# GETTLER-RYAN INC.

October 30, 2001
G-R Job #180061

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

**RE: Third Quarter Event of September 24, 2001**
Groundwater Monitoring & Sampling Report
Tosco (Unocal) Service Station #5325
3220 Lakeshore Avenue
Oakland, 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 any wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are summarized in Table 4. A Potentiometric Map is included as Figure 1.

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

Sincerely,

Deanna Marie Harding
- FOR -

Deanna L. Harding
Project Coordinator

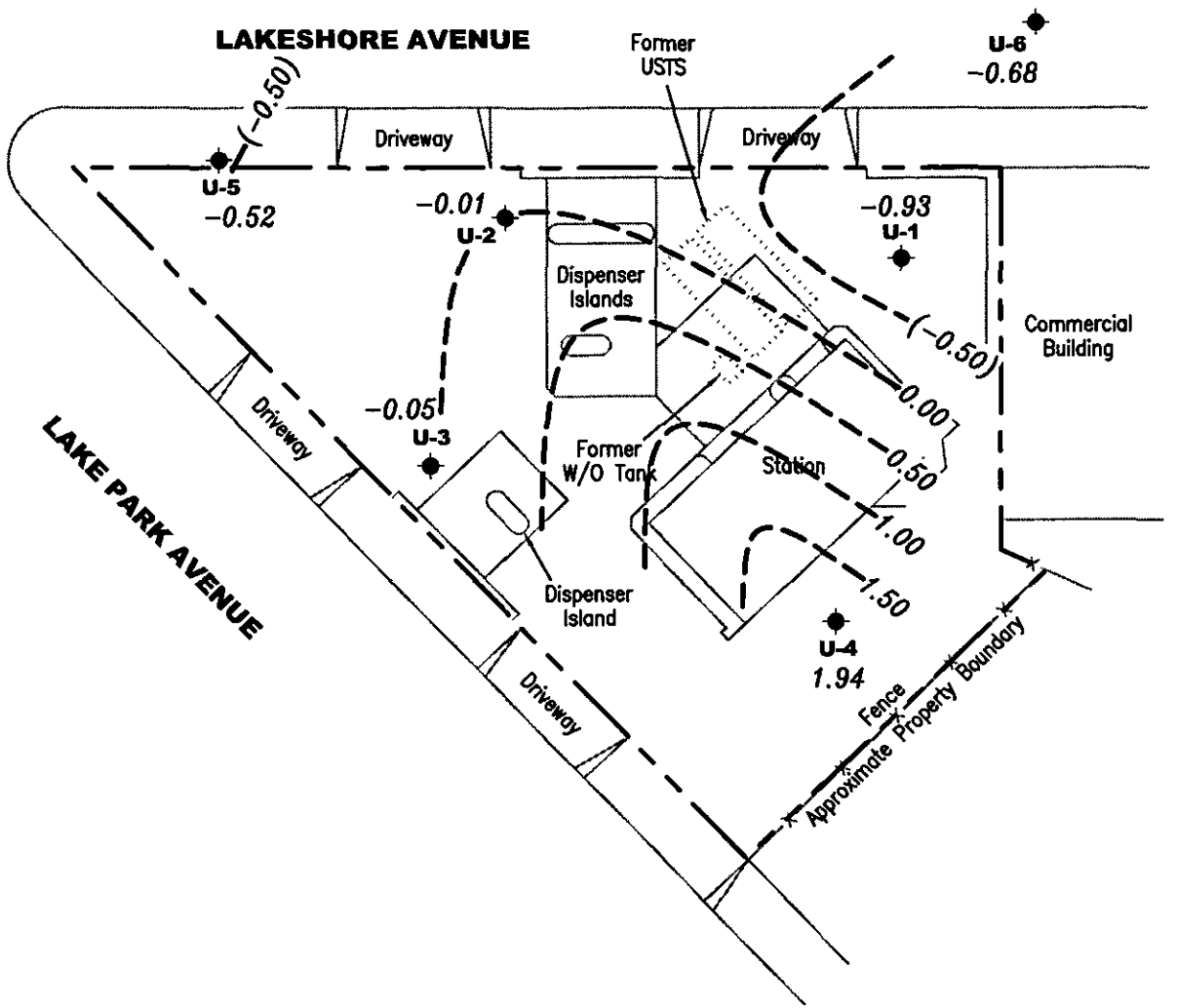
REGISTERED GEOLOGIST
DOUGLAS J. LEE
No. 6882
STATE OF CALIFORNIA

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: | Groundwater Analytical Results |
| Table 4: | Dissolved Oxygen Concentrations |
| Attachments: | Standard Operating Procedure - Groundwater Sampling |
| | Field Data Sheets |
| | Chain of Custody Document and Laboratory Analytical Reports |

255325 SS X BP
QM X TRANSMITTAL
3 4 5

5325.qml




## EXPLANATION

- Groundwater monitoring well
- 99.99 — Groundwater elevation in feet referenced to Mean Sea Level (MSL)
- 99.99 — Groundwater elevation contour, dashed where inferred.

Approximate groundwater flow direction at a gradient of 0.01 to 0.03 Ft./Ft.

N

0 40

Scale in Feet

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

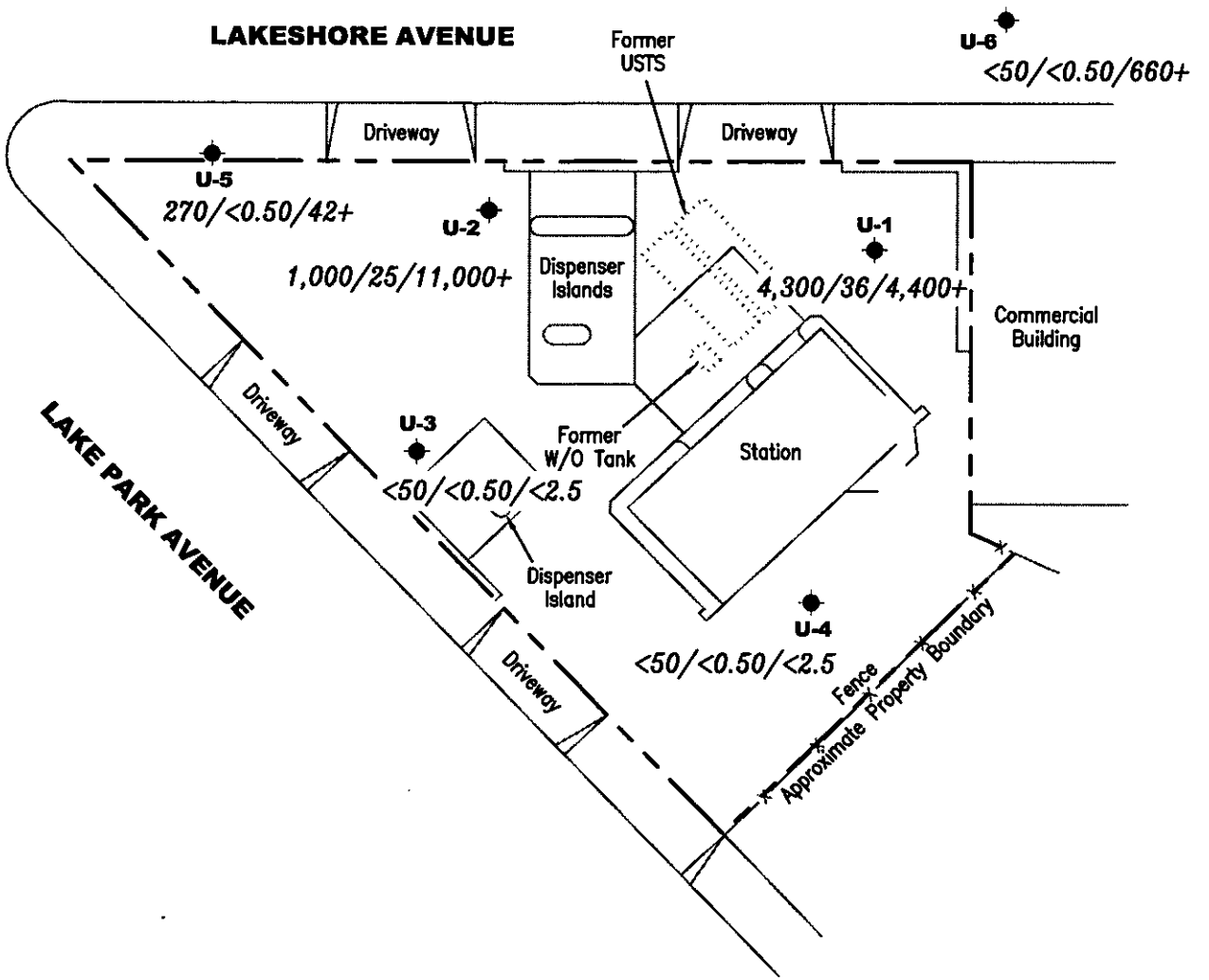
GETTLER - RYAN INC.
6747 Sierra Ct., Suite J
Dublin, CA 94568 (925) 551-7555

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

FIGURE 1

| PROJECT NUMBER | REVIEWED BY | DATE | REVISED DATE |
|---|---|---|---|
| 180061 | | September 24, 2001 | |

FILE NAME: P:\ENVIRO\TOSCO\5325\Q01-5325.DWG | Layout Tab: Pot3




## EXPLANATION

- ◆ Groundwater monitoring well
- *A/B/C* TPH(G) (Total Petroleum Hydrocarbons as Gasoline)/ Benzene/MTBE concentrations in ppb
- \+ MTBE by EPA Method 8260

N

0 40

Scale in Feet

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 #5325
3220 Lakeshore Avenue
Oakland, California

FIGURE
2

| PROJECT NUMBER | REVIEWED BY | DATE | REVISED DATE |
|---|---|---|---|
| 180061 | | September 24, 2001 | |

FILE NAME: P:\Enviro\Tosco\5325\Q01-5325.DWG | Layout Tab: Con3

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-1 | 08/10/90 | -- | 5.0-20.0 | -- | -- | 690 | 38 | 75 | 8.6 | 130 | -- |
| | 01/07/91 | -- | | -- | -- | 250 | 22 | 16 | 4.2 | 17 | -- |
| | 04/01/91 | -- | | -- | -- | 160 | 13 | 8.6 | 1.0 | 15 | -- |
| | 07/03/91 | -- | | -- | -- | 140 | 21 | 4.3 | 0.36 | 17 | -- |
| | 10/09/91 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 02/12/92 | -- | | -- | -- | 250 | ND | ND | ND | ND | -- |
| | 05/05/92 | -- | | -- | -- | 230 | 1.2 | ND | ND | ND | -- |
| | 06/11/92 | -- | | -- | -- | 1,000 | 80 | 1.4 | 6.7 | 41 | -- |
| | 08/20/92 | -- | | -- | -- | 400[1] | 1.0 | ND | ND | 0.6 | -- |
| | 02/22/93 | -- | | -- | -- | 34,000 | 1,400 | 5,500 | 910 | 7,300 | -- |
| | 05/07/93 | -- | | -- | -- | 8,700 | 600 | 240 | 650 | 3,300 | -- |
| | 08/08/93 | -- | | -- | -- | 4,900[2] | 79 | ND | 832 | 270 | -- |
| 5.32 | 11/16/93 | 8.61 | | -3.29 | 0.00 | 690[3] | ND | ND | ND | ND | -- |
| | 02/16/94 | 8.54 | | -3.22 | 0.00 | 6,800[4] | ND | ND | ND | ND | -- |
| 8.46 | 06/22/94 | 8.39 | | 0.07 | 0.00 | 200 | ND | ND | 5.9 | 21 | -- |
| | 09/22/94 | 8.66 | | -0.20 | 0.00 | 6,100[3] | ND | ND | ND | ND | -- |
| | 12/24/94 | 8.04 | | 0.42 | 0.00 | 50,000 | 2,500 | 9,700 | 2,400 | 17,000 | -- |
| | 03/25/95 | 7.72 | | 1.02** | 0.37 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 06/21/95 | 9.30 | | -0.69** | 0.20 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 09/19/95 | 9.29 | | -0.53** | 0.40 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 12/19/95 | 8.98 | | -0.50** | 0.03 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 03/18/96 | 8.25 | | 0.21 | 0.00 | 27,000 | ND | 2,300 | 1,400 | 11,000 | 4,900 |
| | 06/27/96 | 7.92 | | 0.54 | <0.01 | 120,000 | 540 | 4,300 | 2,600 | 26,000 | ND |
| | 09/26/96 | 9.10 | | -0.62** | 0.02 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 12/09/96 | 6.88 | | 1.60** | 0.03 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 03/14/97 | 9.02 | | -0.15** | 0.55 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 06/30/97 | 8.41 | | 0.07** | 0.02 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 09/19/97 | 8.56 | | -0.08** | 0.02 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 12/12/97 | 8.58 | | -0.11** | 0.01 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 03/03/98[17] | 8.23 | | 0.26** | 0.04 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 06/15/98[17] | 8.37 | | 0.09 | Sheen | 52,000 | ND[7] | 900 | 1,800 | 13,000 | ND[7] |

# Table 1

## Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-1 | 09/30/98[17] | 8.94 | 5.0-20.0 | -0.48 | Sheen | 1,000,000[8] | ND[7] | 2,600 | 13,000 | 83,000 | 4,800 |
| (cont) | 12/28/98[17] | 8.57 | | -0.11 | <0.01 | 1,100,000[9] | ND[7] | 1,600 | 8,600 | 71,000 | 5,700 |
| | 03/22/99[17] | 8.18 | | 0.28 | Sheen | 130,000 | 470 | 1,100 | 2,000 | 28,000 | 5,700 |
| | 06/09/99 | 9.37 | | -0.91 | 0.00 | 40,000 | 230 | 640 | 590 | 13,000 | 3,500/2,100[10] |
| | 09/08/99[17] | 9.53 | | -1.07 | 0.00 | 55,000[11] | 217 | 202 | 745 | 14,300 | 6,890/6,690[10] |
| | 12/07/99[17] | 9.67 | | -1.21 | 0.00 | 41,200[13] | 89.3 | ND[7] | 385 | 6,930 | 15,800/14,700[12] |
| | 03/13/00[17] | 8.44 | | 0.02 | 0.00 | 48,000[11] | 490 | 610 | 2,400 | 10,000 | 22,000/23,000[10] |
| | 06/21/00[17] | 9.45 | | -0.99 | 0.00 | 37,000[11] | 200 | ND[7] | 1,200 | 7,200 | 15,000/20,000[10] |
| | 09/27/00[17] | 9.29 | | -0.83 | 0.00 | 15,000[11] | 92 | ND[7] | 540 | 2,800 | 74,000/83,000[15] |
| | 12/12/00[17] | 9.37 | | -0.91 | 0.00 | 50,000[16] | ND[7] | ND[7] | 250 | 1,900 | 12,000/15,000[12] |
| | 03/07/01[17] | 8.45 | | 0.01 | 0.00 | 6,220[13] | 29.8 | 10.4 | 96.3 | 638 | 11,200/11,800[10] |
| | 06/06/01[17] | 9.29 | | -0.83 | 0.00 | 5,200[13] | 17 | ND[7] | 69 | 420 | 6,500/8,700[12] |
| | **09/24/01[17]** | **9.39** | | **-0.93** | **0.00** | **4,300[18]** | **36** | **<25** | **65** | **590** | **4,400/4,400[10]** |
| U-2 | 08/10/90 | -- | 5.0-20.0 | -- | -- | 780 | 27 | 46 | 15 | 130 | -- |
| | 01/07/91 | -- | | -- | -- | 1,900 | 67 | 5.8 | 58 | 69 | -- |
| | 04/01/91 | -- | | -- | -- | 1,700 | 250 | 89 | 34 | 190 | -- |
| | 07/03/91 | -- | | -- | -- | 2,100 | 150 | 25 | 3.1 | 290 | -- |
| | 10/09/91 | -- | | -- | -- | 230 | 7.1 | ND | ND | 11 | -- |
| | 02/12/92 | -- | | -- | -- | 410 | 1.9 | ND | 0.36 | 0.4 | -- |
| | 05/05/92 | -- | | -- | -- | 1,600 | 120 | 52 | 6.2 | 290 | -- |
| | 06/11/92 | -- | | -- | -- | 620 | 17 | 2.1 | ND | 37 | -- |
| | 08/20/92 | -- | | -- | -- | 700 | 28 | 6.5 | 1.3 | 4.6 | -- |
| | 02/22/93 | -- | | -- | -- | 3,400 | 2,400 | 2,100 | 1,200 | 5,800 | -- |
| | 05/07/93 | -- | | -- | -- | 17,000 | 1,800 | 660 | 1,700 | 4,000 | -- |
| | 08/08/93 | -- | | -- | -- | 5,600[2] | 420 | ND | 410 | 670 | -- |
| 4.53 | 11/16/93 | 8.17 | | -3.64 | 0.00 | 510[3] | ND | ND | ND | ND | -- |
| | 02/16/94 | 7.73 | | -3.20 | 0.00 | 980[4] | 49 | 13 | 2.7 | 40 | -- |
| 7.62 | 06/22/94 | 7.60 | | 0.02 | 0.00 | 31,000 | 2,200 | 62 | 1,500 | 3,500 | -- |
| | 09/22/94 | 7.93 | | -0.31 | 0.00 | 8,500[3] | 29 | ND | ND | ND | -- |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-2 | 12/24/94 | 7.27 | 5.0-20.0 | 0.35 | 0.00 | 32,000 | 1,500 | 890 | 1,300 | 5,000 | -- |
| (cont) | 03/25/95 | 7.01 | | 0.61 | 0.00 | 170,000 | 1,900 | 21,000 | 4,800 | 33,000 | -- |
| | 06/21/95 | 6.98 | | 0.64 | 0.00 | 16,000 | 2,100 | ND | 1,800 | 1,700 | -- |
| | 09/19/95 | 7.70 | | -0.08 | 0.00 | 3,000 | 610 | ND | 78 | 240 | --[5] |
| | 12/19/95 | 7.30 | | 0.32 | 0.00 | 1,600 | 140 | 55 | 52 | 270 | --[6] |
| | 03/18/96 | 6.45 | | 1.17 | 0.00 | 12,000 | 2,200 | ND | 1,200 | 2,200 | 22,000 |
| | 06/27/96 | 7.41 | | 0.21 | 0.00 | 28,000 | 3,400 | ND | 2,800 | 3,100 | 3,000 |
| | 09/26/96 | 7.90 | | -0.28 | 0.00 | 5,900 | 750 | ND | ND | ND | 18,000 |
| | 12/09/96 | 6.76 | | 0.86 | 0.00 | 13,000 | 5,100 | 290 | 980 | 370 | 2,700 |
| | 03/14/97 | 7.12 | | 0.52** | 0.03 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 06/30/97 | 6.19 | | 1.43 | <0.01 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 09/19/97 | 7.31 | | 0.31 | <0.01 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 12/12/97 | 6.75 | | 0.88** | <0.01 | NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT | | | | | -- |
| | 03/03/98 | 6.36 | | 1.26 | Sheen | 80,000 | 3,000 | 1,100 | 820 | 16,000 | 16,000 |
| | 06/15/98 | 6.51 | | 1.11 | Sheen | 48,000 | 1,800 | 330 | 470 | 7,900 | 20,000 |
| | 09/30/98 | 7.17 | | 0.45 | Sheen | 60,000 | 1,300 | ND[7] | 500 | 9,700 | 19,000 |
| | 12/28/98 | 7.06 | | 0.56 | 0.00 | 63,000 | 590 | 160 | 320 | 5,600 | 16,000 |
| | 03/22/99 | 6.82 | | 0.80 | 0.00 | 28,000 | 1,100 | ND[7] | 360 | 2,900 | 25,000 |
| | 06/09/99 | 7.51 | | 0.11 | 0.00 | 21,000 | 110 | 190 | 310 | 2,600 | 7,900/7,800[10] |
| | 09/08/99 | 8.16 | | -0.54 | 0.00 | 23,300[11] | 477 | 138 | 286 | 4,110 | 16,400/15,300[10] |
| | 12/07/99 | 8.31 | | -0.69 | 0.00 | 4,840[13] | 17.2 | ND[7] | ND[7] | 157 | 14,900/15,600[12] |
| | 03/13/00 | 6.69 | | 0.93 | 0.00 | 11,000[11] | 380 | 160 | ND[7] | 2,100 | 22,000/26,000[10] |
| | 06/21/00 | 7.67 | | -0.05 | 0.00 | 9,100[11] | 22 | ND[7] | ND[7] | 800 | 16,000/22,000[10] |
| | 09/27/00 | 7.44 | | 0.18 | 0.00 | 2,900[11] | 43 | ND[7] | ND[7] | 39 | 20,000/26,000[15] |
| | 12/12/00 | 7.51 | | 0.11 | 0.00 | 3,600[11] | 17 | ND[7] | ND[7] | 87 | 8,000/7,800[12] |
| | 03/07/01 | 7.15 | | 0.47 | 0.00 | 1,670[13] | 51.0 | ND[7] | 7.20 | 19.5 | 5,930/7,900[10] |
| | 06/06/01 | 7.57 | | 0.05 | 0.00 | 1,100[11] | 14 | ND[7] | 9.3 | 35 | 9,200/10,000[12] |
| | **09/24/01** | **7.63** | | **-0.01** | **0.00** | **1,000[18]** | **25** | **<2.5** | **12** | **100** | **9,800/11,000[10]** |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-3 | 08/10/90 | -- | 5.0-20.0 | -- | -- | ND | ND | ND | ND | ND | -- |
| | 01/07/91 | -- | | -- | -- | ND | ND | ND | ND | 1.8 | -- |
| | 04/01/91 | -- | | -- | -- | ND | 1.0 | 2.9 | 0.53 | 5.4 | -- |
| | 07/03/91 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 10/09/91 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 02/12/92 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 05/05/92 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 06/11/92 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 08/20/92 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 02/22/93 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 05/07/93 | -- | | -- | -- | ND | ND | ND | ND | ND | -- |
| | 08/08/93 | -- | | -- | -- | 210 | 5.0 | 9.7 | 0.7 | 4.1 | -- |
| 7.86 | 11/16/93 | 11.82 | | -3.96 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 02/16/94 | 11.62 | | -3.76 | 0.00 | ND | ND | ND | ND | ND | -- |
| 10.98 | 06/22/94 | 11.64 | | -0.66 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/22/94 | 11.76 | | -0.78 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 12/24/94 | 11.28 | | -0.30 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 03/25/95 | 10.96 | | 0.02 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 06/21/95 | 11.37 | | -0.39 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/19/95 | 11.55 | | -0.57 | 0.00 | ND | ND | ND | ND | ND | --[5] |
| | 12/19/95 | 11.45 | | -0.47 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 03/18/96 | 11.10 | | -0.12 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 06/27/96 | 11.16 | | -0.18 | 0.00 | 440 | 49 | 50 | 51 | 140 | 50 |
| | 09/26/96 | 11.55 | | -0.57 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/09/96 | 10.12 | | 0.86 | 0.00 | ND | ND | ND | ND | ND | 29 |
| | 03/14/97 | 10.87 | | 0.11 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/30/97 | 11.08 | | -0.10 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/19/97 | 11.05 | | -0.07 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/12/97 | 10.58 | | 0.40 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/03/98 | 9.84 | | 1.14 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/15/98 | 10.56 | | 0.42 | 0.00 | ND | ND | ND | ND | ND | ND |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-3 | 09/30/98 | 11.12 | 5.0-20.0 | -0.14 | 0.00 | ND | ND | ND | ND | ND | ND |
| (cont) | 12/28/98 | 10.96 | | 0.02 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/22/99 | 9.46 | | 1.52 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/09/99 | 11.01 | | -0.03 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/08/99 | 11.31 | | -0.33 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/07/99 | 11.26 | | -0.28 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/13/00 | 8.28 | | 2.70 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/21/00 | 11.12 | | -0.14 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/27/00 | 11.07 | | -0.09 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/12/00 | 10.94 | | 0.04 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/07/01 | 8.32 | | 2.66 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/06/01 | 10.94 | | 0.04 | 0.00 | ND | ND | ND | ND | ND | ND |
| | **09/24/01** | **11.03** | | **-0.05** | **0.00** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<2.5** |
| **U-4** | | | | | | | | | | | |
| 11.15 | 06/22/94 | 10.16 | 5.0-20.0 | 0.99 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/22/94 | 10.79 | | 0.36 | 0.00 | ND | 0.78 | 1.3 | ND | 1.4 | -- |
| | 12/24/94 | 9.81 | | 1.34 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 03/25/95 | 9.51 | | 1.64 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 06/21/95 | 9.54 | | 1.61 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/19/95 | 10.17 | | 0.98 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 12/19/95 | 9.98 | | 1.17 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 03/18/96 | 9.66 | | 1.49 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 06/27/96 | 9.74 | | 1.41 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/26/96 | 10.14 | | 1.01 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/09/96 | 8.67 | | 2.48 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/14/97 | 9.35 | | 1.80 | 0.00 | ND | ND | ND | ND | ND | 33 |
| | 06/30/97 | 9.89 | | 1.26 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/19/97 | 9.96 | | 1.19 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/12/97 | 8.56 | | 2.59 | 0.00 | ND | ND | ND | ND | ND | ND |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-4 | 03/03/98 | 7.85 | 5.0-20.0 | 3.30 | 0.00 | ND | ND | ND | ND | ND | ND |
| (cont) | 06/15/98 | 9.08 | | 2.07 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/30/98 | 9.75 | | 1.40 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/28/98 | 9.59 | | 1.56 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/22/99 | 8.34 | | 2.81 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/09/99 | 9.39 | | 1.76 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/08/99 | 9.90 | | 1.25 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/07/99 | 10.05 | | 1.10 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/13/00 | 7.24 | | 3.91 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/21/00 | 9.48 | | 1.67 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 09/27/00 | 9.42 | | 1.73 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 12/12/00 | 9.50 | | 1.65 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 03/07/01 | 6.88 | | 4.27 | 0.00 | ND | ND | ND | ND | ND | ND |
| | 06/06/01 | 9.18 | | 1.97 | 0.00 | ND | ND | ND | ND | ND | ND |
| | **09/24/01** | **9.21** | | **1.94** | **0.00** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<2.5** |
| **U-5** | | | | | | | | | | | |
| 6.98 | 06/22/94 | 6.83 | 5.0-20.0 | 0.15 | 0.00 | 210 | 7.1 | 13 | 4.5 | 26 | -- |
| | 09/22/94 | 6.90 | | 0.08 | 0.00 | 170 | 8.4 | 10 | 8.5 | 18 | -- |
| | 12/24/94 | 6.43 | | 0.55 | 0.00 | 8,700 | 560 | 70 | 670 | 430 | -- |
| | 03/25/95 | 6.35 | | 0.63 | 0.00 | 44,000 | 390 | 960 | 1,500 | 7,600 | -- |
| | 06/21/95 | 7.11 | | -0.13 | 0.00 | 400 | 2.3 | ND | 9.1 | 3.5 | -- |
| | 09/19/95 | 6.99 | | -0.01 | 0.00 | 850 | 14 | 7.1 | 13 | 66 | --[5] |
| | 12/19/95 | 7.17 | | -0.19 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 03/18/96 | 6.65 | | 0.33 | 0.00 | 100 | 0.67 | 0.5 | 0.51 | 5.4 | -- |
| | 06/27/96 | 6.49 | | 0.49 | 0.00 | 16,000 | 280 | 150 | 1,400 | 4,600 | 530 |
| | 09/26/96 | 7.13 | | -0.15 | 0.00 | ND | ND | 0.57 | ND | 0.96 | ND |
| | 12/09/96 | 5.90 | | 1.08 | 0.00 | 1,300 | 29 | 46 | ND | 140 | 97 |
| | 03/14/97 | 6.99 | | -0.01 | 0.00 | ND | ND | ND | ND | ND | 14 |
| | 06/30/97 | 7.08 | | -0.10 | 0.00 | 4,200 | 74 | 51 | 180 | 980 | 270 |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-5 | 09/19/97 | 6.78 | 5.0-20.0 | 0.20 | 0.00 | 6,300 | 160 | 13 | 370 | 1000 | 480 |
| (cont) | 12/12/97 | 6.94 | | 0.04 | 0.00 | 60 | 1.3 | ND | 1.6 | 2.1 | 47 |
| | 03/03/98 | 6.50 | | 0.48 | 0.00 | 1,700 | 29 | ND[7] | 150 | 190 | 330 |
| | 06/15/98 | 6.85 | | 0.13 | 0.00 | 1,500 | 32 | ND[7] | 91 | 83 | 330 |
| | 09/30/98 | 7.31 | | -0.33 | 0.00 | 1,700 | 44 | ND[7] | 39 | 150 | 60 |
| | 12/28/98 | 7.25 | | -0.27 | 0.00 | 1,400 | 59 | ND[7] | 13 | 27 | 150 |
| | 03/22/99 | 6.86 | | 0.12 | 0.00 | 780 | 8.9 | ND | 0.76 | 4.5 | 350 |
| | 06/09/99 | 7.28 | | -0.30 | 0.00 | 1,000 | ND[7] | ND[7] | 10 | 35 | 280/350[10] |
| | 09/08/99 | 7.52 | | -0.54 | 0.00 | 2,620[11] | 26.2 | ND[7] | 32.2 | 157 | 280/239[12] |
| | 12/07/99 | 7.67 | | -0.69 | 0.00 | 949[11] | 9.26 | ND[7] | 11.2 | 22.7 | 235/301[12] |
| | 03/13/00 | 6.73 | | 0.25 | 0.00 | 880[14] | 12 | 1.0 | 5.6 | 8.7 | 46/37[10] |
| | 06/21/00 | 7.39 | | -0.41 | 0.00 | 700[11] | 4.0 | ND | 0.99 | 4.0 | 120/140[10] |
| | 09/27/00 | 7.45 | | -0.47 | 0.00 | 400[11] | 1.9 | ND | ND | 1.5 | 160/250[15] |
| | 12/12/00 | 7.68 | | -0.70 | 0.00 | 770[11] | 3.2 | ND[7] | ND[7] | ND[7] | 27/13[12] |
| | 03/07/01 | 6.83 | | 0.15 | 0.00 | 623[13] | 5.15 | ND | ND | 0.669 | 35.7/43.4[10] |
| | 06/06/01 | 7.42 | | -0.44 | 0.00 | 110[13] | ND | ND | ND | ND | ND |
| | **09/24/01** | **7.50** | | **-0.52** | **0.00** | **270[19]** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **40/42[10]** |
| **U-6** | | | | | | | | | | | |
| 7.14 | 06/22/94 | 7.14 | 5.0-24.0 | 0.00 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/22/94 | 7.34 | | -0.20 | 0.00 | 130 | 1.3 | 0.8 | ND | 0.73 | -- |
| | 12/24/94 | 6.67 | | 0.47 | 0.00 | 6,900 | 500 | 59 | 600 | 380 | -- |
| | 03/25/95 | 6.29 | | 0.85 | 0.00 | 47,000 | 450 | 1,300 | 1,700 | 8,200 | -- |
| | 06/21/95 | 7.60 | | -0.46 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 09/19/95 | 7.70 | | -0.56 | 0.00 | ND | ND | ND | ND | ND | --[5] |
| | 12/19/95 | 7.75 | | -0.61 | 0.00 | 210 | 2.5 | 1.0 | 2.9 | 17 | -- |
| | 03/18/96 | 6.86 | | 0.28 | 0.00 | ND | ND | ND | ND | ND | -- |
| | 06/27/96 | 6.52 | | 0.62 | 0.00 | ND | ND | ND | ND | ND | 510 |
| | 09/26/96 | 7.62 | | -0.48 | 0.00 | ND | ND | ND | ND | ND | 1,400 |
| | 12/09/96 | 5.88 | | 1.26 | 0.00 | 1,200 | 29 | 48 | 6.4 | 140 | 58 |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| U-6 | 03/14/97 | 7.30 | 5.0-24.0 | -0.16 | 0.00 | ND | ND | ND | ND | ND | 1,500 |
| (cont) | 06/30/97 | 7.35 | | -0.21 | 0.00 | ND | ND | ND | ND | ND | 990 |
| | 09/19/97 | 7.25 | | -0.11 | 0.00 | ND | ND | ND | ND | ND | 1,400 |
| | 12/12/97 | 7.29 | | -0.15 | 0.00 | ND | ND | ND | ND | ND | 680 |
| | 03/03/98 | 7.00 | | 0.14 | 0.00 | ND | ND | ND | ND | ND | 1,600 |
| | 06/15/98 | 7.18 | | -0.04 | 0.00 | ND[7] | ND[7] | ND[7] | ND[7] | ND[7] | 1,000 |
| | 09/30/98 | 7.90 | | -0.76 | 0.00 | ND | ND | ND | ND | ND | 1,200 |
| | 12/28/98 | 7.79 | | -0.65 | 0.00 | ND[7] | ND[7] | ND[7] | ND[7] | ND[7] | 730 |
| | 03/22/99 | 7.47 | | -0.33 | 0.00 | ND | ND | ND | ND | ND | 1,800 |
| | 06/09/99 | 7.73 | | -0.59 | 0.00 | ND[7] | ND[7] | ND[7] | ND[7] | ND[7] | 1,000/850[10] |
| | 09/08/99 | 7.95 | | -0.81 | 0.00 | ND | ND | ND | ND | ND | 851/1,040[10] |
| | 12/07/99 | 8.10 | | -0.96 | 0.00 | ND | ND | ND | ND | ND | 1,140/1,150[12] |
| | 03/13/00 | 6.95 | | 0.19 | 0.00 | ND | ND | ND | ND | ND | 560/670[10] |
| | 06/21/00 | 7.84 | | -0.70 | 0.00 | ND | ND | ND | ND | ND | 400/590[10] |
| | 09/27/00 | 7.68 | | -0.54 | 0.00 | ND | ND | ND | ND | ND | 2,500/2,800[15] |
| | 12/12/00 | 7.74 | | -0.60 | 0.00 | ND | ND | ND | ND | ND | 590/580[12] |
| | 03/0701 | 7.27 | | -0.13 | 0.00 | ND | ND | ND | ND | ND | 310/321[12] |
| | 06/06/01 | 7.80 | | -0.66 | 0.00 | ND | ND | ND | ND | ND | 250/330[12] |
| | **09/24/01** | **7.82** | | **-0.68** | **0.00** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **530/660[10]** |
| **Trip Blank** | | | | | | | | | | | |
| TB-LB | 03/03/98 | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND |
| | 06/15/98 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 09/30/98 | -- | | -- | -- | ND | ND | 1.7 | ND | 2.2 | ND |
| | 12/28/98 | -- | | -- | -- | ND | ND | 0.71 | ND | 0.72 | 9.5 |
| | 03/22/99 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 06/09/99 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 09/08/99 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 12/07/99 | -- | | -- | -- | ND | ND | 0.762 | ND | ND | ND |
| | 03/13/00 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

| WELL ID/ TOC* | DATE | DTW (ft.) | S.I. (ft. bgs) | GWE (ft.) | Product Thickness (ft.) | TPH-G (ppb) | B (ppb) | T (ppb) | E (ppb) | X (ppb) | MTBE (ppb) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-LB | 06/21/00 | -- | -- | -- | -- | ND | ND | ND | ND | ND | ND |
| (cont) | 09/27/00 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 12/12/00 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 03/07/01 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | 06/06/01 | -- | | -- | -- | ND | ND | ND | ND | ND | ND |
| | **09/24/01** | **--** | | **--** | **--** | **<50** | **<0.50** | **<0.50** | **<0.50** | **<0.50** | **<2.5** |

# Table 1

## Groundwater Monitoring Data and Analytical Results

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

**EXPLANATIONS:**

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

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
S.I. = Screen Interval
(ft. bgs) = Feet Below Ground Surface
GWE = Groundwater Elevation
TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed

* TOC elevations are surveyed relative to City of Oakland Benchmark, at the northeasterly corner of Weller and Cheney Avenue (Elevation = 9.055 feet, city datum; add 3.00' to U.S.G.S. datum). Prior to November 16, 1993, the DTW measurements were taken from the well cover.

** Groundwater elevation corrected due to the presence of free product; correction factor = [(TOC-DTW)+(Product Thickness x 0.75)].

1 The positive result for gasoline does not appear to have a typical gasoline pattern.

2 The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.

3 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline

4 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

5 Laboratory has potentially identified the presence of MTBE at reportable levels in the groundwater sample collected from this well.

6 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.

7 Detection limit raised. Refer to analytical reports.

8 Laboratory report indicates unidentified hydrocarbons C6-C12.

9 Laboratory report indicates gasoline and unidentified hydrocarbons >C8.

10 MTBE by EPA Method 8260.

11 Laboratory report indicates gasoline C6-C12.

12 MTBE by EPA Method 8260 analyzed past the recommended holding time.

13 Laboratory report indicates weathered gasoline C6-C12.

14 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons <C6.

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

16 Laboratory report indicates gasoline C6-C12 + unidentified hydrocarbons >C10.

17 Skimmer present in well.

18 Laboratory report indicates gasoline C6-C10.

19 Laboratory report indicates unidentified hydrocarbons C6-C10.

# Table 2

## Groundwater Analytical Results - Oxygenate Compounds

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

| WELL ID | DATE | ETHANOL (ppb) | TBA (ppb) | MTBE (ppb) | DIPE (ppb) | ETBE (ppb) | TAME (ppb) | 1,2-DCA (ppb) | EDB (ppb) |
|---|---|---|---|---|---|---|---|---|---|
| U-1 | 09/27/00[1] | -- | ND[2] | 83,000 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | 12/12/00 | -- | -- | 15,000[3] | -- | -- | -- | -- | -- |
| | 03/07/01 | ND[2] | ND[2] | 11,800 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | 06/06/01[3] | ND[2] | ND[2] | 8,700 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | **09/24/01** | **<400,000** | **<20,000** | **4,400** | **<1,000** | **<1,000** | **<1,000** | **<1,000** | **<1,000** |
| U-2 | 09/27/00 | -- | -- | 26,000[1] | -- | -- | -- | -- | -- |
| | 12/12/00 | -- | -- | 7,800[3] | -- | -- | -- | -- | -- |
| | 03/07/01 | ND[2] | ND[2] | 7,900 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | 06/06/01[3] | ND[2] | ND[2] | 10,000 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | **09/24/01** | **<400,000** | **<20,000** | **11,000** | **<1,000** | **<1,000** | **<1,000** | **<1,000** | **<1,000** |
| U-5 | 09/27/00 | -- | -- | 250[1] | -- | -- | -- | -- | -- |
| | 12/12/00 | -- | -- | 13[3] | -- | -- | -- | -- | -- |
| | 03/07/01 | ND | ND | 43.4 | ND | ND | ND | ND | ND |
| | **09/24/01** | **<4,000** | **<200** | **42** | **<10** | **<10** | **<10** | **<10** | **<10** |
| U-6 | 09/27/00 | -- | -- | 2,800[1] | -- | -- | -- | -- | -- |
| | 12/12/00 | -- | -- | 580[3] | -- | -- | -- | -- | -- |
| | 03/07/01[3] | ND[2] | ND[2] | 321 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | 06/06/01[3] | ND[2] | ND[2] | 330 | ND[2] | ND[2] | ND[2] | ND[2] | ND[2] |
| | **09/24/01** | **<40,000** | **<2,000** | **660** | **<100** | **<100** | **<100** | **<100** | **<100** |

# Table 2

## Groundwater Analytical Results - Oxygenate Compounds

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

**EXPLANATIONS:**

TBA = Tertiary butyl alcohol
MTBE = Methyl tertiary butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
1,2-DCA = 1,2-Dichloroethane
EDB = 1,2-Dibromoethane
(ppb) = Parts per billion
ND = Not Detected
-- = Not Analyzed

**ANALYTICAL METHOD:**

EPA Method 8260 for Oxygenate Compounds

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

[2] Detection limit raised. Refer to analytical reports.

[3] Laboratory report indicates sample was analyzed outside the EPA recommended holding time.

# Table 3

**Groundwater Analytical Results**

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

| WELL ID | DATE | Ferrous Iron *(ppm)* | Nitrate as NO3 *(ppm)* | Phosphate as PO4 *(ppm)* | Redox Potential *mV* |
|---|---|---|---|---|---|
| U-1 | 06/15/98 | 39 | ND | ND | 382[2] |
| | 09/30/98 | 17 | ND | ND | 366[2] |
| | 12/28/98 | 4.3 | 6.3 | 28 | 298[2] |
| | 03/22/99 | 4.9 | ND | 3.5 | 320[3] |
| | 06/09/99 | 1.2 | ND | ND | 260[3] |
| | 09/08/99 | 1.80 | ND[1] | ND[1] | 85[3] |
| | 12/07/99 | 5.70 | ND[1] | 17.0 | 404[3] |
| | 03/13/00 | 8.0 | 0.18 | ND | [2]117/262[3] |
| | 06/21/00 | 9.3 | ND[1] | ND[1] | 148[2] |
| | 09/27/00 | 2.8 | ND[1] | 18.4 | 119[2] |
| | 12/12/00 | 0.49 | ND[1] | 16.0 | 131[2] |
| | 03/07/01 | 0.483 | 2.64 | 6.89 | 125[2] |
| | 06/06/01 | 1.0[4] | ND | 2.7 | 141[2] |
| | **09/24/01** | **<0.10** | **0.45[5]** | **--** | **125[2]** |
| U-2 | 03/03/98 | 25 | ND | ND | 369[2] |
| | 06/15/98 | 42 | ND | ND | 341[2] |
| | 09/30/98 | 25 | ND | ND | 354[2] |
| | 12/28/98 | 28 | ND | ND | 276[2] |
| | 03/22/99 | 0.68 | ND | 2.3 | 320[3] |
| | 06/09/99 | 0.50 | ND | ND | 290[3] |
| | 09/08/99 | 1.90 | ND[1] | ND[1] | 235[3] |
| | 12/07/99 | 0.250 | ND[1] | ND[1] | 389[3] |
| | 03/13/00 | 4.3 | 0.31 | ND | [2]121/184[3] |
| | 06/21/00 | 0.26 | ND[1] | ND[1] | 136[2] |
| | 09/27/00 | 0.64 | ND[1] | 10.5 | 142[2] |
| | 12/12/00 | 2.7 | ND[1] | ND[1] | 155[2] |
| | 03/07/01 | 0.677 | 2.24 | 3.02 | 148[2] |
| | 06/06/01 | 0.80[4] | ND | 2.8 | 163[2] |
| | **09/24/01** | **<0.10** | **0.49[5]** | **--** | **151[2]** |
| U-3 | 06/30/97 | 1.4 | 21 | 0.86 | 190[3] |
| | 09/19/97 | 0.57 | 19 | ND | 75[3] |
| | 12/12/97 | 1.9 | 23 | 0.85 | 390[3] |
| | 03/03/98 | 0.013 | 36 | ND | 358[2] |
| | 06/15/98 | 0.16 | 33 | ND | 318[2] |
| | 09/30/98 | 0.040 | 31 | ND | 295[2] |
| | 12/28/98 | ND | 29 | ND | 281[2] |
| | 03/22/99 | 0.015 | 30 | 0.14 | 310[3] |
| | 06/09/99 | ND | 26 | 1.2 | 350[3] |
| | 09/08/99 | ND | 32.9 | ND[1] | 417[3] |
| | 12/07/99 | 0.0520 | 27.9 | ND[1] | 437[3] |
| | 03/13/00 | 0.15 | 33 | ND | [2]226/307[3] |

# Table 3

***Groundwater Analytical Results***

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

| WELL ID | DATE | Ferrous Iron *(ppm)* | Nitrate as NO3 *(ppm)* | Phosphate as PO4 *(ppm)* | Redox Potential *mV* |
|---|---|---|---|---|---|
| U-3 | 06/21/00 | 0.20 | 32 | ND[1] | 225[2] |
| (cont) | 09/27/00 | ND | 34 | 15.7 | 211[2] |
| | 12/12/00 | ND | 31 | ND[1] | 246[2] |
| | 03/07/01 | ND | 36.5 | 0.443 | 251[2] |
| | 06/06/01 | ND[4] | 8.0 | 0.18 | 214[2] |
| | **09/24/01** | **<0.10** | **23[5]** | **--** | **198[2]** |
| U-4 | 06/30/97 | 0.13 | 35 | 0.52 | 200[3] |
| | 09/19/97 | 0.35 | 30 | ND | 45[3] |
| | 12/12/97 | 0.68 | 31 | 0.73 | 380[3] |
| | 03/03/98 | 0.018 | 3.2 | ND | 284[2] |
| | 06/15/98 | 0.14 | 33 | ND | 256[2] |
| | 09/30/98 | 0.049 | 31 | ND | 276[2] |
| | 12/28/98 | 0.36 | 31 | ND | 280[2] |
| | 03/22/99 | ND | 30 | 0.14 | 320[3] |
| | 06/09/99 | ND | 35 | 0.91 | 340[3] |
| | 09/08/99 | ND | 24 | ND[1] | 391[3] |
| | 12/07/99 | ND | 27.7 | ND[1] | 478[3] |
| | 03/13/00 | ND | 33 | ND | [2]219/244[3] |
| | 06/21/00 | 0.034 | 32 | ND[1] | 248[2] |
| | 09/27/00 | ND | 28 | ND[1] | 198[2] |
| | 12/12/00 | ND | 30 | ND[1] | 210[2] |
| | 03/07/01 | ND | 33.9 | 0.226 | 233[2] |
| | 06/06/01 | ND[4] | 7.4 | 0.21 | 248[2] |
| | **09/24/01** | **<0.10** | **24[5]** | **--** | **262[2]** |
| U-5 | 06/30/97 | 16 | ND | ND | 160[3] |
| | 09/19/97 | 0.22 | ND | ND | 63[3] |
| | 12/12/97 | 6.7 | ND | ND | 400[3] |
| | 03/03/98 | 18 | 3.1 | ND | 345[2] |
| | 06/15/98 | 17 | ND | ND | 333[2] |
| | 09/30/98 | 17 | ND | ND | 318[2] |
| | 12/28/98 | 17 | 6.6 | ND | 305[2] |
| | 03/22/99 | 0.12 | ND | 2.4 | 340[3] |
| | 06/09/99 | 0.23 | ND | ND | 320[3] |
| | 09/08/99 | 2.10 | ND[1] | ND[1] | 335[3] |
| | 12/07/99 | 0.310 | ND[1] | ND[1] | 408[3] |
| | 03/13/00 | 0.33 | 0.16 | ND | [2]111/264[3] |
| | 06/21/00 | 0.15 | ND[1] | ND[1] | 159[2] |
| | 09/27/00 | 0.33 | ND[1] | ND[1] | 136[2] |
| | 12/12/00 | 0.086 | ND[1] | ND[1] | 122[2] |

# Table 3

**Groundwater Analytical Results**

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

| WELL ID | DATE | Ferrous Iron (ppm) | Nitrate as NO3 (ppm) | Phosphate as PO4 (ppm) | Redox Potential mV |
|---|---|---|---|---|---|
| U-5 | 03/07/01 | 1.07 | 3.02 | 4.00 | 141[2] |
| (cont) | 06/06/01 | ND[4] | ND | 1.2 | 112[2] |
| | **09/24/01** | **<0.10** | **0.77[5]** | **--** | **146[2]** |
| **U-6** | 06/30/97 | 88 | 0.80 | ND | 190[3] |
| | 09/19/97 | 2.9 | 1.80 | ND | ND[3] |
| | 12/12/97 | 51 | ND | ND | 380[3] |
| | 03/03/98 | 60 | 3.5 | ND | 327[2] |
| | 06/15/98 | 590 | 4.8 | ND | 315[2] |
| | 09/30/98 | 33 | ND | ND | 345[2] |
| | 12/28/98 | 83 | 7.2 | ND | 297[2] |
| | 03/22/99 | 2.1 | ND | 0.98 | 330[3] |
| | 06/09/99 | 0.47 | 0.20 | ND | 320[3] |
| | 09/08/99 | 0.140 | 5.59 | ND[1] | 305[3] |
| | 12/07/99 | 0.260 | ND[1] | ND[1] | 443[3] |
| | 03/13/00 | 0.79 | 0.26 | ND | [2]68/222[3] |
| | 06/21/00 | 1.9 | ND[1] | ND[1] | 159[2] |
| | 09/27/00 | 2.6 | ND[1] | ND[1] | 170[2] |
| | 12/12/00 | ND | 2.7 | ND[1] | 128[2] |
| | 03/07/01 | 2.52 | 3.11 | 37.0 | 117[2] |
| | 06/06/01 | 0.47[4] | 0.15 | 0.70 | 97[2] |
| | **09/24/01** | **<0.10** | **0.58[5]** | **--** | **123[2]** |

**EXPLANATIONS:**

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

(ppm) = Parts per million

ND = Not Detected

mV = millivolts

-- = Not Analyzed

1 Detection limit raised. Refer to analytical reports.

2 Field measurement.

3 Analyzed by laboratory.

4 Due to the transfer of samples from one laboratory to another laboratory; the sample was received beyond the EPA recommended holding time.

5 Laboratory report indicates the sample was analyzed beyond the EPA recommended holding time.

# Table 4

**Dissolved Oxygen Concentrations**

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

| WELL ID | DATE | Before Purge (mg/L) |
|---|---|---|
| U-1 | 12/07/99 | 1.36 |
| | 06/21/00 | 1.53 |
| | 09/27/00 | 1.63 |
| | 12/12/00 | 1.48 |
| | 03/07/01 | 1.91 |
| | 06/06/01 | 1.77 |
| | **09/24/01** | **1.64** |
| U-2 | 12/07/99 | 2.28 |
| | 06/21/00 | 1.96 |
| | 09/27/00 | 2.12 |
| | 12/12/00 | 2.35 |
| | 03/07/01 | 2.21 |
| | 06/06/01 | 2.67 |
| | **09/24/01** | **2.10** |
| U-3 | 06/30/97 | 4.1 |
| | 09/19/97 | 4.2 |
| | 12/12/97 | 2.97 |
| | 03/03/98 | 2.63 |
| | 06/15/98 | 2.93 |
| | 09/30/98 | 3.11 |
| | 12/28/98 | 3.59 |
| | 03/22/99 | 4.02 |
| | 06/09/99 | 3.70 |
| | 09/08/99 | 3.96 |
| | 12/07/99 | 4.21 |
| | 06/21/00 | 4.27 |
| | 09/27/00 | 4.67 |
| | 12/12/00 | 4.79 |
| | 03/07/01 | 5.16 |
| | 06/06/01 | 4.79 |
| | **09/24/01** | **4.27** |
| U-4 | 06/30/97 | 5.4 |
| | 09/19/97 | 5.1 |
| | 12/12/97 | 3.11 |
| | 03/03/98 | 2.94 |
| | 06/15/98 | 3.08 |
| | 09/30/98 | 4.05 |
| | 12/28/98 | 4.57 |
| | 03/22/99 | 4.26 |
| | 06/09/99 | 3.61 |
| | 09/08/99 | 3.75 |

# Table 4

**Dissolved Oxygen Concentrations**

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

| WELL ID | DATE | Before Purge (mg/L) |
|---|---|---|
| U-4 (cont) | 12/07/99 | 4.03 |
| | 06/21/00 | 4.89 |
| | 09/27/00 | 5.09 |
| | 12/12/00 | 4.86 |
| | 03/07/01 | 4.97 |
| | 06/06/01 | 5.12 |
| | **09/24/01** | **4.86** |
| **U-5** | 06/30/97 | 3.4 |
| | 09/19/97 | 0.6 |
| | 12/12/97 | 1.75 |
| | 03/03/98 | 2.36 |
| | 06/15/98 | 2.55 |
| | 09/30/98 | 1.93 |
| | 12/28/98 | 1.64 |
| | 03/22/99 | 1.99 |
| | 06/09/99 | 2.10 |
| | 09/08/99 | 2.21 |
| | 12/07/99 | 2.66 |
| | 06/21/00 | 3.42 |
| | 09/27/00 | 3.85 |
| | 12/12/00 | 3.53 |
| | 03/07/01 | 2.98 |
| | 06/06/01 | 2.67 |
| | **09/24/01** | **3.15** |
| **U-6** | 06/30/97 | 0.30 |
| | 09/19/97 | 0.60 |
| | 12/12/97 | 2.70 |
| | 03/03/98 | 2.18 |
| | 06/15/98 | 2.48 |
| | 09/30/98 | 3.06 |
| | 12/28/98 | 3.42 |
| | 03/22/99 | 3.88 |
| | 06/09/99 | 3.29 |
| | 09/08/99 | 3.12 |
| | 12/07/99 | 3.44 |
| | 06/21/00 | 3.27 |
| | 09/27/00 | 3.49 |
| | 12/12/00 | 3.06 |
| | 03/07/01 | 2.85 |
| | 06/06/01 | 2.46 |
| | **09/24/01** | **3.10** |

# Table 4

**Dissolved Oxygen Concentrations**

Tosco (Unocal) Service Station #5325

3220 Lakeshore Avenue

Oakland, California

**EXPLANATIONS:**

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

(mg/L) = milligrams per liter

# STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

# WELL MONITORING/SAMPLING
# FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 9-24-01

City: Oakland Sampler: JOC

---

Well ID U-1 Well Condition: O.K

Well Diameter 3 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.68 ft

Depth to Water 9.39 ft

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

10.29 X VF 0.38 = 3.91 X 3 (case volume) = Estimated Purge Volume: 12 (gal.)

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

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

---

Starting Time: 10:15 Weather Conditions: Foggy

Sampling Time: 10:43 Am (1043) Water Color: clear Odor: yes

Purging Flow Rate: 1 gpm. Sediment Description: _____

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

| Time | Volume (gal.) | pH | Conductivity (@ 20°) µmhos/cm X | Temperature F | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
|---|---|---|---|---|---|---|---|
| 10:26 | 4 | 6.75 | 1.56 | 72.1 | 1.64 | 125 | |
| 10:28 | 8 | 6.77 | 1.51 | 70.7 | | | |
| 10:31 | 12 | 6.79 | 1.42 | 71.3 | | | |
| | | | | | | | |
| | | | | | | | |

---

## LABORATORY INFORMATION

| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| U-1 | 3 VOA | Y | HCL | Seq. | TPHG, BTEX, MTBE |
| | 1 plastic | " | — | " | Ferrous Iron |
| | | | | | Nitrate |
| | | | | | Sulfate |

COMMENTS: No product found in skimmer

---

# WELL MONITORING/SAMPLING
# FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 9-24-01

City: Oakland Sampler: JOC

---

Well ID U-2 Well Condition: O.K

Well Diameter 3 in Hydrocarbon Thickness: 0 in Amount Bailed (product/water): 0 (gal.)

Total Depth 19.60 ft

Depth to Water 7.63 ft

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

11.97 X VF 0.38 = 4.55 X 3 (case volume) = Estimated Purge Volume: 14 (gal.)

Purge Equipment: Disposable Bailer / Bailer / Stack / (Suction) / Grundfos / Other:

Sampling Equipment: (Disposable Bailer) / Bailer / Pressure Bailer / Grab Sample / Other:

---

Starting Time: 9:32 Weather Conditions: Foggy

Sampling Time: 10:03 A.m (1003) Water Color: Clear Odor: Some

Purging Flow Rate: 1 gpm Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

| Time | Volume (gal.) | pH | Conductivity (µmhos/cm) | Temperature °F | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
|---|---|---|---|---|---|---|---|
| 9:42 | 5 | 7.28 | 3.95 | 72.1 | 2.10 | 151 | |
| 9:45 | 10 | 7.36 | 3.82 | 73.0 | | | |
| 9:47 | 14 | 7.40 | 3.87 | 72.9 | | | |
| | | | | | | | |
| | | | | | | | |

---

## LABORATORY INFORMATION

| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| U-2 | 3 VOA | Y | HCL | Seq. | TPHG, BTEX, MTBE |
| | 1 plastic | " | — | " | (Ferrous Iron |
| | | | | | & Nitrate |
| | | | | | Sulfate) |

COMMENTS:

# WELL MONITORING/SAMPLING
# FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 9-24-01

City: Oakland Sampler: JOC

---

Well ID U-3 Well Condition: O.K

Well Diameter 3 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 19.36 ft.

Depth to Water 11.03 ft.

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

8.33 X VF 0.38 = 3.17 X 3 (case volume) = Estimated Purge Volume: 9.5 (gal.)

Purge Equipment: Disposable Bailer; Bailer; Stack; (Suction); Grundfos; Other: _____

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other: _____

---

Starting Time: 7:35 Weather Conditions: Foggy

Sampling Time: 8:05 Am (0805) Water Color: clear Odor: none

Purging Flow Rate: 1 gpm Sediment Description: _____

Did well de-water? _____ If yes; Time: _____ Volume: _____ (gal.)

| Time | Volume (gal.) | pH | Conductivity (µmhos/cm) | Temperature (F) | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
|---|---|---|---|---|---|---|---|
| 7:45 | 3 | 7.65 | 9.27 | 72.8 | 4.27 | 198 | |
| 7:47 | 6 | 7.60 | 9.23 | 73.0 | | | |
| 7:50 | 9.5 | 7.64 | 9.18 | 73.1 | | | |
| | | | | | | | |
| | | | | | | | |

---

## LABORATORY INFORMATION

| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| U-3 | 3 VOA | Y | HCL | Seq. | TPHG, BTEX, MTBE |
| | 1 plastic | " | — | " | (Ferrous Iron & Nitrate & Sulfate |
| | | | | | |
| | | | | | |

COMMENTS: _____

# WELL MONITORING/SAMPLING
# FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 9-24-01

City: Oakland Sampler: JOC

---

Well ID U-4 Well Condition: O.K

Well Diameter 4 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 20.15 ft.

Depth to Water 9.21 ft.

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

10.94 X VF 0.66 = 7.22 X 3 (case volume) = Estimated Purge Volume: 22 (gal.)

Purge Equipment: Disposable Bailer; Bailer; Stack; (Suction); Grundfos; Other:

Sampling Equipment: (Disposable Bailer); Bailer; Pressure Bailer; Grab Sample; Other:

---

Starting Time: 6:45 Weather Conditions: Foggy

Sampling Time: 7:25 Am (0725) Water Color: clear Odor: none

Purging Flow Rate: 2 gpm. Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

| Time | Volume (gal.) | pH | Conductivity (mmhos/cm) | Temperature (F) | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
|---|---|---|---|---|---|---|---|
| 7:00 | 7.5 | 7.46 | 10.16 | 72.6 | 4.86 | 262 | |
| 7:03 | 15 | 7.39 | 9.58 | 72.5 | | | |
| 7:08 | 22 | 7.41 | 9.51 | 72.4 | | | |
| | | | | | | | |
| | | | | | | | |

## LABORATORY INFORMATION

| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| U-4 | 3 VOA | Y | HCL | Seq. | TPHG, BTEX, MTBE |
| | 1 plastic | " | — | " | (Ferrous Iron |
| | | | | | & Nitrate |
| | | | | | Sulfate) |

COMMENTS:

# WELL MONITORING/SAMPLING
# FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave. Date: 9-24-01

City: Oakland Sampler: JOC

---

Well ID U-5 Well Condition: O.K

Well Diameter 4 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 20.05 ft.

Depth to Water 7.50 ft.

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

12.55 X VF 0.66 = 8.28 X 3 (case volume) = Estimated Purge Volume: 24.5 (gal.)

Purge Equipment: Disposable Bailer, Bailer, Stack, (Suction), Grundfos, Other:

Sampling Equipment: (Disposable Bailer), Bailer, Pressure Bailer, Grab Sample, Other:

---

Starting Time: 8:17 Weather Conditions: Foggy

Sampling Time: 8:45 Am (0845) Water Color: clear Odor: mild

Purging Flow Rate: 2 gpm. Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

| Time | Volume (gal.) | pH | Conductivity (mmhos/cm) | Temperature F | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
|---|---|---|---|---|---|---|---|
| 8:26 | 8 | 7.12 | 6.58 | 72.1 | 3.15 | 146 | |
| 8:30 | 17 | 7.16 | 6.52 | 72.3 | | | |
| 8:33 | 24.5 | 7.22 | 6.55 | 72.4 | | | |
| | | | | | | | |
| | | | | | | | |

---

## LABORATORY INFORMATION

| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| U-5 | 3 VOA | Y | HCL | Seq. | TPHG, BTEX, MTBE |
| | 1 plastic | " | — | " | (Ferrous Iron |
| | | | | | & Nitrate |
| | | | | | Sulfate) |

COMMENTS:

# WELL MONITORING/SAMPLING
# FIELD DATA SHEET

Client/
Facility # 5325 Job#: 180061

Address: 3220 Lakeshore Ave Date: 9-24-01

City: Oakland Sampler: JOC

---

Well ID U-6 Well Condition: O.K

Well Diameter 2 in. Hydrocarbon Thickness: 0 in. Amount Bailed (product/water): 0 (gal.)

Total Depth 23.78 ft.

Depth to Water 7.82 ft.

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

15.96 X VF 0.17 = 2.71 X 3 (case volume) = Estimated Purge Volume: 8.5 (gal.)

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

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

---

Starting Time: 9:00 Weather Conditions: Foggy

Sampling Time: 9:25 A.m (0925) Water Color: clear Odor:

Purging Flow Rate: 1 gpm. Sediment Description:

Did well de-water? If yes; Time: Volume: (gal.)

| Time | Volume (gal.) | pH | Conductivity (µmhos/cm) | Temperature °F | D.O. (mg/L) | ORP (mV) | Alkalinity (ppm) |
|---|---|---|---|---|---|---|---|
| 9:08 | 3 | 7.44 | 722 | 73.1 | 3.10 | 123 | |
| 9:10 | 5.5 | 7.38 | 758 | 72.2 | | | |
| 9:12 | 8.5 | 7.35 | 759 | 72.5 | | | |
| | | | | | | | |
| | | | | | | | |

---

## LABORATORY INFORMATION

| SAMPLE ID | (#) - CONTAINER | REFRIG. | PRESERV. TYPE | LABORATORY | ANALYSES |
|---|---|---|---|---|---|
| U-6 | 3 voA | Y | HCL | Seq. | TPHG, BTEX, MTBE |
| | 1 plastic | " | — | " | Ferrous Iron |
| | | | | | Nitrate |
| | | | | | Sulfate |

COMMENTS:

# Chain-of-Custody-Record

TOSCO

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

Facility Number (Tosco) # 5325
Facility Address 3220 Lakeshore Ave. Oakland, CA
Consultant Project Number 180061.85
Consultant Name Gettler-Ryan Inc. (G-R Inc.)
Address 6747 Sierra Court, Suite J, Dublin, CA 94568
Project Contact (Name) Deanna L. Harding
(Phone) 925-551-7555 (Fax Number) 925-551-7888

Contact (Name) Mr. Dave DeWitt
(Phone) (925) 277-2384
Laboratory Name Sequoia Analytical
Laboratory Release Number
Samples Collected by (Name) JOE AJEMIAN
Collection Date 9-24-01
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 | Time | Sample Preservation | Iced (Yes or No) | Analyses To Be Performed: TPH Gas + BTEX w/MTBE (8015) (8020) | TPH Diesel (8015) | Oil and Grease (5520) | Purgeable Halocarbons (8010) | Purgeable Aromatics (8020) | Purgeable Organics (8240) | Extractable Organics (8270) | Metals Cd,Cr,Pb,Zn,Ni (TCAP or AA) | Ferrous Iron, Nitrate, Phosphate | | | | | DO NOT BILL TB-LB ANALYSIS. Run 8260 - 6 oxy's + 1,2 DCA & EDB on ALL 8020 MTBE hits. Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TB-LB | | 1 VOA | W | G | — | HCL | Y | ✓ | | | | | | | | | | | | | |
| U-1 | | 3 VOA 1 L | / | / | 1043 | / | / | ✓ | | | | | | | | ✓ | | | | | Please filter from plastic and preserve for Ferrous Iron analysis. |
| U-2 | | " | / | / | 1003 | / | / | ✓ | | | | | | | | ✓ | | | | | |
| U-3 | | " | / | / | 0805 | / | / | ✓ | | | | | | | | ✓ | | | | | |
| U-4 | | " | / | / | 0725 | / | / | ✓ | | | | | | | | ✓ | | | | | |
| U-5 | | " | / | / | 0845 | / | / | ✓ | | | | | | | | ✓ | | | | | |
| U-6 | | " | / | / | 0925 | / | / | ✓ | | | | | | | | ✓ | | | | | |

| Relinquished By (Signature) | Organization | Date/Time | Received By (Signature) | Organization | Date/Time |
|---|---|---|---|---|---|
| | G-R Inc. | 9-24-01 1800 | | | 9/24/01 1800 |
| Relinquished By (Signature) | Organization | Date/Time | Received By (Signature) | Organization | Date/Time |
| Relinquished By (Signature) | Organization | Date/Time | Received For Laboratory By (Signature) | | Date/Time |

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
As Contracted

**Sequoia Analytical**

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com



10 October, 2001

Deanna Harding
Gettler Ryan/Geostrategies - Tosco/Unocal
6747 Sierra Ct, Suite J
Dublin, CA 94568

RE: TOSCO
Sequoia Report: MKI0498

Enclosed are the results of analyses for samples received by the laboratory on 09/24/01 18:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley
Project Manager

CA ELAP Certificate #1210

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|---|---|---|---|---|
| TB-LB | MK10498-01 | Water | 09/24/01 00:00 | 09/24/01 18:00 |
| U-1 | MK10498-02 | Water | 09/24/01 10:43 | 09/24/01 18:00 |
| U-2 | MK10498-03 | Water | 09/24/01 10:03 | 09/24/01 18:00 |
| U-3 | MK10498-04 | Water | 09/24/01 08:05 | 09/24/01 18:00 |
| U-4 | MK10498-05 | Water | 09/24/01 07:25 | 09/24/01 18:00 |
| U-5 | MK10498-06 | Water | 09/24/01 08:45 | 09/24/01 18:00 |
| U-6 | MK10498-07 | Water | 09/24/01 09:25 | 09/24/01 18:00 |

Sequoia Analytical - Morgan Hill

James Hartley, 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.*

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A

### Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **TB-LB (MK10498-01) Water Sampled: 09/24/01 00:00 Received: 09/24/01 18:00** | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 50 | ug/l | 1 | 1126003 | 09/26/01 | 09/26/01 | 8015B/8021A | |
| Benzene | ND | 0.50 | " | " | " | " | " | " | |
| Toluene | ND | 0.50 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 0.50 | " | " | " | " | " | " | |
| Methyl tert-butyl ether | ND | 2.5 | " | " | " | " | " | " | |
| *Surrogate: a,a,a-Trifluorotoluene* | | *99.6 %* | *70-130* | | " | " | " | " | |
| **U-1 (MK10498-02) Water Sampled: 09/24/01 10:43 Received: 09/24/01 18:00** | | | | | | | | | |
| **Gasoline Range Organics (C6-C10)** | **4300** | 2500 | ug/l | 50 | 1126002 | 09/26/01 | 09/26/01 | 8015B/8021A | P-01 |
| **Benzene** | **36** | 25 | " | " | " | " | " | " | |
| Toluene | ND | 25 | " | " | " | " | " | " | |
| **Ethylbenzene** | **65** | 25 | " | " | " | " | " | " | |
| **Xylenes (total)** | **590** | 25 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **4400** | 120 | " | " | " | " | " | " | |
| *Surrogate: a,a,a-Trifluorotoluene* | | *97.3 %* | *70-130* | | " | " | " | " | |
| **U-2 (MK10498-03) Water Sampled: 09/24/01 10:03 Received: 09/24/01 18:00** | | | | | | | | | |
| **Gasoline Range Organics (C6-C10)** | **1000** | 250 | ug/l | 5 | 1127002 | 09/27/01 | 09/27/01 | 8015B/8021A | P-01 |
| **Benzene** | **25** | 2.5 | " | " | " | " | " | " | |
| Toluene | ND | 2.5 | " | " | " | " | " | " | |
| **Ethylbenzene** | **12** | 2.5 | " | " | " | " | " | " | |
| **Xylenes (total)** | **100** | 2.5 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **9800** | 120 | " | 50 | " | " | 10/01/01 | " | M-03 |
| *Surrogate: a,a,a-Trifluorotoluene* | | *85.8 %* | *70-130* | | " | " | *09/27/01* | " | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A

### Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **U-3 (MKI0498-04) Water Sampled: 09/24/01 08:05 Received: 09/24/01 18:00** | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 50 | ug/l | 1 | 1127003 | 09/27/01 | 09/27/01 | 8015B/8021A | |
| Benzene | ND | 0.50 | " | " | " | " | " | " | |
| Toluene | ND | 0.50 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 0.50 | " | " | " | " | " | " | |
| Methyl tert-butyl ether | ND | 2.5 | " | " | " | " | " | " | |
| *Surrogate: a,a,a-Trifluorotoluene* | | *97.4 %* | *70-130* | | " | " | " | " | |
| **U-4 (MKI0498-05) Water Sampled: 09/24/01 07:25 Received: 09/24/01 18:00** | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 50 | ug/l | 1 | 1126001 | 09/26/01 | 09/26/01 | 8015B/8021A | |
| Benzene | ND | 0.50 | " | " | " | " | " | " | |
| Toluene | ND | 0.50 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 0.50 | " | " | " | " | " | " | |
| Methyl tert-butyl ether | ND | 2.5 | " | " | " | " | " | " | |
| *Surrogate: a,a,a-Trifluorotoluene* | | *90.8 %* | *70-130* | | " | " | " | " | |
| **U-5 (MKI0498-06) Water Sampled: 09/24/01 08:45 Received: 09/24/01 18:00** | | | | | | | | | |
| **Gasoline Range Organics (C6-C10)** | **270** | 50 | ug/l | 1 | 1126001 | 09/26/01 | 09/26/01 | 8015B/8021A | P-03 |
| Benzene | ND | 0.50 | " | " | " | " | " | " | |
| Toluene | ND | 0.50 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 0.50 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **40** | 2.5 | " | " | " | " | " | " | |
| *Surrogate: a,a,a-Trifluorotoluene* | | *90.8 %* | *70-130* | | " | " | " | " | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A

### Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **U-6 (MK10498-07) Water Sampled: 09/24/01 09:25 Received: 09/24/01 18:00** | | | | | | | | | |
| Gasoline Range Organics (C6-C10) | ND | 50 | ug/l | 1 | 1126001 | 09/26/01 | 09/26/01 | 8015B/8021A | |
| Benzene | ND | 0.50 | " | " | " | " | " | " | |
| Toluene | ND | 0.50 | " | " | " | " | " | " | |
| Ethylbenzene | ND | 0.50 | " | " | " | " | " | " | |
| Xylenes (total) | ND | 0.50 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **530** | 12 | " | 5 | " | " | 10/01/01 | " | M-03 |
| *Surrogate: a,a,a-Trifluorotoluene* | | *91.4 %* | *70-130* | | " | " | *09/26/01* | " | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Volatile Organic Compounds by EPA Method 8260B

### Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **U-1 (MK10498-02) Water Sampled: 09/24/01 10:43 Received: 09/24/01 18:00** | | | | | | | | | |
| Ethanol | ND | 400000 | ug/l | 1000 | 1J09019 | 10/08/01 | 10/08/01 | EPA 8260B | |
| tert-Butyl alcohol | ND | 20000 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **4400** | 200 | " | 200 | " | " | 10/08/01 | " | |
| Di-isopropyl ether | ND | 1000 | " | 1000 | " | " | 10/08/01 | " | |
| Ethyl tert-butyl ether | ND | 1000 | " | " | " | " | " | " | |
| tert-Amyl methyl ether | ND | 1000 | " | " | " | " | " | " | |
| 1,2-Dichloroethane | ND | 1000 | " | " | " | " | " | " | |
| Ethylene dibromide | ND | 1000 | " | " | " | " | " | " | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *142 %* | *70.1-171.9* | | " | " | " | " | |
| **U-2 (MK10498-03) Water Sampled: 09/24/01 10:03 Received: 09/24/01 18:00** | | | | | | | | | |
| Ethanol | ND | 400000 | ug/l | 1000 | 1J09019 | 10/08/01 | 10/08/01 | EPA 8260B | |
| tert-Butyl alcohol | ND | 20000 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **11000** | 500 | " | 500 | " | " | 10/08/01 | " | |
| Di-isopropyl ether | ND | 1000 | " | 1000 | " | " | 10/08/01 | " | |
| Ethyl tert-butyl ether | ND | 1000 | " | " | " | " | " | " | |
| tert-Amyl methyl ether | ND | 1000 | " | " | " | " | " | " | |
| 1,2-Dichloroethane | ND | 1000 | " | " | " | " | " | " | |
| Ethylene dibromide | ND | 1000 | " | " | " | " | " | " | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *113 %* | *70.1-171.9* | | " | " | " | " | |
| **U-5 (MK10498-06) Water Sampled: 09/24/01 08:45 Received: 09/24/01 18:00** | | | | | | | | | |
| Ethanol | ND | 4000 | ug/l | 10 | 1J09019 | 10/08/01 | 10/08/01 | EPA 8260B | |
| tert-Butyl alcohol | ND | 200 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **42** | 10 | " | " | " | " | " | " | |
| Di-isopropyl ether | ND | 10 | " | " | " | " | " | " | |
| Ethyl tert-butyl ether | ND | 10 | " | " | " | " | " | " | |
| tert-Amyl methyl ether | ND | 10 | " | " | " | " | " | " | |
| 1,2-Dichloroethane | ND | 10 | " | " | " | " | " | " | |
| Ethylene dibromide | ND | 10 | " | " | " | " | " | " | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *117 %* | *70.1-171.9* | | " | " | " | " | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Volatile Organic Compounds by EPA Method 8260B

### Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **U-6 (MK10498-07) Water Sampled: 09/24/01 09:25 Received: 09/24/01 18:00** | | | | | | | | | |
| Ethanol | ND | 40000 | ug/l | 100 | 1J09019 | 10/08/01 | 10/08/01 | EPA 8260B | |
| tert-Butyl alcohol | ND | 2000 | " | " | " | " | " | " | |
| **Methyl tert-butyl ether** | **660** | 100 | " | " | " | " | " | " | |
| Di-isopropyl ether | ND | 100 | " | " | " | " | " | " | |
| Ethyl tert-butyl ether | ND | 100 | " | " | " | " | " | " | |
| tert-Amyl methyl ether | ND | 100 | " | " | " | " | " | " | |
| 1,2-Dichloroethane | ND | 100 | " | " | " | " | " | " | |
| Ethylene dibromide | ND | 100 | " | " | " | " | " | " | |
| *Surrogate: 1,2-Dichloroethane-d4* | | *127 %* | *70.1-171.9* | | " | " | " | " | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Ferrous Iron by Hach method 8146/1;10 Phenanthroline Method

## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **U-1 (MK10498-02) Water Sampled: 09/24/01 10:43 Received: 09/24/01 18:00** | | | | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | 1 | 1J08036 | 09/25/01 | 09/25/01 | Hach Co. 8146 | |
| **U-2 (MK10498-03) Water Sampled: 09/24/01 10:03 Received: 09/24/01 18:00** | | | | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | 1 | 1J08036 | 09/25/01 | 09/25/01 | Hach Co. 8146 | |
| **U-3 (MK10498-04) Water Sampled: 09/24/01 08:05 Received: 09/24/01 18:00** | | | | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | 1 | 1J08036 | 09/25/01 | 09/25/01 | Hach Co. 8146 | |
| **U-4 (MK10498-05) Water Sampled: 09/24/01 07:25 Received: 09/24/01 18:00** | | | | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | 1 | 1J08036 | 09/25/01 | 09/25/01 | Hach Co. 8146 | |
| **U-5 (MK10498-06) Water Sampled: 09/24/01 08:45 Received: 09/24/01 18:00** | | | | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | 1 | 1J08036 | 09/25/01 | 09/25/01 | Hach Co. 8146 | |
| **U-6 (MK10498-07) Water Sampled: 09/24/01 09:25 Received: 09/24/01 18:00** | | | | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | 1 | 1J08036 | 09/25/01 | 09/25/01 | Hach Co. 8146 | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Anions by EPA Method 300.0

### Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|---|---|---|---|---|---|---|---|---|
| **U-1 (MK10498-02) Water Sampled: 09/24/01 10:43 Received: 09/24/01 18:00** | | | | | | | | | |
| **Nitrate as NO3** | **0.45** | 0.10 | mg/l | 1 | 1J05006 | 09/26/01 | 09/26/01 | EPA 300.0 | HT-04 |
| **U-2 (MK10498-03) Water Sampled: 09/24/01 10:03 Received: 09/24/01 18:00** | | | | | | | | | |
| **Nitrate as NO3** | **0.49** | 0.10 | mg/l | 1 | 1J05006 | 09/26/01 | 09/26/01 | EPA 300.0 | HT-04 |
| **U-3 (MK10498-04) Water Sampled: 09/24/01 08:05 Received: 09/24/01 18:00** | | | | | | | | | |
| **Nitrate as NO3** | **23** | 1.0 | mg/l | 10 | 1J05006 | 09/26/01 | 09/26/01 | EPA 300.0 | HT-04 |
| **U-4 (MK10498-05) Water Sampled: 09/24/01 07:25 Received: 09/24/01 18:00** | | | | | | | | | |
| **Nitrate as NO3** | **24** | 1.0 | mg/l | 10 | 1J05006 | 09/26/01 | 09/26/01 | EPA 300.0 | HT-04 |
| **U-5 (MK10498-06) Water Sampled: 09/24/01 08:45 Received: 09/24/01 18:00** | | | | | | | | | |
| **Nitrate as NO3** | **0.77** | 0.10 | mg/l | 1 | 1J05006 | 09/26/01 | 09/26/01 | EPA 300.0 | HT-04 |
| **U-6 (MK10498-07) Water Sampled: 09/24/01 09:25 Received: 09/24/01 18:00** | | | | | | | | | |
| **Nitrate as NO3** | **0.58** | 0.10 | mg/l | 1 | 1J05006 | 09/26/01 | 09/26/01 | EPA 300.0 | HT-04 |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control
## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1126001 - EPA 5030B [P/T]** | | | | | | | | | | |
| **Blank (1126001-BLK1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 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 | 2.5 | " | | | | | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.18* | | " | *10.0* | | *91.8* | *70-130* | | | |
| **LCS (1126001-BS1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Benzene | 8.39 | 0.50 | ug/l | 10.0 | | 83.9 | 70-130 | | | |
| Toluene | 9.12 | 0.50 | " | 10.0 | | 91.2 | 70-130 | | | |
| Ethylbenzene | 9.43 | 0.50 | " | 10.0 | | 94.3 | 70-130 | | | |
| Xylenes (total) | 28.4 | 0.50 | " | 30.0 | | 94.7 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.30* | | " | *10.0* | | *93.0* | *70-130* | | | |
| **LCS (1126001-BS2)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 265 | 50 | ug/l | 250 | | 106 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *8.39* | | " | *10.0* | | *83.9* | *70-130* | | | |
| **Batch 1126002 - EPA 5030B [P/T]** | | | | | | | | | | |
| **Blank (1126002-BLK1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 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 | 2.5 | " | | | | | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.46* | | " | *10.0* | | *94.6* | *70-130* | | | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control

## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1126002 - EPA 5030B [P/T]** | | | | | | | | | | |
| **LCS (1126002-BS1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Benzene | 9.04 | 0.50 | ug/l | 10.0 | | 90.4 | 70-130 | | | |
| Toluene | 8.93 | 0.50 | " | 10.0 | | 89.3 | 70-130 | | | |
| Ethylbenzene | 9.44 | 0.50 | " | 10.0 | | 94.4 | 70-130 | | | |
| Xylenes (total) | 28.1 | 0.50 | " | 30.0 | | 93.7 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.61* | | " | *10.0* | | *96.1* | *70-130* | | | |
| **LCS (1126002-BS2)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 241 | 50 | ug/l | 250 | | 96.4 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.95* | | " | *10.0* | | *99.5* | *70-130* | | | |
| **Matrix Spike (1126002-MS1)** | | Source: MK10435-01 | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 257 | 50 | ug/l | 250 | ND | 103 | 60-140 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *10.7* | | " | *10.0* | | *107* | *70-130* | | | |
| **Matrix Spike Dup (1126002-MSD1)** | | Source: MK10435-01 | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 266 | 50 | ug/l | 250 | ND | 106 | 60-140 | 3.44 | 25 | |
| *Surrogate: a,a,a-Trifluorotoluene* | *10.8* | | " | *10.0* | | *108* | *70-130* | | | |
| **Batch 1126003 - EPA 5030B [P/T]** | | | | | | | | | | |
| **Blank (1126003-BLK1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 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 | 2.5 | " | | | | | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.94* | | " | *10.0* | | *99.4* | *70-130* | | | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control
## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1126003 - EPA 5030B [P/T]** | | | | | | | | | | |
| **LCS (1126003-BS1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Benzene | 9.52 | 0.50 | ug/l | 10.0 | | 95.2 | 70-130 | | | |
| Toluene | 10.1 | 0.50 | " | 10.0 | | 101 | 70-130 | | | |
| Ethylbenzene | 10.7 | 0.50 | " | 10.0 | | 107 | 70-130 | | | |
| Xylenes (total) | 31.9 | 0.50 | " | 30.0 | | 106 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.72* | | " | *10.0* | | *97.2* | *70-130* | | | |
| **LCS (1126003-BS2)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 270 | 50 | ug/l | 250 | | 108 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *11.2* | | " | *10.0* | | *112* | *70-130* | | | |
| **Matrix Spike (1126003-MS1)** | | Source: MK10450-01 | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Benzene | 9.32 | 0.50 | ug/l | 10.0 | ND | 93.2 | 60-140 | | | |
| Toluene | 9.91 | 0.50 | " | 10.0 | ND | 99.1 | 60-140 | | | |
| Ethylbenzene | 10.6 | 0.50 | " | 10.0 | ND | 106 | 60-140 | | | |
| Xylenes (total) | 31.3 | 0.50 | " | 30.0 | ND | 104 | 60-140 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *10.3* | | " | *10.0* | | *103* | *70-130* | | | |
| **Matrix Spike Dup (1126003-MSD1)** | | Source: MK10450-01 | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Benzene | 9.32 | 0.50 | ug/l | 10.0 | ND | 93.2 | 60-140 | 0.00 | 25 | |
| Toluene | 9.85 | 0.50 | " | 10.0 | ND | 98.5 | 60-140 | 0.607 | 25 | |
| Ethylbenzene | 10.4 | 0.50 | " | 10.0 | ND | 104 | 60-140 | 1.90 | 25 | |
| Xylenes (total) | 31.2 | 0.50 | " | 30.0 | ND | 104 | 60-140 | 0.320 | 25 | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.98* | | " | *10.0* | | *99.8* | *70-130* | | | |
| **Batch 1127002 - EPA 5030B [P/T]** | | | | | | | | | | |
| **Blank (1127002-BLK1)** | | | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 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 | 2.5 | " | | | | | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.08* | | " | *10.0* | | *90.8* | *70-130* | | | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control
## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1127002 - EPA 5030B [P/T]** | | | | | | | | | | |
| **LCS (1127002-BS1)** | | | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Benzene | 7.81 | 0.50 | ug/l | 10.0 | | 78.1 | 70-130 | | | |
| Toluene | 8.51 | 0.50 | " | 10.0 | | 85.1 | 70-130 | | | |
| Ethylbenzene | 8.96 | 0.50 | " | 10.0 | | 89.6 | 70-130 | | | |
| Xylenes (total) | 27.4 | 0.50 | " | 30.0 | | 91.3 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *8.51* | | " | *10.0* | | *85.1* | *70-130* | | | |
| **LCS (1127002-BS2)** | | | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 254 | 50 | ug/l | 250 | | 102 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *8.36* | | " | *10.0* | | *83.6* | *70-130* | | | |
| **Batch 1127003 - EPA 5030B [P/T]** | | | | | | | | | | |
| **Blank (1127003-BLK1)** | | | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 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 | 2.5 | " | | | | | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.77* | | " | *10.0* | | *97.7* | *70-130* | | | |
| **LCS (1127003-BS1)** | | | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Benzene | 9.13 | 0.50 | ug/l | 10.0 | | 91.3 | 70-130 | | | |
| Toluene | 9.80 | 0.50 | " | 10.0 | | 98.0 | 70-130 | | | |
| Ethylbenzene | 10.7 | 0.50 | " | 10.0 | | 107 | 70-130 | | | |
| Xylenes (total) | 31.4 | 0.50 | " | 30.0 | | 105 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *9.80* | | " | *10.0* | | *98.0* | *70-130* | | | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Total Purgeable Hydrocarbons (C6-C10) by 8015B and BTEX and MTBE by 8021A - Quality Control

## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1127003 - EPA 5030B [P/T]** | | | | | | | | | | |
| **LCS (1127003-BS2)** | | | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 276 | 50 | ug/l | 250 | | 110 | 70-130 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *11.8* | | " | *10.0* | | *118* | *70-130* | | | |
| **Matrix Spike (1127003-MS1)** | | **Source: MK10526-03** | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 227 | 50 | ug/l | 250 | ND | 90.8 | 60-140 | | | |
| *Surrogate: a,a,a-Trifluorotoluene* | *12.4* | | " | *10.0* | | *124* | *70-130* | | | |
| **Matrix Spike Dup (1127003-MSD1)** | | **Source: MK10526-03** | | Prepared & Analyzed: 09/27/01 | | | | | | |
| Gasoline Range Organics (C6-C10) | 214 | 50 | ug/l | 250 | ND | 85.6 | 60-140 | 5.90 | 25 | |
| *Surrogate: a,a,a-Trifluorotoluene* | *11.9* | | " | *10.0* | | *119* | *70-130* | | | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Volatile Organic Compounds by EPA Method 8260B - Quality Control

## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1J09019 - EPA 5030B P/T** | | | | | | | | | | |
| **Blank (1J09019-BLK1)** | | | | Prepared & Analyzed: 10/08/01 | | | | | | |
| Ethanol | ND | 400 | ug/l | | | | | | | |
| tert-Butyl alcohol | ND | 20 | " | | | | | | | |
| Methyl tert-butyl ether | ND | 1.0 | " | | | | | | | |
| Di-isopropyl ether | ND | 1.0 | " | | | | | | | |
| Ethyl tert-butyl ether | ND | 1.0 | " | | | | | | | |
| tert-Amyl methyl ether | ND | 1.0 | " | | | | | | | |
| 1,2-Dichloroethane | ND | 1.0 | " | | | | | | | |
| Ethylene dibromide | ND | 1.0 | " | | | | | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *5.70* | | " | *5.00* | | *114* | *70.1-171.9* | | | |
| **LCS (1J09019-BS1)** | | | | Prepared & Analyzed: 10/08/01 | | | | | | |
| Methyl tert-butyl ether | 7.59 | 1.0 | ug/l | 10.0 | | 75.9 | 70-130 | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *4.11* | | " | *5.00* | | *82.2* | *70.1-171.9* | | | |
| **Matrix Spike (1J09019-MS1)** | | **Source: MK10498-07** | | Prepared & Analyzed: 10/08/01 | | | | | | |
| Methyl tert-butyl ether | 1630 | 100 | ug/l | 1000 | 660 | 97.0 | 70-130 | | | |
| *Surrogate: 1,2-Dichloroethane-d4* | *6.19* | | " | *5.00* | | *124* | *70.1-171.9* | | | |
| **Matrix Spike Dup (1J09019-MSD1)** | | **Source: MK10498-07** | | Prepared & Analyzed: 10/08/01 | | | | | | |
| Methyl tert-butyl ether | 1610 | 100 | ug/l | 1000 | 660 | 95.0 | 70-130 | 1.23 | 25 | |
| *Surrogate: 1,2-Dichloroethane-d4* | *5.36* | | " | *5.00* | | *107* | *70.1-171.9* | | | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Ferrous Iron by Hach method 8146/1;10 Phenanthroline Method - Quality Control
## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1J08036 - General Preparation** | | | | | | | | | | |
| **Blank (1J08036-BLK1)** | | | | Prepared & Analyzed: 09/25/01 | | | | | | |
| Ferrous Iron | ND | 0.10 | mg/l | | | | | | | |
| **LCS (1J08036-BS1)** | | | | Prepared & Analyzed: 09/25/01 | | | | | | |
| Ferrous Iron | 0.395 | 0.10 | mg/l | 0.400 | | 98.8 | 90-110 | | | |
| **Matrix Spike (1J08036-MS1)** | | Source: MK10498-02 | | Prepared & Analyzed: 09/25/01 | | | | | | |
| Ferrous Iron | 0.501 | 0.10 | mg/l | 0.400 | ND | 106 | 80-120 | | | |
| **Matrix Spike Dup (1J08036-MSD1)** | | Source: MK10498-02 | | Prepared & Analyzed: 09/25/01 | | | | | | |
| Ferrous Iron | 0.503 | 0.10 | mg/l | 0.400 | ND | 107 | 80-120 | 0.398 | 20 | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Anions by EPA Method 300.0 - Quality Control

## Sequoia Analytical - Morgan Hill

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| **Batch 1J05006 - General Preparation** | | | | | | | | | | |
| **Blank (1J05006-BLK1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Nitrate as NO3 | ND | 0.10 | mg/l | | | | | | | |
| **LCS (1J05006-BS1)** | | | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Nitrate as NO3 | 9.98 | 0.10 | mg/l | 10.0 | | 99.8 | 90-110 | | | |
| **Matrix Spike (1J05006-MS1)** | | Source: MK10498-07 | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Nitrate as NO3 | 93.6 | 1.0 | mg/l | 100 | ND | 93.0 | 80-120 | | | |
| **Matrix Spike Dup (1J05006-MSD1)** | | Source: MK10498-07 | | Prepared & Analyzed: 09/26/01 | | | | | | |
| Nitrate as NO3 | 92.0 | 1.0 | mg/l | 100 | ND | 91.4 | 80-120 | 1.72 | 20 | |

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.sequoialabs.com

| | | |
|---|---|---|
| Gettler Ryan/Geostrategies - Tosco/Unocal | Project: TOSCO | |
| 6747 Sierra Ct, Suite J | Project Number: Tosco # 5325 | **Reported:** |
| Dublin CA, 94568 | Project Manager: Deanna Harding | 10/10/01 17:18 |

## Notes and Definitions

| | |
|---|---|
| HT-04 | This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose. |
| M-03 | This result is from a second dilution of the sample. An initial result was reported from a previous dilution of the sample necessary to report other analytes in a different range. |
| P-01 | Chromatogram Pattern: Gasoline C6-C10 |
| P-03 | Chromatogram Pattern: Unidentified Hydrocarbons C6-C10 |
| 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 |