



# GETTLER - RYAN INC.

March 20, 2002  
G-R Job #180021

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

**RECEIVED**  
9:24 am, Mar 23, 2009  
Alameda County  
Environmental Health

**RE: First Semi-Annual Event of February 6, 2002**  
Groundwater Monitoring & Sampling Report  
Tosco (Unocal) Service Station #6419  
6401 Dublin Boulevard  
Dublin, 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).

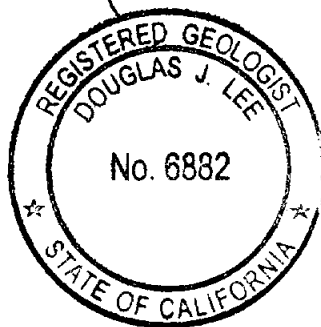
Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are summarized in Table 3. 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 4. 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 - Oxygenate Compounds
- Table 3: Dissolved Oxygen Concentrations
- Table 4: Groundwater Analytical Results - Metals
- Attachments: Standard Operating Procedure - Groundwater Sampling  
Field Data Sheets  
Chain of Custody Document and Laboratory Analytical Reports

#	256419	SS	X	BP
	QM	X	TRANSMITTAL	
	2	3	4	5
				6

6419.qml

**EXPLANATION**

● Groundwater monitoring well

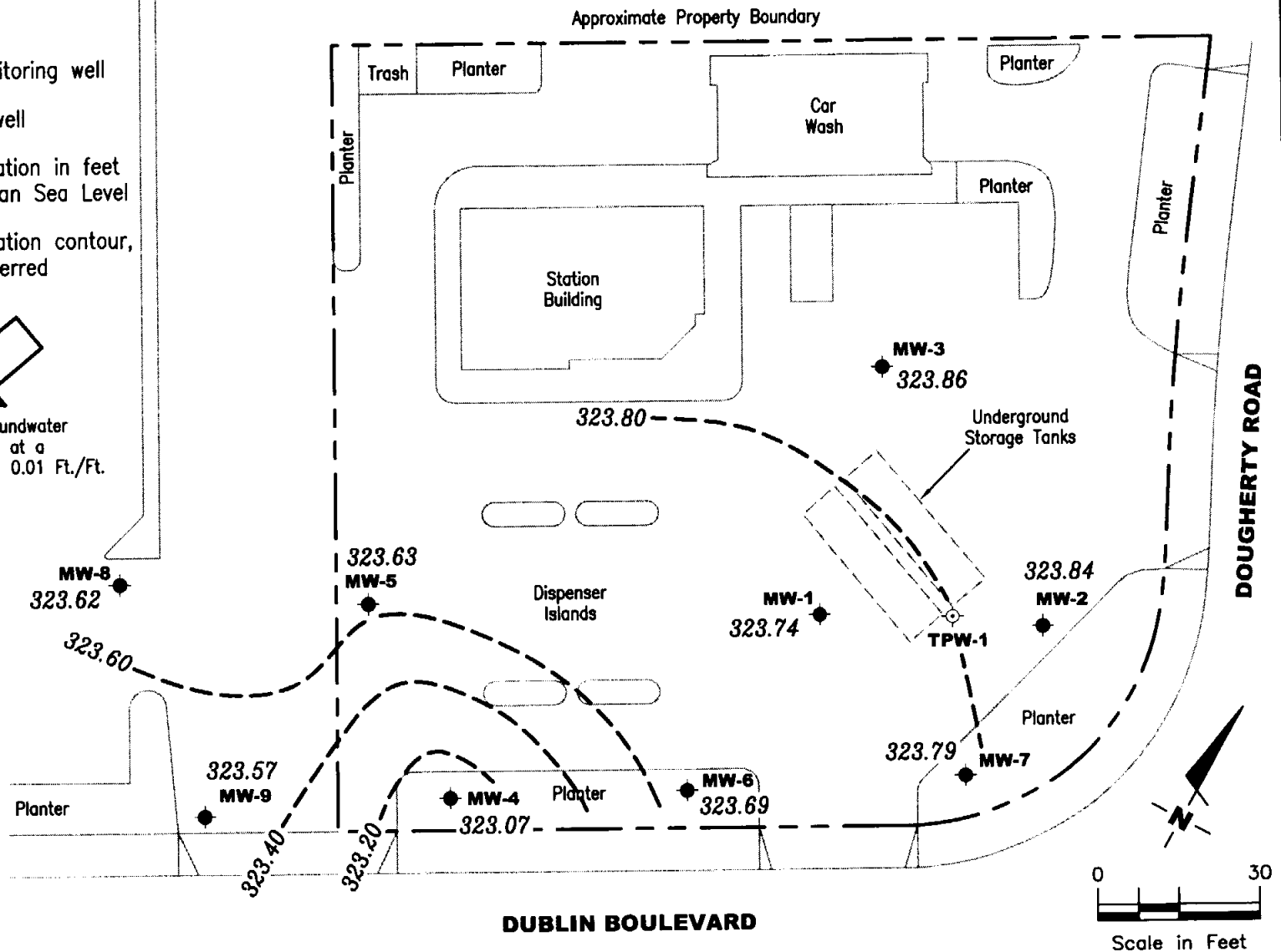
⊕ UST Pit backfill well

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 0.003 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 #6419  
 6401 Dublin Boulevard  
 Dublin, California

FIGURE

1

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 180021

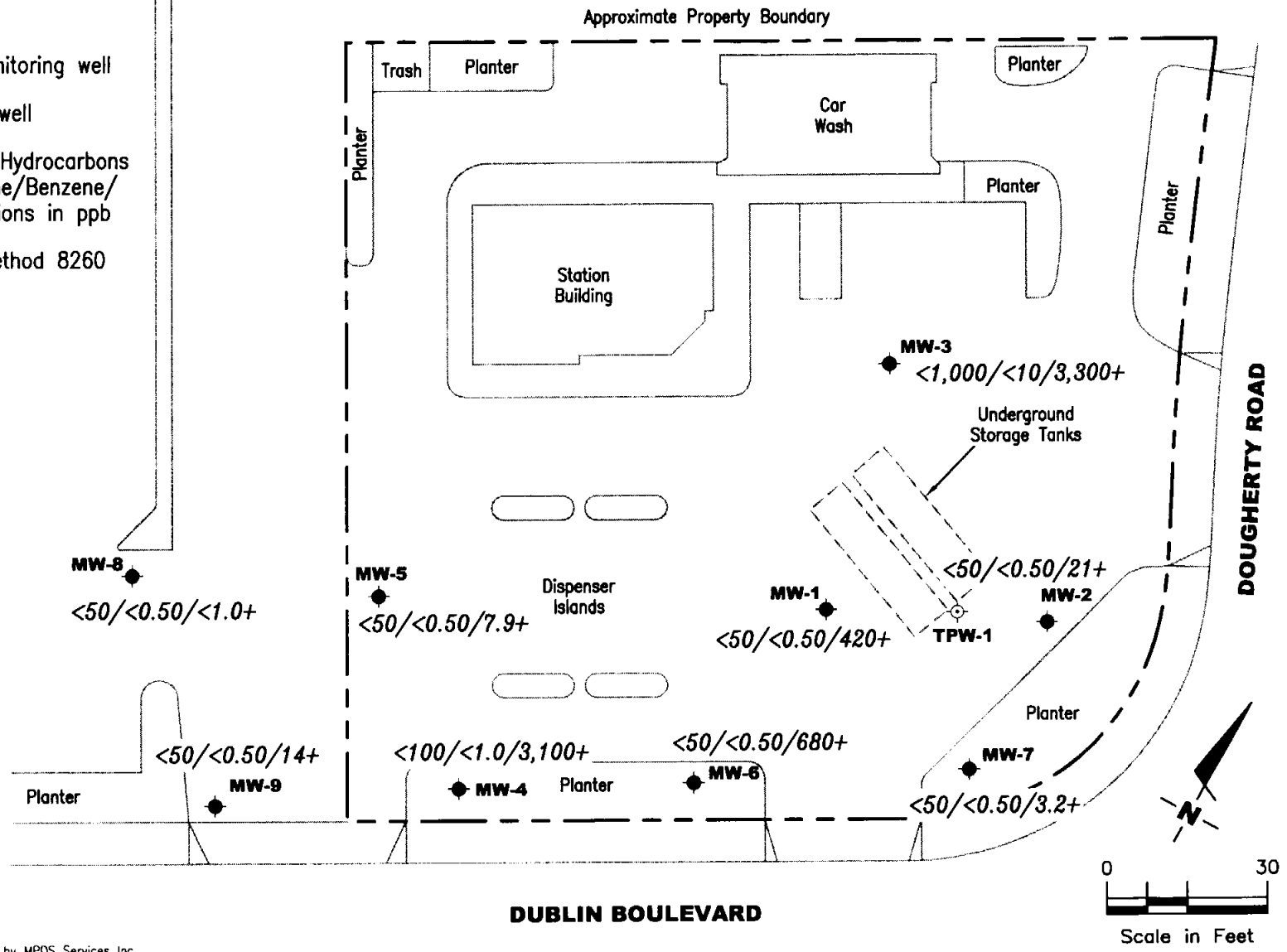
REVIEWED BY

DATE  
 February 6, 2002

REVISED DATE

**EXPLANATION**

- ◆ Groundwater monitoring well
- ⊕ UST Pit backfill well
- A/B/C Total Petroleum Hydrocarbons (TPH) as Gasoline/Benzene/MTBE concentrations in ppb
- + MTBE by EPA Method 8260



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

**GETTLER - RYAN INC.**  
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**CONCENTRATION MAP**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

FIGURE

2

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DATE  
 February 6, 2002

REVISED DATE

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
Tosco (Unocal) Service Station #6419  
6401 Dublin Boulevard  
Dublin, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>MW-1</b>											
330.45	03/14/94	7.27	4.0-19.0	323.18	810 <sup>1</sup>	1,800 <sup>2</sup>	17	ND	ND	ND	--
	08/25/94	8.57		321.88	910 <sup>3</sup>	9,200 <sup>2</sup>	48	ND	540	ND	--
	09/30/94	8.78		321.67	--	--	--	--	--	--	--
	10/20/94	8.98		321.47	--	--	--	--	--	--	--
	11/18/94	7.69		322.76	910 <sup>3</sup>	5,100	33	ND	560	38	--
	12/20/94	7.58		322.87	--	--	--	--	--	--	--
	01/17/95	6.03		324.42	--	--	--	--	--	--	--
	02/15/95	6.29		324.16	660 <sup>1</sup>	3,300	13	ND	180	5.2	--
	03/13/95	5.64		324.81	--	--	--	--	--	--	--
	04/06/95	5.62		324.83	--	--	--	--	--	--	--
	05/17/95	6.26		324.19	200 <sup>3</sup>	130	0.75	ND	1.5	ND	--
	06/15/95	6.75		323.70	--	--	--	--	--	--	--
	08/25/95	7.91		322.54	--	490	9.1	ND	21	2.0	-- <sup>5</sup>
	11/28/95	9.03		321.42	--	1,400	18	3.0	98	3.6	-- <sup>5</sup>
	02/26/96	5.77		324.68	--	560	9.3	ND	22	ND	1,300
	08/23/96	7.78		322.67	--	ND	ND	ND	ND	ND	640
330.23	02/17/97	5.73		324.50	--	120 <sup>4</sup>	1.0	0.95	ND	ND	280
	08/18/97	7.38		322.85	--	ND	ND	ND	ND	ND	100
	02/02/98 <sup>6</sup>	5.10		325.13	--	ND <sup>7</sup>	130	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	32,000
	08/24/98	6.73		323.50	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	26,000/24,000 <sup>8</sup>
	02/10/99	5.46		324.77	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	84,000/100,000 <sup>8</sup>
	04/12/99	6.38		323.85	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	140,000/120,000 <sup>8</sup>
330.21	05/21/99	5.95		324.26	--	--	--	--	--	--	--
	08/02/99	6.75		323.46	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	91,000/140,000 <sup>10</sup>
	02/11/00	6.44		323.77	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	38,000/39,000 <sup>8</sup>
330.18	07/26/00 <sup>13</sup>	7.08		323.10	--	146 <sup>12</sup>	ND	ND	ND	ND	30,900/42,800 <sup>10</sup>
	02/02/01	6.99		323.19	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	5,380/6,430 <sup>8</sup>
	08/24/01	7.72		322.46	--	<50	8.3	<0.50	<0.50	<0.50	10,000/6,600 <sup>8</sup>
330.17	10/11/01	7.72		322.45	--	--	--	--	--	--	--
	02/06/02	6.43		323.74	--	<50	<0.50	<0.50	<0.50	<0.50	450/420 <sup>8</sup>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

WELL ID/ TOC* (ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>MW-2</b>											
330.40	03/14/94	7.23	4.0-20.0	323.17	--	ND	ND	2.8	1.1	8.0	--
	08/25/94	8.41		321.99	--	ND	ND	ND	ND	ND	--
	09/30/94	8.73		321.67	--	--	--	--	--	--	--
	10/20/94	8.92		321.48	--	--	--	--	--	--	--
	11/18/94	7.67		322.73	--	ND	ND	ND	ND	ND	--
	12/20/94	7.48		322.92	--	--	--	--	--	--	--
	01/17/95	6.00		324.40	--	--	--	--	--	--	--
	02/15/95	6.16		324.24	--	ND	ND	ND	ND	ND	--
	03/13/95	5.59		324.81	--	--	--	--	--	--	--
	04/06/95	5.51		324.89	--	--	--	--	--	--	--
	05/17/95	6.15		324.25	--	ND	ND	ND	ND	ND	--
	06/15/95	6.61		323.79	--	--	--	--	--	--	--
	08/25/95	7.45		322.95	--	ND	ND	ND	ND	ND	--
	11/28/95	8.85		321.55	--	ND	ND	ND	ND	ND	--
	02/26/96	5.49		324.91	--	ND	ND	ND	ND	ND	--
	08/23/96	7.44		322.96	SAMPLED ANNUALLY		--	--	--	--	--
330.27	02/17/97	5.64		324.63	--	ND	ND	ND	ND	ND	ND
	08/18/97	7.40		322.87	--	--	--	--	--	--	--
	02/02/98	5.09		325.18	--	ND	ND	ND	ND	ND	62
	08/24/98	6.70		323.57	--	--	--	--	--	--	--
	02/10/99	5.56		324.71	--	ND	ND	ND	ND	ND	130
330.30	05/21/99	5.98		324.32	--	--	--	--	--	--	--
	08/02/99	6.72		323.58	--	ND	ND	ND	ND	ND	120
	02/11/00	6.43		323.87	--	ND	ND	ND	ND	ND	39
330.24	07/26/00 <sup>13</sup>	7.03		323.21	--	ND	ND	ND	ND	ND	89.9
	02/02/01	6.81		323.43	--	ND	ND	ND	ND	ND	20.1
	08/24/01	7.57		322.67	--	<50	<0.50	<0.50	<0.50	<0.50	36
330.24	10/11/01	7.62		322.62	--	--	--	--	--	--	--
	02/06/02	6.40		323.84	--	<50	<0.50	<0.50	<0.50	<0.50	23/21 <sup>8</sup>

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Dublin, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>MW-3</b>											
331.11	03/14/94	7.93	4.0-20.0	323.18	--	150 <sup>4</sup>	ND	ND	ND	ND	--
	08/25/94	9.20		321.91	--	130 <sup>4</sup>	ND	ND	ND	ND	--
	09/30/94	9.43		321.68	--	--	--	--	--	--	--
	10/20/94	9.64		321.47	--	--	--	--	--	--	--
	11/18/94	8.39		322.72	--	130 <sup>4</sup>	ND	ND	ND	ND	--
	12/20/94	8.20		322.91	--	--	--	--	--	--	--
	01/17/95	6.72		324.39	--	--	--	--	--	--	--
	02/15/95	6.93		324.18	--	130 <sup>4</sup>	ND	ND	ND	ND	--
	03/13/95	6.30		324.81	--	--	--	--	--	--	--
	04/06/95	8.20		322.91	--	--	--	--	--	--	--
	05/17/95	6.88		324.23	--	99 <sup>4</sup>	ND	ND	ND	ND	--
	06/15/95	7.35		323.76	--	--	--	--	--	--	--
	08/25/95	8.20		322.91	--	ND	ND	ND	ND	ND	-- <sup>5</sup>
	11/28/95	9.52		321.59	--	ND	ND	ND	ND	ND	--
	02/26/96	6.25		324.86	--	ND	ND	ND	ND	ND	-- <sup>5</sup>
	08/23/96	7.98		323.13	SAMPLED ANNUALLY		--	--	--	--	--
330.68	02/17/97	6.07		324.61	--	ND	ND	ND	ND	ND	68
	08/18/97	7.82		322.86	--	--	--	--	--	--	--
	02/02/98	5.50		325.18	--	ND	ND	ND	ND	ND	100
	08/24/98	7.12		323.56	--	--	--	--	--	--	--
	02/10/99	5.80		324.88	--	ND	ND	ND	ND	ND	92
330.49	05/21/99	6.16		324.33	--	--	--	--	--	--	--
	08/02/99	6.95		323.54	--	ND	ND	ND	ND	ND	140
	02/11/00	6.71		-- <sup>11</sup>	--	ND	ND	ND	ND	ND	46
330.60	07/26/00 <sup>13</sup>	7.35		323.25	--	ND	ND	ND	ND	ND	927
	02/02/01	7.17		323.43	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	2,240
	08/24/01	7.88		322.72	--	<50	<0.50	<0.50	<0.50	<0.50	2,500
330.59	10/11/01	7.83		322.76	--	--	--	--	--	--	--
	02/06/02	6.73		323.86	--	<1,000	<10	<10	<10	<10	4,300/3,300 <sup>8</sup>

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 Dublin, California

WELL ID/ TOC* (ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>MW-4</b>											
330.36	05/21/99 <sup>9</sup>	6.43	4.0-19.0	323.93	--	ND	ND	ND	ND	ND	960/910 <sup>8</sup>
	08/02/99	7.34		323.02	--	ND	10	ND	13	11	ND
	02/11/00	6.92		323.44	--	ND	ND	ND	ND	ND	2,700
330.35	07/26/00 <sup>13</sup>	7.68		322.67	--	ND	ND	ND	ND	ND	3,710
	02/02/01	7.40		322.95	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	5,340
	08/24/01	8.14		322.21	--	<50	<0.50	<0.50	<0.50	<0.50	7,800
330.35	10/11/01	8.29		322.06	--	--	--	--	--	--	--
	<b>02/06/02</b>	<b>7.28</b>		<b>323.07</b>	--	<b>&lt;100</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>&lt;1.0</b>	<b>2,300/3,100<sup>8</sup></b>
<b>MW-5</b>											
330.20	05/21/99 <sup>9</sup>	5.99	4.0-19.0	324.21	--	ND	ND	ND	ND	ND	32/33 <sup>8</sup>
	08/02/99	6.83		323.37	--	ND	ND	ND	ND	ND	230
	02/11/00	6.34		323.86	--	ND	ND	ND	ND	ND	98
	07/26/00 <sup>13</sup>	7.06		323.14	--	ND	ND	ND	ND	ND	25.9
	02/02/01	6.81		323.39	--	ND	ND	ND	ND	ND	18.0
	08/24/01	7.60		322.60	--	<50	<0.50	<0.50	<0.50	<0.50	18
330.18	10/11/01	7.34		322.84	--	--	--	--	--	--	--
	<b>02/06/02</b>	<b>6.55</b>		<b>323.63</b>	--	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>7.7/7.9<sup>8</sup></b>
<b>MW-6</b>											
330.49	05/21/99 <sup>9</sup>	6.24	4.0-19.0	324.25	--	ND	ND	ND	ND	ND	2,200/2,300 <sup>8</sup>
	08/02/99	7.10		323.39	--	ND	ND	ND	ND	ND	ND
	02/11/00	6.60		323.89	--	ND	ND	ND	ND	ND	2,500
	07/26/00 <sup>13</sup>	7.31		323.18	--	ND	ND	ND	ND	ND	4,280
	02/02/01	7.02		323.47	--	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	ND <sup>7</sup>	1,990
	08/24/01	7.84		322.65	--	<200	<2.0	<2.0	<2.0	<2.0	1,100
330.47	10/11/01	8.03		322.44	--	--	--	--	--	--	--
	<b>02/06/02</b>	<b>6.78</b>		<b>323.69</b>	--	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>610/680<sup>8</sup></b>

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
<b>MW-7</b>											
330.43	05/21/99 <sup>9</sup>	6.13	4.0-19.0	324.30	--	ND	ND	ND	ND	ND	22/22 <sup>8</sup>
	08/02/99	6.92		323.51	--	ND	ND	ND	ND	ND	31
	02/11/00	6.50		323.93	--	ND	ND	ND	ND	ND	20
	07/26/00 <sup>13</sup>	7.18		323.25	--	ND	ND	ND	ND	ND	17.9
	02/02/01	6.95		323.48	--	ND	ND	ND	ND	ND	ND
	08/24/01	7.72		322.71	--	<50	<0.50	<0.50	<0.50	<0.50	4.4
330.41	10/11/01	7.87		322.54	--	--	--	--	--	--	--
	<b>02/06/02</b>	<b>6.62</b>		<b>323.79</b>	--	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>3.9/3.2<sup>8</sup></b>
<b>MW-8</b>											
329.97	10/11/01	7.57	--	322.40	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0 <sup>8</sup>
	<b>02/06/02</b>	<b>6.35</b>		<b>323.62</b>	--	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;2.5/&lt;1.0<sup>8</sup></b>
<b>MW-9</b>											
329.51	10/11/01	7.12	--	322.39	--	<50	<0.50	<0.50	<0.50	<0.50	22/15 <sup>8</sup>
	<b>02/06/02</b>	<b>5.94</b>		<b>323.57</b>	--	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>19/14<sup>8</sup></b>
<b>Trip Blank</b>											
TB-LB	02/02/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	08/24/98	--	--	--	--	ND	ND	ND	ND	ND	ND
	02/10/99	--	--	--	--	ND	ND	ND	ND	ND	ND
	04/12/99	--	--	--	--	ND	ND	ND	ND	ND	ND
	05/21/99	--	--	--	--	ND	ND	ND	ND	ND	ND
	08/02/99	--	--	--	--	ND	ND	ND	ND	ND	ND
	02/11/00	--	--	--	--	ND	ND	ND	ND	ND	ND
	07/26/00 <sup>13</sup>	--	--	--	--	ND	ND	ND	ND	ND	ND



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**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #6419  
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WELL ID/ TOC*(ft)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
TB-LB	02/02/01	--		--	--	ND	ND	ND	ND	ND	ND
(cont)	08/24/01	--		--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	02/06/02	--		--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5

**Table 1**  
**Groundwater Monitoring Data and Analytical Results**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

**EXPLANATIONS:**

Groundwater monitoring data and laboratory results prior to February 2, 1998, were compiled from reports prepared by MPDS Services, Inc.

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

\* TOC elevations were resurveyed on November 1, 2001, by Virgil Chavez Land Surveying. The benchmark for the survey was a chiseled square on top center of the concrete curb at the north curb return at the northwest corner of the intersection of Dougherty Road and Dublin Boulevard, (Benchmark Elevation = 330.60 ft., NGVD 1929).

TOC elevations have been surveyed relative to msl, per the benchmark on the northwest corner of Dougherty Road and Sierra Way, (Elevation = 331.728 feet, msl). These TOC elevations have been used prior to the February 17, 1997 monitoring event. TOC elevations have been resurveyed (after station rebuilding) relative to msl, per the Benchmark on the northwest corner of Dougherty Road and Sierra Way, (Elevation = 331.728 feet, msl). TOC elevations were surveyed on August 18, 2000.

- 1 Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
- 2 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
- 3 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.
- 4 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 5 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.
- 6 Well appears to be obstructed at approximately 9 feet.
- 7 Detection limit raised. Refer to analytical reports.
- 8 MTBE by EPA Method 8260.
- 9 Ethanol, t-butanol (TBA), di-isopropyl ether (DIPE), ethyl t-butyl ether (ETBE), and t-amyl methyl ether (TAME) by EPA Method 8260 were all ND.
- 10 MTBE by EPA Method 8260, was analyzed past EPA recommended hold time.
- 11 TOC has been damaged. Cannot accurately calculate GWE.
- 12 Laboratory report indicates unidentified hydrocarbons C6-C12.
- 13 Laboratory report indicates insufficient preservative to reduce ample pH to less than 2. Sample was analyzed within 14 days, but beyond the seventh day recommended for Benzene, Toluene, Xylene and Ethylbenzene.

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Tosco (Unocal) Service Station #6419  
6401 Dublin Boulevard  
Dublin, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	07/26/00	--	ND <sup>1</sup>	42,800	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>	ND <sup>1</sup>
	02/02/01	--	--	6,430	--	--	--	--	--
	08/24/01	<25,000	<1,000	6,600	<100	<100	<100	<100	<100
	02/06/02	<2,500	<100	420	<5.0	<5.0	<5.0	<5.0	<5.0
MW-2	02/06/02	<500	<20	21	<1.0	<1.0	<1.0	<1.0	<1.0
MW-3	02/06/02	<17,000	<670	3,300	<33	<33	<33	<33	<33
MW-4	02/06/02	<12,000	<500	3,100	<25	<25	<25	<25	<25
MW-5	02/06/02	<500	<20	7.9	<1.0	<1.0	<1.0	<1.0	<1.0
MW-6	02/06/02	<4,200	<170	680	<8.3	<8.3	<8.3	<8.3	<8.3
MW-7	02/06/02	<500	<20	3.2	1.4	<1.0	<1.0	<1.0	<1.0
MW-8	10/11/01	<500	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
	02/06/02	<500	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-9	10/11/01	<500	<20	15	<2.0	<2.0	<2.0	<2.0	<2.0
	02/06/02	<500	<20	14	<1.0	<1.0	<1.0	<1.0	<1.0

**Table 2**  
**Groundwater Analytical Results - Oxygenate Compounds**  
Tosco (Unocal) Service Station #6419  
6401 Dublin Boulevard  
Dublin, California

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**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/Ethylene dibromide  
(ppb) = Parts per billion  
-- = Not Analyzed  
ND = Not Detected

<sup>1</sup> Detection limit raised. Refer to analytical reports.

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds

**Table 3**  
**Dissolved Oxygen Concentrations**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
MW-1	02/15/95	--	4.30
	05/17/95	--	1.20
	08/25/95	--	2.71
	11/28/95	--	3.25
	02/26/96	5.23	1.41
	08/23/96	3.83	N/A
	02/17/97	0.82	0.78
	08/18/97	1.28	2.35
	05/16/01	1.54	--
	08/24/01	--	3.10
MW-2	02/15/95	--	1.90
	02/26/96	0.62	0.43
	08/23/96	2.04	N/A
	02/17/97	0.90	0.82
	08/18/97	1.16	--
	05/16/01	1.47	--
	08/24/01	--	2.60
MW-3	02/15/95	--	2.60
	05/17/95	--	1.13
	08/25/95	--	1.86
	11/28/95	--	6.81
	02/26/96	16.83	1.11
	08/23/96	3.29	N/A
	02/17/97	0.80	0.80
	08/18/97	1.43	--
	05/16/01	1.65	--
	08/24/01	--	2.60
MW-4	08/24/01	--	2.30
MW-5	08/24/01	--	2.10
MW-6	08/24/01	--	2.70

**Table 3**  
**Dissolved Oxygen Concentrations**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
MW-7	08/24/01	--	2.70

**EXPLANATIONS:**

Dissolved oxygen concentrations were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = Milligrams per liter

-- = Not Measured

N/A = Not Applicable

**Table 4**  
**Groundwater Analytical Data - Metals**  
 Tosco (Unocal) Service Station #6419  
 6401 Dublin Boulevard  
 Dublin, California

<b>WELL ID</b>	<b>DATE</b>	<b>Cadmium (ppm)</b>	<b>Chromium (ppm)</b>	<b>Lead (ppm)</b>	<b>Nickel (ppm)</b>	<b>Zinc (ppm)</b>
MW-1	03/14/94	ND	0.012	ND	0.030	0.039
	08/25/94	ND	ND	0.024	ND	ND
	11/18/94	ND	0.076	ND	0.067	ND
	02/15/95	ND	ND	ND	ND	ND
	05/17/95	ND	ND	ND	0.021	ND

**EXPLANATIONS:**

Groundwater laboratory analytical results were compiled from reports prepared by MPDS Services, Inc.

(ppm) = Parts per million

ND = Not Detected

## 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 # Tasco # 6419 Job #: 180021.85  
 Address: 6401 Dublin Blvd. Date: 2/6/02  
 City: Dublin, CA Sampler: Vortex

Well ID MW-1 Well Condition: OK  
 Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
 Total Depth 9.25 ft.  
 Depth to Water 6.43 ft.

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

2.82 X VF 0.17 = 0.47 X 3 (case volume) = Estimated Purge Volume: 1.5 (gal.)

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

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

Starting Time: 1615 Weather Conditions: clear  
 Sampling Time: 1628 Water Color: clear Odor: mild  
 Purging Flow Rate: \_\_\_\_\_ gpm. Sediment Description: \_\_\_\_\_  
 Did well de-water? no 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>1617</u>	<u>0.5</u>	<u>7.63</u>	<u>783</u>	<u>60.5</u>			
<u>1621</u>	<u>1</u>	<u>7.48</u>	<u>782</u>	<u>60.7</u>			
<u>1623</u>	<u>1.5</u>	<u>7.45</u>	<u>780</u>	<u>60.2</u>			
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPHIG/btex/mtbe + 824)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

Client/Facility # Tosco # 6419 Job#: 180021.85  
 Address: 6401 Dublin Blvd. Date: 2/6/02  
 City: Dublin, CA Sampler: Vastley

Well ID MW-2 Well Condition: OK  
 Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
 Total Depth 17.60 ft.  
 Depth to Water 6.40 ft.

Volume Factor (VF)	2" = 0.17	3" = 0.38	4" = 0.66
	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 Bailer Stack Suction Grundfos Other: \_\_\_\_\_  
 Sampling Equipment: Disposable Bailer Bailer Pressure Bailer Grab Sample Other: \_\_\_\_\_

Starting Time: 1415 Weather Conditions: clear  
 Sampling Time: 1430 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>1417</u>	<u>2</u>	<u>7.60</u>	<u>1745</u>	<u>68.6</u>			
<u>1419</u>	<u>4</u>	<u>7.47</u>	<u>1759</u>	<u>67.5</u>			
<u>1424</u>	<u>6</u>	<u>7.44</u>	<u>1763</u>	<u>66.9</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 804's</u>

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

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

Client/Facility # Tosco # 6419 Job#: 180021.85  
 Address: 6401 Dublin Blvd. Date: 2/6/02  
 City: Dublin, CA Sampler: Sartley

Well ID MW-3 Well Condition: OK  
 Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
 Total Depth 18.50 ft.  
 Depth to Water 6.73 ft.

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

11.77 x VF 0.17 = 2.00 x 3 (case volume) = Estimated Purge Volume: 6 (gal.)

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

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

Starting Time: 1515 Weather Conditions: clear  
 Sampling Time: 1530 Water Color: clear 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	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1517</u>	<u>2</u>	<u>7.57</u>	<u>1429</u>	<u>68.8</u>			
<u>1519</u>	<u>4</u>	<u>7.42</u>	<u>1423</u>	<u>68.2</u>			
<u>1521</u>	<u>6</u>	<u>7.39</u>	<u>1420</u>	<u>68.5</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(GI)/btex/mtbe + 804's</u>

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

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

Client/  
Facility # Tosco # 6419

Job#: 180021.85

Address: 6401 Dublin Blvd.

Date: 2/6/02

City: Dublin, CA

Sampler: Watters

Well ID MW-4

Well Condition: OK

Well Diameter 2 in.

Hydrocarbon Thickness: 0.07 (feet) Amount Bailed (product/water): 0 (Gallons)

Total Depth 19.10 ft.

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

Depth to Water 7.28 ft.

11.82 x VF 0.17 = 2.00 x 3 (case volume) = Estimated Purge Volume: 6 (gal.)

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

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

Starting Time: 1545

Weather Conditions: clear

Sampling Time: 1600

Water Color: brn Odor: y

Purging Flow Rate: 1 gpm.

Sediment Description: silt

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>1547</u>	<u>2</u>	<u>7.61</u>	<u>1540</u>	<u>68.6</u>			
<u>1549</u>	<u>4</u>	<u>7.43</u>	<u>1524</u>	<u>68.0</u>			
<u>1551</u>	<u>6</u>	<u>7.41</u>	<u>1513</u>	<u>67.7</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 80xy's</u>

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

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

Client/  
Facility # Tosco # 6419  
Address: 6401 Dublin Blvd.  
City: Dublin, CA

Job#: 180021.85  
Date: 2/6/02  
Sampler: Varthel

Well ID MW-5  
Well Diameter 2 in.  
Total Depth 19.40 ft.  
Depth to Water 6.55 ft.

Well Condition: OK  
Hydrocarbon Thickness: 0.00 (feet) Amount Bailed (product/water): 0 (Gallons)  
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
6" = 1.50 12" = 5.80

12.85 x VF 0.17 = 2.18 x 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 1340  
Sampling Time: 1358  
Purging Flow Rate: 1 gpm.  
Did well de-water? NO

Weather Conditions: clear  
Water Color: clear Odor: no  
Sediment Description: \_\_\_\_\_  
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>1342</u>	<u>2</u>	<u>7.70</u>	<u>1410</u>	<u>70.5</u>			
<u>1345</u>	<u>4.5</u>	<u>7.57</u>	<u>1429</u>	<u>69.4</u>			
<u>1347</u>	<u>7</u>	<u>7.53</u>	<u>1426</u>	<u>69.4</u>			
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 8 olys</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

Client/  
Facility # Tosco # 6419  
Address: 6401 Dublin Blvd.  
City: Dublin, CA

Job#: 180021.85  
Date: 2/6/02  
Sampler: Venture

Well ID MW-6  
Well Diameter 2 in.  
Total Depth 19.35 ft.  
Depth to Water 6.78 ft.

Well Condition: OK  
Hydrocarbon Thickness: 0.00 (feet) Amount Bailed (product/water): 0 (Gallons)  
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
6" = 1.50 12" = 5.80

12.57 x VF 0.17 = 2.13 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: 1445  
Sampling Time: 1500  
Purging Flow Rate: 1 gpm.  
Did well de-water? no

Weather Conditions: clear  
Water Color: clear Odor: no  
Sediment Description: \_\_\_\_\_  
If yes; Time: \_\_\_\_\_ Volume: \_\_\_\_\_ (gal.)

Time	Volume (gal.)	pH	Conductivity $\mu\text{mhos/cm}$	Temperature $^{\circ}\text{F}$	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
<u>1447</u>	<u>2</u>	<u>7.62</u>	<u>1680</u>	<u>67.6</u>			
<u>1449</u>	<u>4</u>	<u>7.49</u>	<u>1674</u>	<u>66.8</u>			
<u>1451</u>	<u>6.5</u>	<u>7.46</u>	<u>1665</u>	<u>66.4</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 8049's</u>

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

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

Client/Facility# Tosco # 6419 Job#: 180021.85  
 Address: 6401 Dublin Blvd. Date: 2/6/02  
 City: Dublin, CA Sampler: Vartke

Well ID MW-7 Well Condition: OK  
 Well Diameter 2 in. Hydrocarbon Amount Bailed  
 Thickness: 0.00 (feet) (product/water): 0 (Gallons)  
 Total Depth 19.35 ft.  
 Depth to Water 6.62 ft.

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

12.73 x VF 0.17 = 2.16 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: 1225 Weather Conditions: clear  
 Sampling Time: 1245 Water Color: bwn. Odor: no  
 Purging Flow Rate: 1 gpm. Sediment Description: silt  
 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>1227</u>	<u>2</u>	<u>7.65</u>	<u>1380</u>	<u>67.6</u>			
<u>1229</u>	<u>4</u>	<u>7.53</u>	<u>1367</u>	<u>68.8</u>			
<u>1232</u>	<u>6.5</u>	<u>7.49</u>	<u>1360</u>	<u>69.7</u>			
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 804's</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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

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

Client/  
Facility # Tosco # 6419  
Address: 6401 Dublin Blvd.  
City: Dublin, CA

Job#: 180021.85  
Date: 2/6/02  
Sampler: Vertek

Well ID MW-8  
Well Diameter 2 in.  
Total Depth 20.10 ft.  
Depth to Water 6.35 ft.

Well Condition: ON  
Hydrocarbon Thickness: 0.002 (feet) Amount Bailed (product/water): 0 (Gallons)  
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
6" = 1.50 12" = 5.80

13.75 x VF 0.17 = 2.33 x 3 (case volume) = Estimated Purge Volume: 7 (gal.)

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

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

Starting Time: 1145  
Sampling Time: 1205  
Purging Flow Rate: 1 gpm.  
Did well de-water? no

Weather Conditions: ptly cloudy  
Water Color: brn Odor: no  
Sediment Description: silt  
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>1147</u>	<u>2.5</u>	<u>7.70</u>	<u>1610</u>	<u>67.3</u>			
<u>1149</u>	<u>5</u>	<u>7.56</u>	<u>1593</u>	<u>67.9</u>			
<u>1252</u>	<u>7</u>	<u>7.52</u>	<u>1587</u>	<u>68.5</u>			

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-8</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 8 org's</u>

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



**WELL MONITORING/SAMPLING  
FIELD DATA SHEET**

Client/  
Facility # Tasco # 6419  
Address: 6401 Dublin Blvd.  
City: Dublin, CA

Job#: 180021.85  
Date: 2/6/02  
Sampler: Vartler

Well ID MW-9  
Well Diameter 2 in.  
Total Depth 20.15 ft.  
Depth to Water 5.94 ft.

Well Condition: OK  
Hydrocarbon Thickness: 0.00 (feet) Amount Bailed (product/water): 0 (Gallons)  
Volume Factor (VF) 2" = 0.17 3" = 0.38 4" = 0.66  
6" = 1.50 12" = 5.80

14.21 x VF 0.17 = 2.41 x 3 (case volume) = Estimated Purge Volume: 7.5 (gal.)

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

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

Starting Time: 1300  
Sampling Time: 1320  
Purging Flow Rate: 1 gpm.  
Did well de-water? no

Weather Conditions: clear  
Water Color: brn. Odor: no  
Sediment Description: Silt  
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>1302</u>	<u>2.5</u>	<u>7.64</u>	<u>1213</u>	<u>68.9</u>	_____	_____	_____
<u>1305</u>	<u>5</u>	<u>7.50</u>	<u>1221</u>	<u>67.9</u>	_____	_____	_____
<u>1308</u>	<u>7.5</u>	<u>7.46</u>	<u>1230</u>	<u>67.1</u>	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

**LABORATORY INFORMATION**

SAMPLE ID	(#) - CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-9</u>	<u>5 X VOA VIAL</u>	<u>Y</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH(G)/btex/mtbe + 8045</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

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



Truck Marketing Company  
8000 Cash Canyon Pl, Ste. 400  
San Francisco, California 94024

Facility Number Tosco #6419  
 Facility Address 6401 Dublin Blvd., Dublin, CA  
 Consultant Project Number 180021.85  
 Consultant Name Gattler-Ryan Inc. (G-R Inc.)  
 Address 6747 SIERRA COURT, SUITE J, DUBLIN, CA 94568  
 Project Contact (Name) Deanne L. Harding  
 (Phone) (925) 551-7555 (Fax Number) 925-551-7899

Contact (Name) MR. Dave DeHick  
 (Phone) 925-277-2384  
 Laboratory Name Saguoa Analytical  
 Laboratory Release Number \_\_\_\_\_  
 Samples Collected by (Name) Natthas Tashjian  
 Collection Date 2/6/02  
 Signature [Signature]

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Date	Sample Preservation	Lead (Yes or No)	Analytes To Be Performed																												
								THM GM - SPEC WITH/OUT (6015)	VPH Chloride (6015)	Oil and Greases (6020)	Purgeable Halocarbons (6010)	Purgeable Aromatics (6020)	Purgeable Organics (6010)	Extractable Organics (6020)	Metals Cd, Cr, Pb, Zn, Ni (6010 or 60)	P	P	P	P																	
202051	01	1	W	G		HCl	Y	X																												
	02	5	"	"	1628	"	Y	X																												
	03	5	"	"	1430	"	Y	X																												
	04	5	"	"	1530	"	Y	X																												
	05	5	"	"	1600	"	Y	X																												
	06	5	"	"	1358	"	Y	X																												
	07	5	"	"	1500	"	Y	X																												
	08	5	"	"	1245	"	Y	X																												
	09	5	"	"	1205	"	Y	X																												
	10	5	"	"	1320	"	Y	X																												

DO NOT BILL  
 TB-LB ANALYSIS  
 8 Oxy's -- MTBB  
 THA, DFB, BT  
 TAMB, 1,2DCA  
 BDB, Ethanal

Amended  
 2/7/02

Requested By (Signature) <u>[Signature]</u>	Organization G-R Inc.	Date/Time <u>2/6/02</u>	Received By (Signature) <u>[Signature]</u>	Organization Saguoa Anal	Date/Time <u>2/6/02</u>
Requested By (Signature) _____	Organization _____	Date/Time _____	Received By (Signature) _____	Organization _____	Date/Time _____
Requested By (Signature) _____	Organization _____	Date/Time _____	Received For Laboratory By (Signature) _____	Organization _____	Date/Time _____

Turn Around Time (Circle Choice)  
 24 Hrs.  
 48 Hrs.  
 6 Days  
 10 Days  
 As Directed



**Sequoia  
Analytical**

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

20 February, 2002

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

02/06/02 17:45  
RE: TOSCO

RE: TOSCO

RE: Tosco(1)  
Sequoia Report: L202051

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

Enclosed are the results of analyses for samples received by the laboratory on 02/06/02 17:45. 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 #6419  
Project Manager: Deanna Harding

**Reported:**  
02/20/02 10:30

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L202051-01	Water	02/06/02 00:00	02/06/02 17:45
MW-1	L202051-02	Water	02/06/02 16:28	02/06/02 17:45
MW-2	L202051-03	Water	02/06/02 14:30	02/06/02 17:45
MW-3	L202051-04	Water	02/06/02 15:30	02/06/02 17:45
MW-4	L202051-05	Water	02/06/02 16:00	02/06/02 17:45
MW-5	L202051-06	Water	02/06/02 13:58	02/06/02 17:45
MW-6	L202051-07	Water	02/06/02 15:00	02/06/02 17:45
MW-7	L202051-08	Water	02/06/02 12:45	02/06/02 17:45
MW-8	L202051-09	Water	02/06/02 12:05	02/06/02 17:45
MW-9	L202051-10	Water	02/06/02 13:20	02/06/02 17:45

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 #6419  
 Project Manager: Deanna Harding

**Reported:**  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-1 (L202051-02) Water</b> <b>Sampled: 02/06/02 16:28</b> <b>Received: 02/06/02 17:45</b>									
Ethanol	ND	2500	ug/l	5	2020030	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	5.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>420</b>	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97.6 %		70-130	"	"	"	"	
<b>MW-2 (L202051-03) Water</b> <b>Sampled: 02/06/02 14:30</b> <b>Received: 02/06/02 17:45</b>									
Ethanol	ND	500	ug/l	1	2020029	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>21</b>	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		101 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		70-130	"	"	"	"	
<b>MW-3 (L202051-04) Water</b> <b>Sampled: 02/06/02 15:30</b> <b>Received: 02/06/02 17:45</b>									
Ethanol	ND	17000	ug/l	33.33	2020030	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	33	"	"	"	"	"	"	
1,2-Dichloroethane	ND	33	"	"	"	"	"	"	
Di-isopropyl ether	ND	33	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	33	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>3300</b>	33	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	33	"	"	"	"	"	"	
Tert-butyl alcohol	ND	670	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		99.0 %		70-130	"	"	"	"	

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568	Project: Tosco(1) Project Number: Tosco #6419 Project Manager: Deanna Harding	<b>Reported:</b> 02/20/02 10:30
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**Volatile Organic 8 Oxygenated Compounds by EPA Method 8260B**  
**Sequoia Analytical - San Carlos**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-4 (L202051-05) Water    Sampled: 02/06/02 16:00    Received: 02/06/02 17:45</b>									
Ethanol	ND	12000	ug/l	25	2020030	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>3100</b>	25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	500	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		110 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		98.4 %		70-130	"	"	"	"	
<b>MW-5 (L202051-06) Water    Sampled: 02/06/02 13:58    Received: 02/06/02 17:45</b>									
Ethanol	ND	500	ug/l	1	2020029	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>7.9</b>	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.2 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		105 %		70-130	"	"	"	"	
<b>MW-6 (L202051-07) Water    Sampled: 02/06/02 15:00    Received: 02/06/02 17:45</b>									
Ethanol	ND	4200	ug/l	8.33	2020030	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	8.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	8.3	"	"	"	"	"	"	
Di-isopropyl ether	ND	8.3	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	8.3	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>680</b>	8.3	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	8.3	"	"	"	"	"	"	
Tert-butyl alcohol	ND	170	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		113 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		95.0 %		70-130	"	"	"	"	

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

 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

 Reported:  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-7 (L202051-08) Water</b> Sampled: 02/06/02 12:45 Received: 02/06/02 17:45									
Ethanol	ND	500	ug/l	1	2020029	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	
<b>Di-isopropyl ether</b>	<b>1.4</b>	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>3.2</b>	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		97.0 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %		70-130	"	"	"	"	
<b>MW-8 (L202051-09) Water</b> Sampled: 02/06/02 12:05 Received: 02/06/02 17:45									
Ethanol	ND	500	ug/l	1	2020029	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		94.2 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %		70-130	"	"	"	"	
<b>MW-9 (L202051-10) Water</b> Sampled: 02/06/02 13:20 Received: 02/06/02 17:45									
Ethanol	ND	500	ug/l	1	2020029	02/11/02	02/11/02	EPA 8260B	
1,2-Dibromoethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	1.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1.0	"	"	"	"	"	"	
<b>Methyl tert-butyl ether</b>	<b>14</b>	1.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	20	"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		98.8 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %		70-130	"	"	"	"	

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

 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

**Reported:**  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TB-LB (L202051-01) Water</b> Sampled: 02/06/02 00:00 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		118 %	70-130	"	"	"	"	"	
<b>MW-1 (L202051-02) Water</b> Sampled: 02/06/02 16:28 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/18/02	02/18/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		107 %	70-130	"	"	"	"	"	
<b>MW-1 (L202051-02RE1) Water</b> Sampled: 02/06/02 16:28 Received: 02/06/02 17:45									
Methyl tert-butyl ether (MTBE)	450	25	ug/l	10	2B14002	02/15/02	02/15/02	EPA 8015M/8021	Q-28a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %	70-130	"	"	"	"	"	
<b>MW-2 (L202051-03) Water</b> Sampled: 02/06/02 14:30 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	Q-28
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	23	2.5	"	"	"	"	"	"	Q-28a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		103 %	70-130	"	"	"	"	"	



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

 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

**Reported:**  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-3 (L202051-04) Water</b> Sampled: 02/06/02 15:30 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	1000	ug/l	20	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	10	"	"	"	"	"	"	
Toluene	ND	10	"	"	"	"	"	"	
Ethylbenzene	ND	10	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>4300</b>	50	"	"	"	"	"	"	Q-28b
<i>Surrogate: a,a,a-Trifluorotoluene</i>		98 %	70-130		"	"	"	"	
<b>MW-4 (L202051-05) Water</b> Sampled: 02/06/02 16:00 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	100	ug/l	2	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	1.0	"	"	"	"	"	"	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %	70-130		"	"	"	"	
<b>MW-4 (L202051-05RE1) Water</b> Sampled: 02/06/02 16:00 Received: 02/06/02 17:45									
<b>Methyl tert-butyl ether (MTBE)</b>	<b>2300</b>	500	ug/l	200	2B14002	02/18/02	02/18/02	EPA 8015M/8021	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		98 %	70-130		"	"	"	"	
<b>MW-5 (L202051-06) Water</b> Sampled: 02/06/02 13:58 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	Q-28
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>7.7</b>	2.5	"	"	"	"	"	"	Q-28a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		98 %	70-130		"	"	"	"	

Gettler-Ryan/Geostrategies(1)  
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 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

 Reported:  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-6 (L202051-07) Water</b> Sampled: 02/06/02 15:00 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	Q-28
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		95 %	70-130		"	"	"	"	
<b>MW-6 (L202051-07RE1) Water</b> Sampled: 02/06/02 15:00 Received: 02/06/02 17:45									
Methyl tert-butyl ether (MTBE)	610	120	ug/l	50	2B14002	02/18/02	02/18/02	EPA 8015M/8021	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		110 %	70-130		"	"	"	"	
<b>MW-7 (L202051-08) Water</b> Sampled: 02/06/02 12:45 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	Q-28
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	3.9	2.5	"	"	"	"	"	"	Q-28a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		95 %	70-130		"	"	"	"	
<b>MW-8 (L202051-09) Water</b> Sampled: 02/06/02 12:05 Received: 02/06/02 17:45									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	Q-28
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether (MTBE)	ND	2.5	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		95 %	70-130		"	"	"	"	

Gettler-Ryan/Geostrategies(1)  
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Dublin CA, 94568

Project: Tosco(1)  
Project Number: Tosco #6419  
Project Manager: Deanna Harding

**Reported:**  
02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>MW-9 (L202051-10) Water</b> <b>Sampled: 02/06/02 13:20</b> <b>Received: 02/06/02 17:45</b>									
Purgeable Hydrocarbons (C6-C12)	ND	50	ug/l	1	2B14002	02/15/02	02/15/02	EPA 8015M/8021	
Benzene	ND	0.50	"	"	"	"	"	"	Q-28
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
<b>Methyl tert-butyl ether (MTBE)</b>	<b>19</b>	<b>2.5</b>	"	"	"	"	"	"	Q-28a
<i>Surrogate: a,a,a-Trifluorotoluene</i>		<i>112 %</i>		<i>70-130</i>	"	"	"	"	

Gettler-Ryan/Geostrategies(1)  
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 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

 Reported:  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2020029 - EPA 5030B [P/T]**
**Blank (2020029-BLK1)**

Prepared &amp; Analyzed: 02/08/02

Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	47.6		"	50.0		95.2	70-130			
<i>Surrogate: Toluene-d8</i>	52.0		"	50.0		104	70-130			

**Blank (2020029-BLK2)**

Prepared &amp; Analyzed: 02/11/02

Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.4		"	50.0		101	70-130			
<i>Surrogate: Toluene-d8</i>	51.6		"	50.0		103	70-130			

**LCS (2020029-BS1)**

Prepared &amp; Analyzed: 02/08/02

Methyl tert-butyl ether	35.9	1.0	ug/l	50.0		71.8	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	48.8		"	50.0		97.6	70-130			
<i>Surrogate: Toluene-d8</i>	54.2		"	50.0		108	70-130			

Gettler-Ryan/Geostrategies(1)  
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 Dublin CA, 94568

 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

**Reported:**  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2020029 - EPA 5030B [P/T]**
**LCS (2020029-BS2)**

Prepared &amp; Analyzed: 02/11/02

Methyl tert-butyl ether	46.2	1.0	ug/l	50.0		92.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	48.7		"	50.0		97.4	70-130			
Surrogate: Toluene-d8	50.8		"	50.0		102	70-130			

**Matrix Spike (2020029-MS1)**

Source: L202051-03

Prepared: 02/08/02 Analyzed: 02/11/02

Methyl tert-butyl ether	76.3	1.0	ug/l	50.0	21	111	60-140			
Surrogate: 1,2-Dichloroethane-d4	49.8		"	50.0		99.6	70-130			
Surrogate: Toluene-d8	51.6		"	50.0		103	70-130			

**Matrix Spike Dup (2020029-MSD1)**

Source: L202051-03

Prepared: 02/08/02 Analyzed: 02/11/02

Methyl tert-butyl ether	74.8	1.0	ug/l	50.0	21	108	60-140	1.99	25	
Surrogate: 1,2-Dichloroethane-d4	49.2		"	50.0		98.4	70-130			
Surrogate: Toluene-d8	51.0		"	50.0		102	70-130			

**Batch 2020030 - EPA 5030B [P/T]**
**Blank (2020030-BLK1)**

Prepared &amp; Analyzed: 02/08/02

Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	"							
Surrogate: 1,2-Dichloroethane-d4	53.1		"	50.0		106	70-130			
Surrogate: Toluene-d8	49.6		"	50.0		99.2	70-130			

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

 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

**Reported:**  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2020030 - EPA 5030B [P/T]**

<b>Blank (2020030-BLK2)</b>				Prepared & Analyzed: 02/11/02						
Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.5		"	50.0		101	70-130			
<i>Surrogate: Toluene-d8</i>	48.9		"	50.0		97.8	70-130			

<b>Blank (2020030-BLK3)</b>				Prepared & Analyzed: 02/12/02						
Ethanol	ND	500	ug/l							
1,2-Dibromoethane	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Di-isopropyl ether	ND	1.0	"							
Ethyl tert-butyl ether	ND	1.0	"							
Methyl tert-butyl ether	ND	1.0	"							
Tert-amyl methyl ether	ND	1.0	"							
Tert-butyl alcohol	ND	20	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.3		"	50.0		107	70-130			
<i>Surrogate: Toluene-d8</i>	50.0		"	50.0		100	70-130			

<b>LCS (2020030-BS1)</b>				Prepared & Analyzed: 02/08/02						
Methyl tert-butyl ether	42.1	1.0	ug/l	50.0		84.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.0		"	50.0		106	70-130			
<i>Surrogate: Toluene-d8</i>	47.3		"	50.0		94.6	70-130			

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**Reported:**  
02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 2020030 - EPA 5030B [P/T]</b>										
<b>LCS (2020030-BS2)</b>										
Prepared & Analyzed: 02/11/02										
Methyl tert-butyl ether	41.8	1.0	ug/l	50.0		83.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	52.6		"	50.0		105	70-130			
Surrogate: Toluene-d8	46.5		"	50.0		93.0	70-130			
<b>LCS (2020030-BS3)</b>										
Prepared & Analyzed: 02/12/02										
Methyl tert-butyl ether	45.3	1.0	ug/l	50.0		90.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	54.4		"	50.0		109	70-130			
Surrogate: Toluene-d8	47.4		"	50.0		94.8	70-130			
<b>Matrix Spike (2020030-MS1)</b>										
Source: L202058-07 Prepared & Analyzed: 02/08/02										
Methyl tert-butyl ether	43.6	1.0	ug/l	50.0	1.5	84.2	60-140			
Surrogate: 1,2-Dichloroethane-d4	55.8		"	50.0		112	70-130			
Surrogate: Toluene-d8	46.3		"	50.0		92.6	70-130			
<b>Matrix Spike Dup (2020030-MSD1)</b>										
Source: L202058-07 Prepared & Analyzed: 02/08/02										
Methyl tert-butyl ether	46.6	1.0	ug/l	50.0	1.5	90.2	60-140	6.65	25	
Surrogate: 1,2-Dichloroethane-d4	58.0		"	50.0		116	70-130			
Surrogate: Toluene-d8	45.8		"	50.0		91.6	70-130			

Gettler-Ryan/Geostrategies(1)  
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 Project: Tosco(1)  
 Project Number: Tosco #6419  
 Project Manager: Deanna Harding

 Reported:  
 02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 2B14002 - EPA 5030B P/T**
**Blank (2B14002-BLK2)**

Prepared &amp; Analyzed: 02/15/02

Purgeable Hydrocarbons (C6-C12)	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 (MTBE)	ND	2.5	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	31.0		"	30.0		103	70-130			

**Blank (2B14002-BLK3)**

Prepared &amp; Analyzed: 02/18/02

Purgeable Hydrocarbons (C6-C12)	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 (MTBE)	ND	2.5	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	33.3		"	30.0		111	70-130			

**LCS (2B14002-BS2)**

Prepared &amp; Analyzed: 02/15/02

Benzene	20.9	0.50	ug/l	20.0		104	70-130			
Toluene	21.1	0.50	"	20.0		106	70-130			
Ethylbenzene	22.4	0.50	"	20.0		112	70-130			
Xylenes (total)	66.0	0.50	"	60.0		110	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	34.6		"	30.0		115	70-130			

**LCS (2B14002-BS3)**

Prepared &amp; Analyzed: 02/18/02

Benzene	18.4	0.50	ug/l	20.0		92	70-130			
Toluene	18.6	0.50	"	20.0		93	70-130			
Ethylbenzene	19.2	0.50	"	20.0		96	70-130			
Xylenes (total)	58.7	0.50	"	60.0		98	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	32.2		"	30.0		107	70-130			





Gettler-Ryan/Geostrategies(1)  
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Dublin CA, 94568

Project: Tosco(1)  
Project Number: Tosco #6419  
Project Manager: Deanna Harding

**Reported:**  
02/20/02 10:30

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 2B14002 - EPA 5030B P/T</b>										
<b>Matrix Spike (2B14002-MS1)</b>		<b>Source: W202156-03</b>			<b>Prepared &amp; Analyzed: 02/15/02</b>					
Benzene	18.3	0.50	ug/l	20.0	ND	92	70-130			
Toluene	18.5	0.50	"	20.0	ND	92	70-130			
Ethylbenzene	19.1	0.50	"	20.0	ND	96	70-130			
Xylenes (total)	57.6	0.50	"	60.0	ND	96	70-130			
Surrogate: a,a,a-Trifluorotoluene	34.5		"	30.0		115	70-130			
<b>Matrix Spike Dup (2B14002-MSD1)</b>		<b>Source: W202156-03</b>			<b>Prepared &amp; Analyzed: 02/15/02</b>					
Benzene	16.1	0.50	ug/l	20.0	ND	80	70-130	13	20	
Toluene	17.4	0.50	"	20.0	ND	87	70-130	6	20	
Ethylbenzene	17.3	0.50	"	20.0	ND	86	70-130	10	20	
Xylenes (total)	55.6	0.50	"	60.0	ND	93	70-130	4	20	
Surrogate: a,a,a-Trifluorotoluene	31.2		"	30.0		104	70-130			



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

Project: Tosco(1)  
Project Number: Tosco #6419  
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**Reported:**  
02/20/02 10:30

### Notes and Definitions

- Q-28 The opening calibration verification standard was outside acceptance criteria by -3%. Although the Laboratory Control Sample verified the accuracy of the batch, this should be considered in evaluating the data for its intended purpose.
- Q-28a The opening calibration verification standard was outside acceptance criteria by 13%. Although the Laboratory Control Sample verified the accuracy of the batch, this should be considered in evaluating the data for its intended purpose.
- Q-28b The opening calibration verification standard was outside acceptance criteria by 5%. Although the Laboratory Control Sample verified the accuracy of the batch, this should be considered in evaluating the data for its intended purpose.
- 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