 %		73-125	"	"	"	"	
Surrogate: 4-BFB		100 %		68-118	"	"	"	"	

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

 Project: Tosco(1)  
 Project Number: Tosco #5430, San Leandro  
 Project Manager: Deanna Harding

 Reported:  
 04/02/02 13:53

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-3 (L203084-04) Water									A-04
Sampled: 03/18/02 12:30 Received: 03/18/02 18:45									
Bromodichloromethane	ND	0.50	ug/l	1	2030070	03/27/02	03/27/02	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	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		105 %	63-118		"	"	"	"	
Surrogate: Toluene-d8		97.6 %	73-125		"	"	"	"	
Surrogate: 4-BFB		101 %	68-118		"	"	"	"	



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

 Project: Tosco(1)  
 Project Number: Tosco #5430, San Leandro  
 Project Manager: Deanna Harding

**Reported:**  
 04/02/02 13:53

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-7 (L203084-08) Water Sampled: 03/18/02 11:25 Received: 03/18/02 18:45									A-04
Bromodichloromethane	ND	0.50	ug/l	1	2030070	03/27/02	03/27/02	EPA 8260B	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	0.50	"	"	"	"	"	"	
<b>Carbon tetrachloride</b>	<b>0.65</b>	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
<b>Chloroform</b>	<b>1.5</b>	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>		102 %		63-118	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97.8 %		73-125	"	"	"	"	
<i>Surrogate: 4-BFB</i>		99.6 %		68-118	"	"	"	"	



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

Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

Reported:  
04/02/02 13:53

**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 2030073 - EPA 5030B (P/T)**

**Blank (2030073-BLK1)**

Prepared & Analyzed: 03/26/02

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: <i>a,a,a</i> -Trifluorotoluene	10.6		"	10.0		106	70-130			

**LCS (2030073-BS1)**

Prepared & Analyzed: 03/26/02

Benzene	11.5	0.50	ug/l	10.0		115	70-130			
Toluene	10.3	0.50	"	10.0		103	70-130			
Ethylbenzene	9.98	0.50	"	10.0		99.8	70-130			
Xylenes (total)	29.4	0.50	"	30.0		98.0	70-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.6		"	10.0		106	70-130			

**LCS (2030073-BS2)**

Prepared & Analyzed: 03/26/02

Purgeable Hydrocarbons as Gasoline	255	50	ug/l	250		102	70-130			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.5		"	10.0		105	70-130			

**Matrix Spike (2030073-MS1)**

Source: L203084-03

Prepared & Analyzed: 03/27/02

Purgeable Hydrocarbons as Gasoline	246	50	ug/l	250	ND	98.4	60-140			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.2		"	10.0		102	70-130			

**Matrix Spike Dup (2030073-MSD1)**

Source: L203084-03

Prepared & Analyzed: 03/27/02

Purgeable Hydrocarbons as Gasoline	275	50	ug/l	250	ND	110	60-140	11.1	25	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.7		"	10.0		107	70-130			

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

 Project: Tosco(1)  
 Project Number: Tosco #5430, San Leandro  
 Project Manager: Deanna Harding

 Reported:  
 04/02/02 13:53

**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
<b>Batch 2030076 - EPA 5030B (P/T)</b>										
<b>Blank (2030076-BLK1)</b>										
Prepared & Analyzed: 03/27/02										
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	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.22		"	10.0		92.2	70-130			
<b>LCS (2030076-BS1)</b>										
Prepared & Analyzed: 03/27/02										
Benzene	11.3	0.50	ug/l	10.0		113	70-130			
Toluene	10.1	0.50	"	10.0		101	70-130			
Ethylbenzene	9.90	0.50	"	10.0		99.0	70-130			
Xylenes (total)	29.5	0.50	"	30.0		98.3	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	11.1		"	10.0		111	70-130			
<b>LCS (2030076-BS2)</b>										
Prepared & Analyzed: 03/27/02										
Purgeable Hydrocarbons as Gasoline	259	50	ug/l	250		104	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.57		"	10.0		95.7	70-130			
<b>Matrix Spike (2030076-MS1)</b>										
Source: L203087-05 Prepared & Analyzed: 03/27/02										
Benzene	11.6	0.50	ug/l	10.0	ND	116	60-140			
Toluene	11.1	0.50	"	10.0	0.80	103	60-140			
Ethylbenzene	10.1	0.50	"	10.0	ND	101	60-140			
Xylenes (total)	29.6	0.50	"	30.0	ND	98.7	60-140			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.1		"	10.0		101	70-130			
<b>Matrix Spike Dup (2030076-MSD1)</b>										
Source: L203087-05 Prepared & Analyzed: 03/27/02										
Benzene	11.7	0.50	ug/l	10.0	ND	117	60-140	0.858	25	
Toluene	11.2	0.50	"	10.0	0.80	104	60-140	0.897	25	
Ethylbenzene	10.2	0.50	"	10.0	ND	102	60-140	0.985	25	
Xylenes (total)	30.1	0.50	"	30.0	ND	100	60-140	1.68	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.3		"	10.0		103	70-130			



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Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

Reported:  
04/02/02 13:53

**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 2030077 - EPA 5030B (P/T)**

**Blank (2030077-BLK1)**

Prepared & Analyzed: 03/27/02

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	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.81		"	10.0		88.1	70-130			

**LCS (2030077-BS1)**

Prepared & Analyzed: 03/27/02

Benzene	11.6	0.50	ug/l	10.0		116	70-130			
Toluene	10.6	0.50	"	10.0		106	70-130			
Ethylbenzene	10.1	0.50	"	10.0		101	70-130			
Xylenes (total)	30.3	0.50	"	30.0		101	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.75		"	10.0		97.5	70-130			

**LCS (2030077-BS2)**

Prepared & Analyzed: 03/27/02

Purgeable Hydrocarbons as Gasoline	259	50	ug/l	250		104	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	11.6		"	10.0		116	70-130			

**Matrix Spike (2030077-MS1)**

Source: L203063-14

Prepared & Analyzed: 03/27/02

Benzene	11.9	0.50	ug/l	10.0	ND	119	60-140			
Toluene	10.9	0.50	"	10.0	ND	109	60-140			
Ethylbenzene	10.3	0.50	"	10.0	ND	103	60-140			
Xylenes (total)	30.5	0.50	"	30.0	ND	102	60-140			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.6		"	10.0		106	70-130			

**Matrix Spike Dup (2030077-MSD1)**

Source: L203063-14

Prepared & Analyzed: 03/27/02

Benzene	11.8	0.50	ug/l	10.0	ND	118	60-140	0.844	25	
Toluene	10.7	0.50	"	10.0	ND	107	60-140	1.85	25	
Ethylbenzene	10.2	0.50	"	10.0	ND	102	60-140	0.976	25	
Xylenes (total)	29.7	0.50	"	30.0	ND	99.0	60-140	2.66	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	11.2		"	10.0		112	70-130			

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 Dublin CA, 94568

 Project: Tosco(1)  
 Project Number: Tosco #5430, San Leandro  
 Project Manager: Deanna Harding

 Reported:  
 04/02/02 13:53

**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 2030070 - EPA 5030B [P/T]**
**Blank (2030070-BLK1)**

Prepared &amp; Analyzed: 03/26/02

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>	<i>10.0</i>		<i>"</i>	<i>10.0</i>		<i>100</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>10.3</i>		<i>"</i>	<i>10.0</i>		<i>103</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>10.4</i>		<i>"</i>	<i>10.0</i>		<i>104</i>	<i>68-118</i>			



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

Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

Reported:  
04/02/02 13:53

**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 2030070 - EPA 5030B [P/T]**

**Blank (2030070-BLK2)**

Prepared & Analyzed: 03/27/02

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	"							
Surrogate: 1,2-Dichloroethane-d4	10.9		"	10.0		109	63-118			
Surrogate: Toluene-d8	10.2		"	10.0		102	73-125			
Surrogate: 4-BFB	9.69		"	10.0		96.9	68-118			

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

 Project: Tosco(1)  
 Project Number: Tosco #5430, San Leandro  
 Project Manager: Deanna Harding

 Reported:  
 04/02/02 13:53

**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 2030070 - EPA 5030B [P/T]**
**LCS (2030070-BS1)**

Prepared &amp; Analyzed: 03/26/02

Chlorobenzene	18.9	0.50	ug/l	20.0		94.5	70-130			
1,1-Dichloroethene	19.7	0.50	"	20.0		98.5	65-135			
Trichloroethene	20.2	0.50	"	20.0		101	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.5</i>		<i>"</i>	<i>10.0</i>		<i>105</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.44</i>		<i>"</i>	<i>10.0</i>		<i>94.4</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>9.65</i>		<i>"</i>	<i>10.0</i>		<i>96.5</i>	<i>68-118</i>			

**LCS (2030070-BS2)**

Prepared &amp; Analyzed: 03/27/02

Chlorobenzene	19.3	0.50	ug/l	20.0		96.5	70-130			
1,1-Dichloroethene	19.9	0.50	"	20.0		99.5	65-135			
Trichloroethene	19.8	0.50	"	20.0		99.0	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.6</i>		<i>"</i>	<i>10.0</i>		<i>106</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.88</i>		<i>"</i>	<i>10.0</i>		<i>98.8</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>10.0</i>		<i>"</i>	<i>10.0</i>		<i>100</i>	<i>68-118</i>			

**Matrix Spike (2030070-MS1)**

Source: L203095-06

Prepared &amp; Analyzed: 03/26/02

Chlorobenzene	19.1	0.50	ug/l	20.0	ND	95.5	60-140			
1,1-Dichloroethene	19.2	0.50	"	20.0	ND	96.0	60-140			
Trichloroethene	19.7	0.50	"	20.0	ND	98.5	60-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.4</i>		<i>"</i>	<i>10.0</i>		<i>104</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.61</i>		<i>"</i>	<i>10.0</i>		<i>96.1</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>9.87</i>		<i>"</i>	<i>10.0</i>		<i>98.7</i>	<i>68-118</i>			

**Matrix Spike Dup (2030070-MSD1)**

Source: L203095-06

Prepared &amp; Analyzed: 03/26/02

Chlorobenzene	18.9	0.50	ug/l	20.0	ND	94.5	60-140	1.05	25	
1,1-Dichloroethene	17.6	0.50	"	20.0	ND	88.0	60-140	8.70	25	
Trichloroethene	18.3	0.50	"	20.0	ND	91.5	60-140	7.37	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>10.4</i>		<i>"</i>	<i>10.0</i>		<i>104</i>	<i>63-118</i>			
<i>Surrogate: Toluene-d8</i>	<i>9.81</i>		<i>"</i>	<i>10.0</i>		<i>98.1</i>	<i>73-125</i>			
<i>Surrogate: 4-BFB</i>	<i>9.78</i>		<i>"</i>	<i>10.0</i>		<i>97.8</i>	<i>68-118</i>			



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

Project: Tosco(1)  
Project Number: Tosco #5430, San Leandro  
Project Manager: Deanna Harding

**Reported:**  
04/02/02 13:53

### Notes and Definitions

A-04 Sample was analyzed by EPA Method 8260B.  
P-02 Chromatogram Pattern: Weathered Gasoline C6-C12  
DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference