

R0219



76 Broadway  
Sacramento, CA 95818  
phone 916.558.7676  
fax 916.558.7639

February 2, 2005

Alameda Co.  
FEB 16 2005  
Enviromental Services

Mr. Don Hwang  
Alameda County Health Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Re: **Document Transmittal**  
Fuel Leak Case  
76 Station #5043  
449 Hegenberger Road  
Oakland, CA

Dear Mr. Hwang:

Please find attached TRC's *Quarterly Status Report*, dated 2/4/05, and TRC's *Quarterly Monitoring Report*, dated 1/20/05 for the above referenced site. I declare, under penalty of perjury, that to the best of my knowledge the information and/or recommendations contained in the attached proposal or report is true and correct.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas H. Kosek".

Thomas H. Kosek  
Site Manager, Risk Management and Remediation  
ConocoPhillips  
76 Broadway, Sacramento, CA 95818

Attachment  
cc: Roger Batra, TRC



February 4, 2005

TRC Project No. 42014401

Mr. Don Hwang  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

**RE: Quarterly Status Report - Fourth Quarter 2004  
76 Station #5043, 449 Hegenberger Road, Oakland, California  
Alameda County**

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the Fourth Quarter 2004 Quarterly Status Report for the subject site, shown on the attached Figures 3 through 5.

#### **PREVIOUS ASSESSMENTS**

The subject site is an operating ConocoPhillips (76) service station, situated on the southwestern corner of Hegenberger Road and Edgewater Drive in Oakland, California. Station facilities include three underground storage tanks (USTs), four dispenser islands, and a station building. A total of six groundwater-monitoring wells are located at or near the site.

October 1991: Four soil samples were collected from the product pipe trenches at depths of approximately 3 feet below ground surface (bgs) during a dispenser island modification. Petroleum hydrocarbon concentrations were moderate to elevated. The product pipe trenches were subsequently excavated to the groundwater depth at 4 to 4.5 bgs.

February 1992: Three monitoring wells were installed at the site to depths ranging from 13.5 to 15 feet bgs.

August 1992: Three additional monitoring wells were installed at the site to depths of 13.5 feet bgs.

September 1994: One 280-gallon waste oil UST was removed from the site. The tank was made of steel, and no apparent holes or cracks were observed in the tank. One soil sample was collected from beneath the former tank at a depth of approximately 9 feet bgs. No petroleum hydrocarbons were detected.

January 1995: Two additional monitoring wells were installed at the site to a depth of 13 feet bgs. In addition, two existing monitoring wells were destroyed in order to accommodate the

construction of a car wash at the subject site. Wells MW-4 and MW-5 were fully drilled out and backfilled with neat cement.

March 1995: Two 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST were removed from the site. Groundwater was encountered in the tank cavity at a depth of approximately 8.5 feet bgs. Soil samples contained low levels of total petroleum hydrocarbons as diesel (TPH-d) and benzene, and moderate levels of total petroleum hydrocarbons as gasoline (TPH-g). Approximately 125,000 gallons of groundwater were pumped from the site for remediation and properly disposed offsite. Four dispenser islands and associated product piping were also removed. Based on detections in confirmation samples, the product dispenser islands were over excavated to approximately 6 feet bgs.

March-April 1995: During demolition activities of the former station building, soil samples were collected from two excavations, which were subsequently over excavated. Confirmation samples contained low petroleum hydrocarbons. An additional area on the south side of the former station building was excavated based on photoionization detector (PID) readings. Two monitoring wells were destroyed in order to allow for over excavation activities to extend to an area adjacent to the dispenser islands in the southeastern quadrant of the site. The excavated areas were subsequently backfilled with clean-engineered fill.

April 1997: Two additional monitoring wells were installed in the vicinity of the site to depths of 13 to 15 feet bgs. In addition, well MW-3, which was damaged during the UST cavity overexcavation in 1995, was fully drilled out and reconstructed in the same borehole.

October 2003: Site environmental consulting responsibilities were transferred to TRC.

## **SENSITIVE RECEPTORS**

A sensitive receptor survey has not been performed for the site.

## **MONITORING AND SAMPLING**

Groundwater samples have been collected on a quarterly basis since 1992. Since 1995, the highest hydrocarbon concentrations, with the exception of methyl tertiary butyl ether (MTBE), have been observed in onsite monitoring well MW-6.

Currently, three onsite and three offsite wells are monitored and sampled quarterly. All wells were sampled this quarter. The groundwater gradient and flow direction were 0.01 foot/foot to the south. These data were consistent with historical data.

## **CHARACTERIZATION STATUS**

Total purgeable petroleum hydrocarbons (TPPH) were detected in four of the six wells, at a maximum concentration of 100,000 micrograms per liter ( $\mu\text{g/l}$ ) in onsite monitoring well MW-6. These levels were consistent with recent historical data.

Benzene was detected in four of the six wells, at a maximum concentration of 5,200  $\mu\text{g/l}$  in onsite monitoring well MW-6. These levels were consistent with recent historical data.

MTBE was detected was detected in one of the six wells, at a maximum concentration of 48  $\mu\text{g/l}$  in onsite monitoring well MW-3. These levels were consistent with recent historical data.

Total petroleum hydrocarbons as diesel (TPH-d) were detected in five of six wells, at a maximum concentration of 78,000  $\mu\text{g/l}$  in onsite monitoring well MW-6. These levels were consistent with recent historical data.

## **REMEDIATION STATUS**

Remediation is not currently being conducted at the site.

## **RECENT CORRESPONDENCE**

No correspondence this quarter.

## **CURRENT QUARTER ACTIVITIES**

October 13, 2004: TRC submitted the work plan for dual phase vacuum extraction (DPVE) pilot test. The objective of this test is to evaluate the DPVE's effectiveness in removing hydrocarbon mass in soil and groundwater at the localized "hot spot" in the vicinity of MW-6.

October 29, 2004: TRC performed groundwater monitoring and sampling. Wastewater generated from well purging and equipment cleaning was stored at TRC's groundwater monitoring facility in Concord, California, and transported by Onyx to the ConocoPhillips Refinery in Rodeo, California, for treatment and disposal.

## **NEXT QUARTER ACTIVITIES**

Perform DPVE test at localized "hot spot" in the vicinity of MW-6.

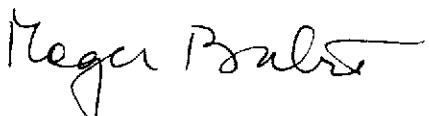
Continue quarterly monitoring and sampling to assess plume stability and concentration trends at key wells.

QSR – Fourth Quarter 2004  
76 Service Station #5043, Oakland, California  
February 4, 2005  
Page 4

If you have any questions regarding this report, please call me at (925) 688-2466.

Sincerely,

TRC



Roger Batra  
Senior Project Manager

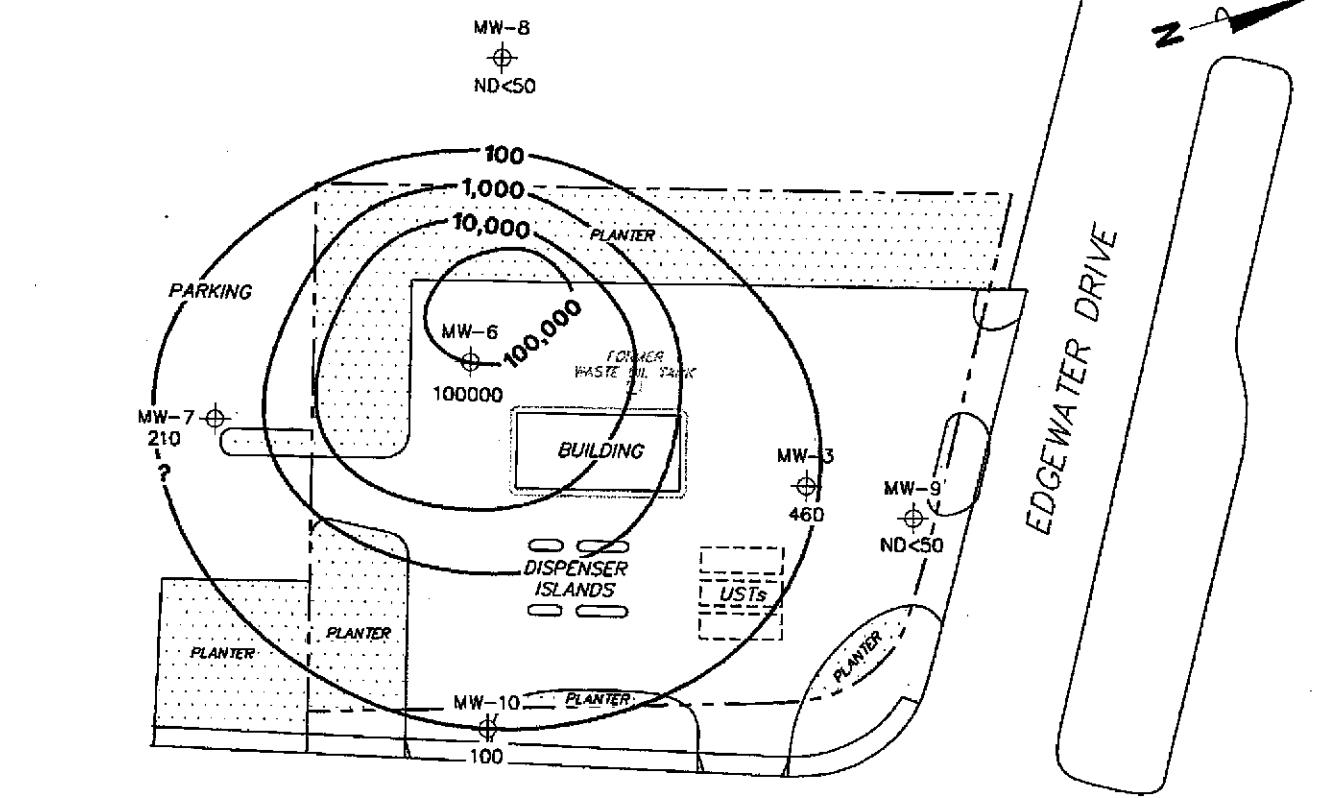
Attachments:

Figure 3 – Dissolved-Phase TPPH Concentration Map, October 29, 2004, from Quarterly Monitoring Report, October through December 2004, dated January 20, 2005 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, October 29, 2004, from Quarterly Monitoring Report, October through December 2004, dated January 20, 2005 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, October 29, 2004, from Quarterly Monitoring Report, October through December 2004, dated January 20, 2005 by TRC.

cc: Thomas Kosel, ConocoPhillips (hard copy and electronic upload)  
Beretta Investment Group, 39560 Stevenson Pl., Suite 118, Fremont, CA 94539



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 TPPH = total purgeable petroleum hydrocarbons.  
 $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

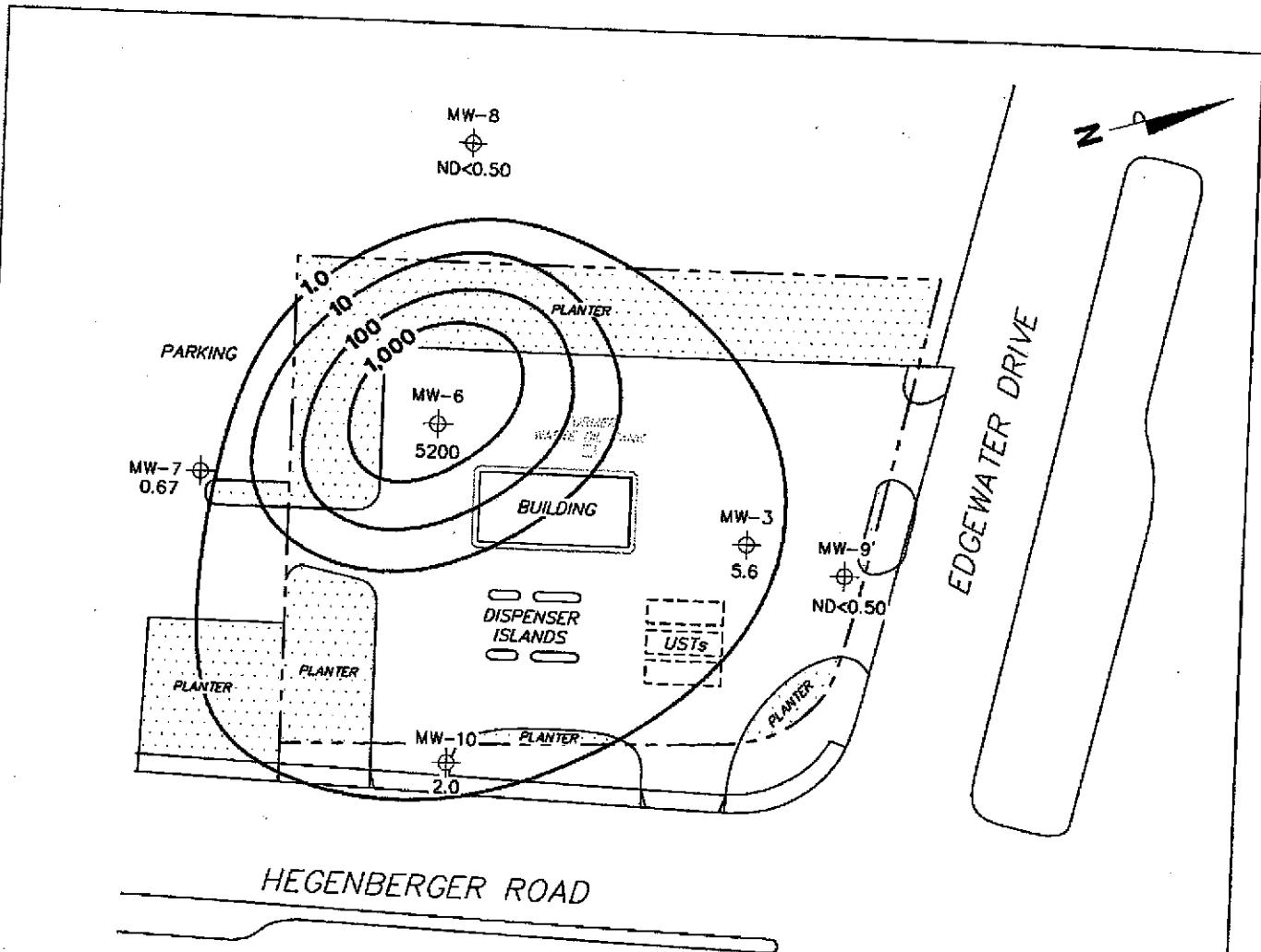
- MW-10 Monitoring Well with Dissolved-Phase TPPH Concentration ( $\mu\text{g/l}$ )
- 100,000- Dissolved-Phase TPPH Contour ( $\mu\text{g/l}$ )

**DISSOLVED-PHASE TPPH CONCENTRATION MAP**  
**October 29, 2004**

76 Station 5043  
 449 Hegenberger Road  
 Oakland, California

SCALE (FEET)  
 0 60

**FIGURE 3**



NOTES:

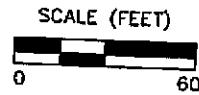
Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank.

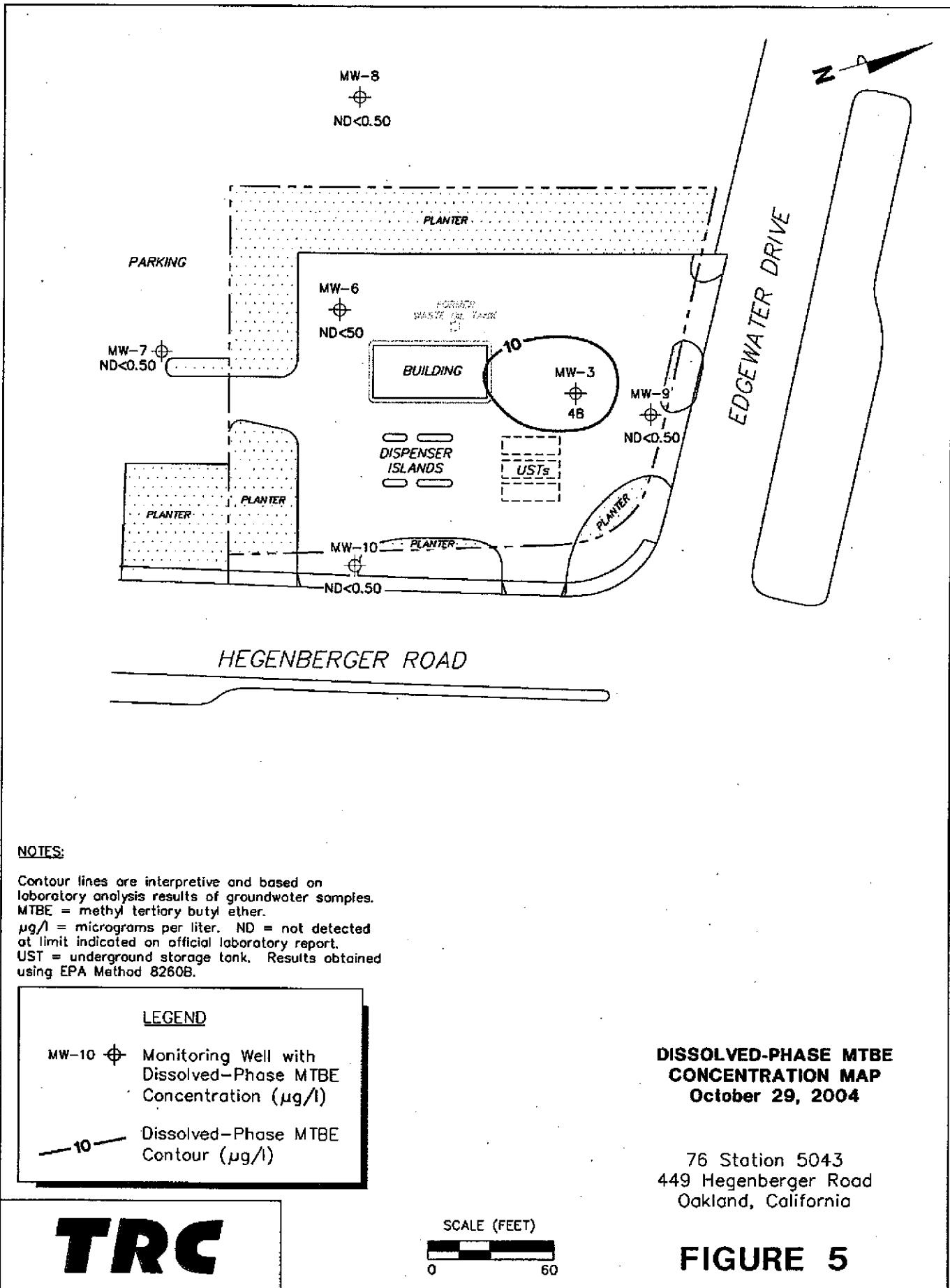
LEGEND

- MW-10 - Monitoring Well with Dissolved-Phase Benzene Concentration ( $\mu\text{g/l}$ )
- 1,000 - Dissolved-Phase Benzene Contour ( $\mu\text{g/l}$ )

**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**  
**October 29, 2004**

76 Station 5043  
 449 Hegenberger Road  
 Oakland, California







January 20, 2005

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

ATTN: MR. THOMAS KOSEL

SITE: 76 STATION 5043  
449 HEGENBERGER ROAD  
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT  
OCTOBER THROUGH DECEMBER 2004

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 5043, located at 449 Hegenberger Road, Oakland, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

A handwritten signature consisting of three stylized loops on the left and a vertical line on the right, with the letters "TRC" written above it.

Anju Farfan *fr*  
QMS Operations Manager

CC: Mr. Roger Batra, TRC (2 copies)  
Beretta Investment Group

Enclosures  
20-0400/5043R05.QMS



**QUARTERLY MONITORING REPORT  
OCTOBER THROUGH DECEMBER 2004**

76 STATION 5043  
449 Hegenberger Road  
Oakland, California

Prepared For:

Mr. Thomas Kosel  
CONOCOPHILLIPS COMPANY  
76 Broadway  
Sacramento, California 95818

By:

A handwritten signature of "Dennis E. Jensen" is positioned to the left of a circular state seal. The seal is for the State of California and reads: "CERTIFIED ENGINEERING GEOLOGIST", "DENNIS E. JENSEN", "No. EG 1034", "Exp. 4/25", and "STATE OF CALIFORNIA".

Senior Project Geologist, Irvine Operations  
January 19, 2005

<b>LIST OF ATTACHMENTS</b>	
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 3: Additional Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPPH Contour Map Figure 4: Dissolved-Phase Benzene Contour Map Figure 5: Dissolved-Phase MTBE Contour Map
Graphs	Groundwater Elevations vs. Time Benzene Concentrations vs. Time
Field Activities	General Field Procedures Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

**Summary of Gauging and Sampling Activities**  
**October 2004 through December 2004**  
**76 Station 5043**  
**449 Hegenberger Road**  
**Oakland, CA**

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Project Coordinator: **Thomas Kosei** Water Sampling Contractor: **TRC**  
Telephone: **916-558-7666** Compiled by: **Valentina Tobon**

Date(s) of Gauging/Sampling Event: **10/29/04**

**Sample Points**

Groundwater wells: **3** onsite, **3** offsite      Wells gauged: **6**      Wells sampled: **6**  
Purging method: **Diaphragm pump**  
Purge water disposal: **Onyx/Rodeo Unit 100**  
Other Sample Points: **0**      Type: **n/a**

**Liquid Phase Hydrocarbons (LPH)**

Wells with LPH: **0**      Maximum thickness (feet): **n/a**  
LPH removal frequency: **n/a**      Method: **n/a**  
Treatment or disposal of water/LPH: **n/a**

**Hydrogeologic Parameters**

Depth to groundwater (below TOC):      Minimum: **1.28 feet**      Maximum: **3.71 feet**  
Average groundwater elevation (relative to available local datum): **5.78 feet**  
Average change in groundwater elevation since previous event: **0.56 feet**

Interpreted groundwater gradient and flow direction:

Current event: **0.01 ft/ft, south**  
Previous event: **0.01 ft/ft, south (7/22/04)**

**Selected Laboratory Results**

Wells with detected **Benzene**: **4**      Wells above MCL (1.0 µg/l): **3**  
Maximum reported benzene concentration: **5,200 µg/l (MW-6)**

Wells with **TPPH 8260B**: **4**      Maximum: **100,000 µg/l (MW-6)**  
Wells with **MTBE**: **1**      Maximum: **48 µg/l (MW-3)**

**Notes:**

## **TABLES**

**Table 1**  
**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**October 29, 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-3 (Screen Interval in feet: 2.5-14.0)</b>														
10/29/04	8.04	2.00	0.00	6.04	0.51	--	460	5.6	15	10	46	--	48	
<b>MW-6 (Screen Interval in feet: 2.5-13.5)</b>														
10/29/04	8.87	3.03	0.00	5.84	0.51	--	100000	5200	6100	4200	15000	--	ND<50	
<b>MW-7 (Screen Interval in feet: 3.0-13.0)</b>														
10/29/04	8.83	3.71	0.00	5.12	1.22	--	210	0.67	1.6	1.7	5.8	--	ND<0.50	
<b>MW-8 (Screen Interval in feet: 3.0-15.0)</b>														
10/29/04	8.52	3.06	0.00	5.46	0.19	--	ND<50	ND<0.50	ND<0.50	0.82	2.5	--	ND<0.50	
<b>MW-9 (Screen Interval in feet: 3.0-13.0)</b>														
10/29/04	8.29	1.28	0.00	7.01	0.60	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.0	--	ND<0.50	
<b>MW-10 (Screen Interval in feet: 3.0-13.0)</b>														
10/29/04	8.62	3.41	0.00	5.21	0.32	--	100	2.0	1.2	1.1	3.6	--	ND<0.50	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-1 (Screen Interval in feet: DNA)</b>														
2/18/92	--	--	--	--	--	150000	--	17000	26000	5200	26000	--	--	
5/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	
8/31/92	--	--	--	--	--	64000	--	13000	12000	2500	22000	--	--	
11/30/92	--	--	--	--	--	--	--	--	--	--	--	--	--	
2/4/93	--	--	--	--	--	--	--	--	--	--	--	--	--	
5/4/93	8.96	2.13	0.10	6.90	--	--	--	--	--	--	--	--	--	Not sampled - presence of free product
8/4/93	8.96	2.92	0.03	6.06	-0.84	--	--	--	--	--	--	--	--	Not sampled - presence of free product
11/3/93	7.38	3.04	0.00	4.34	-1.72	--	--	--	--	--	--	--	--	Not sampled - presence of free product
2/7/94	7.38	2.55	0.03	4.85	0.51	--	--	--	--	--	--	--	--	Not sampled - presence of free product
5/19/94	7.38	2.23	0.01	5.16	0.31	--	--	--	--	--	--	--	--	Not sampled - presence of free product
6/25/94	7.38	2.49	0.01	4.90	-0.26	--	--	--	--	--	--	--	--	Not sampled - presence of free product
7/27/94	7.38	3.10	0.00	4.28	-0.62	--	--	--	--	--	--	--	--	
8/15/94	7.38	2.85	0.11	4.61	0.33	--	--	--	--	--	--	--	--	Not sampled - presence of free product
11/14/94	7.38	2.97	0.12	4.50	-0.11	--	--	--	--	--	--	--	--	Not sampled - presence of free product
2/21/95	7.38	1.53	0.02	5.87	1.37	--	--	--	--	--	--	--	--	Not sampled - presence of free product
5/18/95	--	--	--	--	--	--	--	--	--	--	--	--	--	Destroyed
<b>MW-2 (Screen Interval in feet: DNA)</b>														
2/18/92	--	--	--	--	--	29000	--	1000	5300	260	7900	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-2 continued</b>														
5/20/92	--	--	--	--	--	24000	--	2200	7600	630	11000	--	--	
8/31/92	--	--	--	--	--	9000	--	1800	640	140	2000	--	--	
11/30/92	--	--	--	--	--	29000	--	2000	3400	1200	6900	--	--	
2/4/93	--	--	--	--	--	18000	--	1600	3000	ND	6900	--	--	
5/4/93	8.96	2.48	0.00	6.48	--	63000	--	3200	17000	470	17000	--	--	
8/4/93	8.96	3.20	0.00	5.76	-0.72	45000	--	2100	6600	1400	12000	--	--	
11/3/93	8.58	3.37	0.00	5.21	-0.55	72000	--	3700	16000	3700	20000	--	--	
2/7/94	8.58	2.40	0.00	6.18	0.97	--	--	--	--	--	--	--	--	Not sampled - presence of free product
5/19/94	8.58	2.13	0.00	6.45	0.27	42000	--	2500	1300	2300	13000	--	--	
6/25/94	8.58	2.65	0.00	5.93	-0.52	--	--	--	--	--	--	--	--	
7/27/94	8.58	3.44	0.00	5.14	-0.79	--	--	--	--	--	--	--	--	
8/15/94	8.58	3.25	0.00	5.33	0.19	35000	--	2400	850	1700	15000	--	--	
11/14/94	8.58	2.13	0.00	6.45	1.12	43000	--	2200	6500	1800	14000	--	--	
2/21/95	8.58	1.65	0.00	6.93	0.48	44000	--	2200	3200	1300	1500	--	--	
5/18/95	--	--	--	--	--	--	--	--	--	--	--	--	--	Destroyed
<b>MW-3 (Screen Interval in feet: 2.5-14.0)</b>														
2/18/92	--	--	--	--	--	230	--	4.8	22	1.8	33	--	--	
5/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
8/31/92	--	--	--	--	--	210	--	1	ND	ND	ND	--	--	
11/30/92	--	--	--	--	--	790	--	ND	ND	ND	ND	--	--	
2/4/93	--	--	--	--	--	3300	--	320	ND	96	6.1	--	--	
5/4/93	7.84	4.32	0.00	3.52	--	1800	--	95	ND	ND	ND	--	--	
8/4/93	7.84	4.94	0.00	2.90	-0.62	210	--	ND	ND	ND	ND	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-3 continued														
11/3/93	7.42	4.53	0.00	2.89	-0.01	640	--	ND	ND	ND	ND	--	--	
2/7/94	7.42	2.40	0.00	5.02	2.13	2700	--	110	ND	17	ND	--	--	
5/19/94	7.42	3.60	0.00	3.82	-1.20	1800	--	83	ND	6.2	9.1	--	--	
6/25/94	7.42	4.58	0.00	2.84	-0.98	--	--	--	--	--	--	--	--	
7/27/94	7.42	4.58	0.00	2.84	0.00	--	--	--	--	--	--	--	--	
8/15/94	7.42	4.65	0.00	2.77	-0.07	130	--	1.1	0.54	ND	0.97	--	--	
11/14/94	7.42	3.18	0.00	4.24	1.47	1600	--	ND	ND	ND	ND	--	--	
2/21/95	7.42	1.81	0.00	5.61	1.37	3800	--	350	ND	130	22	--	--	
5/18/95	7.42	4.56	0.00	2.86	-2.75	1300	--	42	ND	ND	ND	--	--	
8/17/95	7.42	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
7/26/96	7.42	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
10/28/96	7.42	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed at 0.55 feet
1/29/97	7.42	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
4/15/97	7.42	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
5/27/97	7.42	3.45	0.00	3.97	--	670	--	6.5	ND	ND	ND	250	--	
6/1/97	7.42	3.50	0.00	3.92	-0.05	--	--	--	--	--	--	--	--	
7/15/97	8.04	3.71	0.00	4.33	--	240	--	ND	ND	ND	ND	490	--	
10/9/97	8.04	3.70	0.00	4.34	--	270	--	1.1	ND	2.4	1.4	910	--	
1/14/98	8.04	2.16	0.00	5.88	1.54	310	--	ND	ND	0.62	0.65	140	--	
4/1/98	8.04	2.20	0.00	5.84	--	370	--	5.7	ND	ND	ND	93	--	
7/15/98	8.04	3.38	0.00	4.66	--	460	--	ND	ND	ND	ND	230	--	
10/16/98	8.04	2.30	0.00	5.74	--	330	--	4.7	ND	ND	ND	60	--	
1/25/99	8.04	2.42	0.00	5.62	--	420	--	1.5	ND	ND	ND	180	--	
4/15/99	8.04	2.16	0.00	5.88	--	290	--	0.54	ND	ND	ND	160	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-3 continued</b>														
7/14/99	8.04	2.35	0.00	5.69	--	290	--	3.2	ND	ND	ND	160	--	
10/21/99	8.04	2.49	0.00	5.55	--	360	--	0.77	ND	ND	ND	82	--	
1/20/00	8.04	2.38	0.00	5.66	--	ND	--	0.81	ND	ND	ND	54	--	
4/13/00	8.04	2.76	0.00	5.28	--	250	--	0.69	ND	ND	ND	91	150	
7/14/00	8.04	3.26	0.00	4.78	--	345	--	ND	ND	ND	ND	94.7	--	
10/26/00	8.04	3.12	0.00	4.92	--	480	--	6.0	ND	ND	ND	120	--	
1/3/01	8.04	3.65	0.00	4.39	-0.53	364	--	1.59	ND	ND	ND	118	--	
4/4/01	8.04	3.98	0.00	4.06	-0.33	417	--	1.24	ND	ND	0.802	237	--	
7/17/01	8.04	3.12	0.00	4.92	0.86	480	--	ND	ND	ND	ND	150	--	
10/1/01	8.04	3.25	0.00	4.79	-0.13	310	--	1.0	ND<0.50	ND<0.50	ND<0.50	53	--	
1/31/02	8.04	2.27	0.00	5.77	0.98	250	--	3.5	ND<1.0	ND<1.0	ND<1.0	110	--	
4/18/02	8.04	3.55	0.00	4.49	-1.28	300	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	59	
7/28/02	8.04	2.55	0.00	5.49	1.00	--	500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	130	
10/9/02	8.04	2.47	0.00	5.57	0.08	--	690	ND<5	ND<5	ND<5	ND<10	--	120	
1/2/03	8.04	1.70	0.00	6.34	0.77	--	310	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	110	
4/1/03	8.04	3.48	0.00	4.56	--	--	250	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	210	
7/1/03	8.04	2.65	0.00	5.39	0.83	--	450	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	70	
10/2/03	8.04	3.12	0.00	4.92	-0.47	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	210	
1/9/04	8.04	2.39	0.00	5.65	0.73	--	300	ND<0.50	0.53	0.53	1.5	--	66	
4/26/04	8.04	3.11	0.00	4.93	-0.72	--	440	2.5	5.5	2.9	9.4	--	81	
7/22/04	8.04	2.51	0.00	5.53	0.60	--	420	ND<0.5	ND<0.5	ND<0.5	ND<1	--	72	
10/29/04	8.04	2.00	0.00	6.04	0.51	--	460	5.6	15	10	.46	--	48	
<b>MW-4</b>														
(Screen Interval in feet: DNA)														
8/31/92	--	--	--	--	--	240	--	ND	ND	ND	0.54	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-4 continued</b>														
11/30/92	--	--	--	--	--	420	--	ND	ND	ND	ND	--	--	
2/4/93	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
5/4/93	9.00	4.09	0.00	4.91	--	110	--	0.95	ND	ND	ND	--	--	
8/4/93	9.00	5.01	0.00	3.99	-0.92	250	--	ND	3.5	ND	4.1	--	--	
11/3/93	8.41	4.23	0.00	4.18	0.19	130	--	ND	ND	ND	ND	--	--	
2/7/94	8.41	3.35	0.00	5.06	0.88	56	--	ND	ND	ND	ND	--	--	
5/19/94	8.41	3.92	0.00	4.49	-0.57	140	--	ND	ND	ND	ND	--	--	
6/25/94	8.41	4.35	0.00	4.06	-0.43	--	--	--	--	--	--	--	--	
7/27/94	8.41	4.28	0.00	4.13	0.07	--	--	--	--	--	--	--	--	
8/15/94	8.41	4.27	0.00	4.14	0.01	59	--	ND	0.6	ND	ND	--	--	
11/14/94	8.41	4.05	0.00	4.36	0.22	130	--	ND	ND	ND	ND	--	--	
2/21/95	--	--	--	--	--	--	--	--	--	--	--	--	--	Destroyed
<b>MW-5 (Screen Interval in feet: DNA)</b>														
8/31/92	--	--	--	--	--	78	--	0.89	ND	ND	13	--	--	
11/30/92	--	--	--	--	--	930	--	70	290	0.79	14	--	--	
2/4/93	--	--	--	--	--	5700	--	38	ND	620	170	--	--	
5/4/93	8.95	4.37	0.00	4.58	--	7400	--	41	ND	1000	35	--	--	
8/4/93	8.95	5.81	0.00	3.14	-1.44	1500	--	130	1	460	11	--	--	
11/3/93	8.95	5.68	0.00	3.27	0.13	13000	--	350	ND	3500	530	--	--	
2/7/94	8.95	5.11	0.00	3.84	0.57	2000	--	87	ND	370	110	--	--	
5/19/94	8.95	5.09	0.00	3.86	0.02	260	--	44	ND	32	4.1	--	--	
6/25/94	8.95	4.55	0.00	4.40	0.54	--	--	--	--	--	--	--	--	
7/27/94	8.95	5.72	0.00	3.23	-1.17	--	--	--	--	--	--	--	--	
8/15/94	8.95	5.68	0.00	3.27	0.04	1600	--	110	ND	340	72	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-5 continued</b>														
11/14/94	8.95	5.63	0.00	3.32	0.05	250	--	40	ND	ND	5	--	--	
2/21/95	--	--	--	--	--	--	--	--	--	--	--	--	--	Destroyed
<b>MW-6 (Screen Interval in feet: 2.5-13.5)</b>														
8/31/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/30/92	--	--	--	--	--	9200	--	550	ND	740	1600	--	--	
2/4/93	--	--	--	--	--	3600	--	340	ND	290	550	--	--	
5/4/93	9.12	3.72	0.00	5.40	--	4900	--	360	18	450	430	--	--	
8/4/93	9.12	5.15	0.00	3.97	-1.43	3400	--	390	ND	440	190	--	--	
11/3/93	8.87	5.25	0.00	3.62	-0.35	1400	--	320	ND	200	7.7	--	--	
2/7/94	8.87	4.55	0.00	4.32	0.70	4900	--	650	ND	250	35	--	--	
5/19/94	8.87	4.62	0.00	4.25	-0.07	3600	--	300	1.7	210	41	--	--	
8/15/94	8.87	5.08	0.00	3.79	--	1300	--	130	6.7	54	57	--	--	
11/14/94	8.87	5.30	0.00	3.57	-0.22	730	--	50	ND	ND	39	--	--	
2/21/95	8.87	5.37	0.00	3.50	-0.07	2000	--	250	4.6	25	30	--	--	
5/18/95	8.87	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
8/17/95	8.87	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
7/26/96	8.87	6.40	3.33	4.97	--	--	--	--	--	--	--	--	--	Not sampled - presence of free product
10/28/96	8.87	4.10	0.21	4.93	-0.04	--	--	--	--	--	--	--	--	Not sampled - presence of free product
11/13/96	8.87	4.02	0.25	5.04	0.11	--	--	--	--	--	--	--	--	
11/25/96	8.87	4.01	0.75	5.42	0.38	--	--	--	--	--	--	--	--	
12/4/96	8.87	3.65	0.50	5.59	0.17	--	--	--	--	--	--	--	--	
12/19/96	8.87	4.80	2.20	5.72	0.13	--	--	--	--	--	--	--	--	
1/8/97	8.87	4.84	1.75	5.34	-0.38	--	--	--	--	--	--	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
MW-6 continued														
1/14/97	8.87	4.51	1.15	5.22	-0.12	--	--	--	--	--	--	--	--	
1/27/97	8.87	4.00	1.75	6.18	0.96	--	--	--	--	--	--	--	--	
1/29/97	8.87	3.24	0.31	5.86	-0.32	--	--	--	--	--	--	--	--	Not sampled - presence of free product
2/11/97	8.87	4.65	1.20	5.12	-0.74	--	--	--	--	--	--	--	--	
2/24/97	8.87	4.81	1.10	4.89	-0.23	--	--	--	--	--	--	--	--	
3/10/97	8.87	4.60	0.95	4.98	0.10	--	--	--	--	--	--	--	--	
3/17/97	8.87	4.50	0.89	5.04	0.05	--	--	--	--	--	--	--	--	
3/31/97	8.87	4.65	1.00	4.97	-0.07	--	--	--	--	--	--	--	--	
4/15/97	8.87	4.90	1.03	4.74	-0.23	--	--	--	--	--	--	--	--	Not sampled - presence of free product
4/28/97	8.87	4.78	0.03	4.11	-0.63	--	--	--	--	--	--	--	--	
5/15/97	8.87	4.60	0.25	4.46	0.35	--	--	--	--	--	--	--	--	
5/27/97	8.87	4.50	0.25	4.56	0.10	--	--	--	--	--	--	--	--	
6/9/97	8.87	4.60	0.20	4.42	--	--	--	--	--	--	--	--	--	
6/24/97	8.87	4.50	0.25	4.56	0.14	--	--	--	--	--	--	--	--	
7/9/97	8.87	4.80	0.60	4.52	-0.04	--	--	--	--	--	--	--	--	
7/15/97	8.87	4.63	0.42	4.55	0.04	--	--	--	--	--	--	--	--	Not sampled - presence of free product
7/21/97	8.87	4.75	0.25	4.31	-0.25	--	--	--	--	--	--	--	--	
8/6/97	8.87	4.50	0.10	4.44	0.14	--	--	--	--	--	--	--	--	
8/20/97	8.87	4.55	0.10	4.39	-0.05	--	--	--	--	--	--	--	--	
9/2/97	8.87	4.75	0.05	4.16	-0.24	--	--	--	--	--	--	--	--	
10/9/97	8.87	4.84	0.04	4.06	-0.10	--	--	--	--	--	--	--	--	Not sampled - presence of free product

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>MW-6 continued</b>														
1/14/98	8.87	3.90	0.94	5.67	1.61	--	--	--	--	--	--	--	--	Not sampled - presence of free product
2/12/98	8.87	3.35	0.64	6.00	0.33	--	--	--	--	--	--	--	--	
3/3/98	8.87	4.51	0.02	4.37	-1.63	--	--	--	--	--	--	--	--	
4/1/98	8.87	3.67	1.60	6.40	2.03	--	--	--	--	--	--	--	--	Not sampled - presence of free product
5/26/98	8.87	4.11	0.50	5.13	-1.26	--	--	--	--	--	--	--	--	
6/15/98	8.87	5.03	0.30	4.06	-1.07	--	--	--	--	--	--	--	--	
7/15/98	8.87	4.56	0.05	4.35	0.28	--	--	--	--	--	--	--	--	Not sampled - presence of free product
8/21/98	8.87	4.77	0.02	4.11	-0.23	--	--	--	--	--	--	--	--	
9/30/98	8.87	5.08	0.03	3.81	-0.30	--	--	--	--	--	--	--	--	
10/16/98	8.87	4.31	2.40	6.36	2.55	--	--	--	--	--	--	--	--	Not sampled - presence of free product
11/6/98	8.87	3.98	0.17	5.02	-1.34	--	--	--	--	--	--	--	--	
11/25/98	8.87	3.92	0.10	5.02	0.01	--	--	--	--	--	--	--	--	
12/28/98	8.87	3.90	0.20	5.12	0.10	--	--	--	--	--	--	--	--	
1/25/99	8.87	4.18	0.60	5.14	0.02	--	--	--	--	--	--	--	--	Not sampled - presence of free product
2/22/99	8.87	4.07	0.22	4.96	-0.18	--	--	--	--	--	--	--	--	
3/22/99	8.87	4.32	0.15	4.66	-0.30	--	--	--	--	--	--	--	--	
4/15/99	8.87	4.23	0.95	5.35	0.69	--	--	--	--	--	--	--	--	Not sampled - presence of free product
5/28/99	8.87	4.38	0.39	4.78	-0.57	--	--	--	--	--	--	--	--	
6/29/99	8.87	4.12	0.02	4.76	-0.02	--	--	--	--	--	--	--	--	
7/14/99	8.87	4.20	0.03	4.69	-0.07	--	--	--	--	--	--	--	--	Not sampled - presence of free product

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-6 continued</b>														
8/23/99	8.87	4.51	0.24	4.54	-0.15	--	--	--	--	--	--	--	--	
9/30/99	8.87	4.17	0.17	4.83	0.29	--	--	--	--	--	--	--	--	
10/21/99	8.87	4.27	0.12	4.69	-0.14	--	--	--	--	--	--	--	--	
11/29/99	8.87	4.18	0.00	4.69	0.00	--	--	--	--	--	--	--	--	
12/20/99	8.87	4.26	0.01	4.62	-0.07	--	--	--	--	--	--	--	--	
1/20/00	8.87	4.31	0.00	4.56	-0.06	130000	--	2900	8600	2000	16000	ND	--	
2/26/00	8.87	3.98	0.00	4.89	0.33	--	--	--	--	--	--	--	--	
3/31/00	8.87	4.14	0.00	4.73	-0.16	--	--	--	--	--	--	--	--	
4/13/00	8.87	4.04	0.00	4.83	0.10	140000	--	5000	14000	3600	27000	7700	--	
5/26/00	8.87	4.41	0.00	4.46	-0.37	--	--	--	--	--	--	--	--	
6/17/00	8.87	4.35	0.00	4.52	0.06	--	--	--	--	--	--	--	--	
7/14/00	8.87	4.47	0.00	4.40	-0.12	259000	--	7670	13700	6860	40700	ND	ND	
8/24/00	8.87	3.71	0.00	5.16	0.76	--	--	--	--	--	--	--	--	
9/27/00	8.87	4.33	0.00	4.54	-0.62	--	--	--	--	--	--	--	--	
10/26/00	8.87	4.32	0.00	4.55	0.01	110000	--	7000	6200	3700	12000	670	43	
1/3/01	8.87	4.52	0.00	4.35	-0.20	84700	--	3950	4130	3650	11800	ND	ND	
4/4/01	8.87	4.29	0.00	4.58	0.23	69800	--	2060	2840	3650	10900	ND	47.8	
7/17/01	8.87	4.37	0.00	4.50	-0.08	100000	--	3200	3300	3400	12000	ND	--	
10/1/01	8.87	4.45	0.00	4.42	-0.08	110000	--	3200	2400	4500	13000	ND<1000	--	
1/31/02	8.87	4.03	0.00	4.84	0.42	230000	--	2400	1800	5400	16000	ND<2500	--	
4/18/02	8.87	3.45	0.00	5.42	0.58	94000	--	6800	13000	3000	19000	ND<500	--	
7/28/02	8.87	2.24	0.00	6.63	1.21	--	110000	530	170	3200	7300	--	ND<100	
10/9/02	8.87	3.53	0.00	5.34	-1.29	--	970000	10000	39000	13000	94000	--	ND<2000	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-6 continued</b>														
1/2/03	8.87	2.34	0.00	6.53	1.19	--	270000	6100	15000	5400	37000	--	ND<200	
4/1/03	8.87	3.17	0.00	5.70	--	--	3000000	8000	39000	37000	260000	--	ND<2000	
7/1/03	8.87	3.55	0.00	5.32	-0.38	--	38000	2100	990	2700	6500	--	ND<100	
10/2/03	8.87	3.82	0.00	5.05	-0.27	--	100000	5600	6900	4700	18000	--	ND<800	
1/9/04	8.87	2.80	0.00	6.07	1.02	--	170000	2800	3300	4700	16000	--	ND<200	
4/26/04	8.87	3.40	0.00	5.47	-0.60	--	97000	5900	9000	5100	23000	--	ND<50	
7/22/04	8.87	3.54	0.00	5.33	-0.14	--	110000	4100	5100	4000	16000	--	ND<200	
10/29/04	8.87	3.03	0.00	5.84	0.51	--	100000	5200	6100	4200	15000	--	ND<50	
<b>MW-7 (Screen Interval in feet: 3.0-13.0)</b>														
5/27/97	8.83	4.50	0.00	4.33	--	68	--	ND	ND	ND	ND	ND	--	
6/1/97	8.83	4.54	0.00	4.29	-0.04	--	--	--	--	--	--	--	--	
7/15/97	8.83	4.70	0.00	4.13	--	ND	--	ND	ND	ND	ND	ND	--	
10/9/97	8.83	4.30	0.00	4.53	--	ND	--	ND	ND	ND	ND	ND	--	
1/14/98	8.83	2.88	0.00	5.95	1.42	ND	--	ND	ND	ND	ND	36	--	
4/1/98	8.83	3.13	0.00	5.70	--	ND	--	ND	ND	ND	ND	ND	--	
7/15/98	8.83	4.45	0.00	4.38	--	ND	--	ND	ND	ND	ND	ND	--	
10/16/98	8.83	3.45	0.00	5.38	--	ND	--	ND	ND	ND	ND	ND	--	
1/25/99	8.83	3.22	0.00	5.61	--	ND	--	ND	ND	ND	ND	ND	--	
4/15/99	8.83	3.11	0.00	5.72	--	ND	--	ND	ND	ND	ND	ND	--	
7/14/99	8.83	3.34	0.00	5.49	--	ND	--	ND	ND	ND	ND	ND	--	
10/21/99	8.83	3.43	0.00	5.40	--	ND	--	ND	ND	ND	ND	ND	--	
1/20/00	8.83	3.29	0.00	5.54	--	ND	--	ND	ND	ND	ND	4.2	--	
4/13/00	8.83	3.39	0.00	5.44	--	ND	--	ND	ND	ND	ND	ND	--	
7/14/00	8.83	4.42	0.00	4.41	--	ND	--	ND	ND	ND	ND	7.83	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-7 continued</b>														
7/17/01	8.83	5.06	0.00	3.77	--	ND	--	ND	ND	ND	ND	ND	ND	--
10/1/01	8.83	4.98	0.00	3.85	0.08	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND	--
1/31/02	8.83	3.88	0.00	4.95	1.10	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND	--
4/18/02	8.83	4.03	0.00	4.80	-0.15	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.7	--
7/28/02	8.83	3.59	0.00	5.24	0.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.9	
10/9/02	8.83	4.53	0.00	4.30	-0.94	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.9	
1/3/03	8.83	3.36	0.00	5.47	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
4/1/03	8.83	3.94	0.00	4.89	-0.58	--	71	ND<0.50	ND<0.50	0.71	ND<1.0	--	3.4	
7/1/03	8.83	4.60	0.00	4.23	-0.66	--	64	ND<0.50	ND<0.50	0.77	2.0	--	35	
10/2/03	8.83	5.46	0.00	3.37	-0.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9	
1/9/04	8.83	3.55	0.00	5.28	1.91	--	54	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.4	
4/26/04	8.83	4.49	0.00	4.34	-0.94	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.5	--	2.3	
7/22/04	8.83	4.93	0.00	3.90	-0.44	--	82	0.90	2.0	3.5	9.9	--	1.4	
10/29/04	8.83	3.71	0.00	5.12	1.22	--	210	0.67	1.6	1.7	5.8	--	ND<0.50	
<b>MW-8</b> <b>(Screen Interval in feet: 3.0-15.0)</b>														
5/27/97	8.52	3.42	0.00	5.10	--	310	--	0.88	0.67	15	70	ND	--	
6/1/97	8.52	3.46	0.00	5.06	-0.04	--	--	--	--	--	--	--	--	
7/15/97	8.52	3.49	0.00	5.03	--	ND	--	ND	ND	2.7	3.8	ND	--	
10/9/97	8.52	3.73	0.00	4.79	--	590	--	1.4	ND	32	4.1	ND	--	
1/14/98	8.52	1.92	0.00	6.60	1.81	ND	--	ND	ND	ND	ND	ND	ND	
4/1/98	8.52	2.38	0.00	6.14	--	ND	--	ND	ND	ND	ND	4.7	--	
7/15/98	8.52	3.53	0.00	4.99	--	ND	--	ND	ND	0.56	1.1	ND	--	
10/16/98	8.52	3.04	0.00	5.48	--	ND	--	ND	ND	ND	ND	ND	ND	
1/25/99	8.52	2.92	0.00	5.60	--	ND	--	ND	ND	ND	ND	ND	ND	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
		(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-8 continued</b>														
4/15/99	8.52	2.40	0.00	6.12	--	ND	--	ND	ND	ND	ND	ND	--	
7/14/99	8.52	3.03	0.00	5.49	--	ND	--	ND	ND	ND	ND	ND	--	
10/21/99	8.52	3.11	0.00	5.41	--	ND	--	ND	ND	ND	ND	ND	--	
1/20/00	8.52	3.06	0.00	5.46	--	ND	--	ND	ND	ND	ND	ND	--	
4/13/00	8.52	2.84	0.00	5.68	--	ND	--	ND	ND	ND	ND	ND	--	
7/14/00	8.52	3.39	0.00	5.13	--	ND	--	ND	ND	ND	ND	ND	--	
7/17/01	8.52	3.46	0.00	5.06	--	ND	--	ND	ND	ND	ND	ND	--	
10/1/01	8.52	3.51	0.00	5.01	-0.05	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
1/31/02	8.52	2.75	0.00	5.77	0.76	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
4/18/02	8.52	2.98	0.00	5.54	-0.23	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
7/28/02	8.52	2.41	0.00	6.11	0.57	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/9/02	8.52	2.09	0.00	6.43	0.32	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
1/2/03	8.52	1.98	0.00	6.54	0.11	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
4/1/03	8.52	2.66	0.00	5.86	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
7/1/03	8.52	3.08	0.00	5.44	-0.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/2/03	8.52	3.89	0.00	4.63	-0.81	--	540	3.9	15	29	80	--	ND<2.0	
1/9/04	8.52	2.38	0.00	6.14	1.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
4/26/04	8.52	2.89	0.00	5.63	-0.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
7/22/04	8.52	3.25	0.00	5.27	-0.36	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	ND<0.5	
10/29/04	8.52	3.06	0.00	5.46	0.19	--	ND<50	ND<0.50	ND<0.50	0.82	2.5	--	ND<0.50	
<b>MW-9 (Screen Interval in feet: 3.0-13.0)</b>														
2/21/95	8.29	1.98	0.00	6.31	--	70	--	ND	ND	ND	ND	--	--	
5/18/95	8.29	3.47	0.00	4.82	-1.49	52	--	ND	1.1	ND	1.9	--	--	
8/17/95	8.29	1.49	0.00	6.80	1.98	ND	--	ND	ND	ND	ND	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-9 continued</b>														
7/26/96	8.29	0.28	0.00	8.01	1.21	ND	--	ND	ND	ND	ND	ND	--	
10/28/96	8.29	1.15	0.00	7.14	-0.87	ND	--	ND	ND	ND	ND	7.6	--	
1/29/97	8.29	1.05	0.00	7.24	--	ND	--	ND	ND	ND	ND	5.4	--	
4/15/97	8.29	1.88	0.00	6.41	--	ND	--	ND	ND	ND	ND	5.4	--	
5/27/97	8.29	1.05	0.00	7.24	--	--	--	--	--	--	--	--	--	
7/15/97	8.29	1.90	0.00	6.39	--	ND	--	ND	ND	ND	ND	ND	--	
10/9/97	8.29	1.76	0.00	6.53	--	ND	--	ND	ND	ND	ND	ND	--	
1/14/98	8.29	1.26	0.00	7.03	0.50	ND	--	ND	ND	ND	ND	ND	--	
4/1/98	8.29	0.85	0.00	7.44	--	ND	--	ND	ND	ND	ND	ND	--	
7/15/98	8.29	1.52	0.00	6.77	--	ND	--	ND	ND	ND	ND	ND	--	
10/16/98	8.29	0.81	0.00	7.48	--	ND	--	ND	ND	ND	ND	ND	--	
1/25/99	8.29	0.92	0.00	7.37	--	ND	--	ND	ND	ND	ND	ND	--	
4/15/99	8.29	0.90	0.00	7.39	--	75	--	21	ND	ND	1.1	680	--	
7/14/99	8.29	1.04	0.00	7.25	--	ND	--	1.9	ND	ND	ND	260	--	
10/21/99	8.29	1.23	0.00	7.06	--	ND	--	ND	ND	ND	ND	170	--	
1/20/00	8.29	1.18	0.00	7.11	--	ND	--	1.1	ND	ND	ND	35	--	
4/13/00	8.29	1.08	0.00	7.21	--	160	--	0.64	ND	ND	ND	53	--	
7/14/00	8.29	1.43	0.00	6.86	--	ND	--	ND	ND	ND	ND	20.2	--	
10/26/00	8.29	1.38	0.00	6.91	--	240	--	2.9	ND	ND	ND	56	--	
1/3/01	8.29	1.66	0.00	6.63	-0.28	166	--	0.763	0.776	ND	1.28	50.2	--	
4/4/01	8.29	1.27	0.00	7.02	0.39	296	--	0.738	ND	ND	0.907	135	--	
7/17/01	8.29	1.38	0.00	6.91	-0.11	ND	--	ND	ND	ND	ND	13	--	
10/1/01	8.29	1.93	0.00	6.36	-0.55	51	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.0	--	
1/31/02	8.29	2.08	0.00	6.21	-0.15	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.8	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-9 continued</b>														
4/18/02	8.29	1.76	0.00	6.53	0.32	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.1	--	
7/28/02	8.29	1.57	0.00	6.72	0.19	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.5	
10/9/02	8.29	1.45	0.00	6.84	0.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	17	
1/2/03	8.29	1.18	0.00	7.11	0.27	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.6	
4/1/03	8.29	2.04	0.00	6.25	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.4	
7/1/03	8.29	2.80	0.00	5.49	-0.76	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.2	
10/2/03	8.29	2.70	0.00	5.59	0.10	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
1/9/04	8.29	1.90	0.00	6.39	0.80	--	74	ND<0.50	0.98	2.3	6.2	--	ND<2.0	
4/26/04	8.29	1.62	0.00	6.67	0.28	--	51	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.51	
7/22/04	8.29	1.88	0.00	6.41	-0.26	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	0.78	
10/29/04	8.29	1.28	0.00	7.01	0.60	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.0	--	ND<0.50	
<b>MW-10 (Screen Interval in feet: 3.0-13.0)</b>														
2/21/95	8.62	4.69	0.00	3.93	--	1500	--	250	26	9.1	160	--	--	
5/18/95	8.62	4.92	0.00	3.70	-0.23	810	--	520	ND	18	23	--	--	
8/17/95	8.62	4.05	0.00	4.57	0.87	67	--	25	ND	2.4	ND	--	--	
7/26/96	8.62	4.08	0.00	4.54	-0.03	ND	--	3.7	ND	ND	ND	ND	--	
10/28/96	8.62	4.09	0.00	4.53	-0.01	ND	--	1.1	ND	ND	ND	ND	--	
1/29/97	8.62	2.94	0.00	5.68	--	210	--	41	0.67	7.2	4.8	11	--	
4/15/97	8.62	4.07	0.00	4.55	--	110	--	12	ND	0.77	ND	9.7	--	
5/27/97	8.62	4.40	0.00	4.22	--	--	--	--	--	--	--	--	--	
7/15/97	8.62	4.19	0.00	4.43	--	ND	--	2.1	ND	0.67	0.73	ND	--	
10/9/97	8.62	4.75	0.00	3.87	--	190	--	38	0.92	6.6	7.6	ND	--	
1/14/98	8.62	2.66	0.00	5.96	2.09	59	--	9.5	0.85	1.2	1.7	4.5	--	
4/1/98	8.62	3.45	0.00	5.17	--	230	--	66	1.7	12	17	6.4	--	

**Table 2**  
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**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-10	continued													
7/15/98	8.62	4.21	0.00	4.41	--	290	--	98	45	21	38	21	--	
10/16/98	8.62	4.11	0.00	4.51	--	160	--	44	0.96	2.5	10	17	--	
1/25/99	8.62	3.26	0.00	5.36	--	140	--	27	ND	2.8	6.8	23	--	
4/15/99	8.62	3.63	0.00	4.99	--	120	--	18	ND	1.8	5.1	14	--	
7/14/99	8.62	3.89	0.00	4.73	--	280	--	55	3.2	11	31	6.1	--	
10/21/99	8.62	4.09	0.00	4.53	--	140	--	22	0.59	1.7	7.7	5.3	--	
1/20/00	8.62	3.92	0.00	4.70	--	ND	--	0.73	0.86	ND	ND	5.2	--	
4/13/00	8.62	3.85	0.00	4.77	--	67	--	54	ND	2.6	ND	3.8	--	
7/14/00	8.62	4.18	0.00	4.44	--	ND	--	0.547	ND	ND	ND	ND	--	
10/26/00	8.62	3.96	0.00	4.66	--	ND	--	3.3	ND	0.83	1.5	ND	--	
1/3/01	8.62	4.14	0.00	4.48	-0.18	52.7	--	5.15	ND	0.823	1.57	ND	--	
4/4/01	8.62	3.88	0.00	4.74	0.26	129	--	28.1	1.67	4.97	10.1	ND	--	
7/17/01	8.62	4.08	0.00	4.54	-0.20	ND	--	4.1	ND	1.0	1.8	ND	--	
10/1/01	8.62	4.22	0.00	4.40	-0.14	140	--	30	0.51	4.0	12	ND<5.0	--	
1/31/02	8.62	3.68	0.00	4.94	0.54	110	--	16	ND<0.50	2.3	5.6	ND<2.5	--	
4/18/02	8.62	4.01	0.00	4.61	-0.33	ND<50	--	11	ND<0.50	1.4	4.5	ND<2.5	--	
7/28/02	8.62	4.11	0.00	4.51	-0.10	--	67	15	ND<0.50	0.94	7.3	--	ND<2.0	
10/9/02	8.62	3.97	0.00	4.65	0.14	--	ND<50	0.67	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
1/2/03	8.62	3.03	0.00	5.59	0.94	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
4/1/03	8.62	3.83	0.00	4.79	--	--	ND<50	11	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
7/1/03	8.62	4.13	0.00	4.49	-0.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/2/03	8.62	4.05	0.00	4.57	0.08	--	77	9.9	0.78	2.3	4.9	--	ND<2.0	
1/9/04	8.62	3.40	0.00	5.22	0.65	--	53	1.2	ND<0.50	0.70	1.6	--	ND<2.0	
4/26/04	8.62	3.89	0.00	4.73	-0.49	--	ND<50	2.8	1.3	1.0	2.9	--	ND<0.50	

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**February 1992 Through October 2004**  
**76 Station 5043**

Date Sampled	TOC	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
		(feet)	(feet)	(feet)	(feet)	( $\mu\text{g/l}$ )								
MW-10	continued													
7/22/04	8.62	3.73	0.00	4.89	0.16	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1	--	ND<0.5	
10/29/04	8.62	3.41	0.00	5.21	0.32	--	100	2.0	1.2	1.1	3.6	--	ND<0.50	

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8260B ( $\mu\text{g/l}$ )	TOG (mg/l)
<b>MW-1</b>									
2/18/92	13000	--	--	--	--	--	--	--	--
8/31/92	8900	--	--	--	--	--	--	--	--
<b>MW-2</b>									
2/18/92	4300	--	--	--	--	--	--	--	--
5/20/92	4300	--	--	--	--	--	--	--	--
8/31/92	1600	--	--	--	--	--	--	--	--
11/30/92	5700	--	--	--	--	--	--	--	--
2/4/93	6100	--	--	--	--	--	--	--	--
5/4/93	7100	--	--	--	--	--	--	--	--
8/4/93	1800	--	--	--	--	--	--	--	--
11/3/93	2600	--	--	--	--	--	--	--	--
5/19/94	3000	--	--	--	--	--	--	--	--
8/15/94	2800	--	--	--	--	--	--	--	--
11/14/94	10000	--	--	--	--	--	--	--	--
2/21/95	2000	--	--	--	--	--	--	--	--
<b>MW-3</b>									
2/18/92	ND	--	--	--	--	--	--	--	--
8/31/92	92	--	--	--	--	--	--	--	--
11/30/92	94	--	--	--	--	--	--	--	--
2/4/93	550	--	--	--	--	--	--	--	--
5/4/93	250	--	--	--	--	--	--	--	--
8/4/93	100	--	--	--	--	--	--	--	--
11/3/93	160	--	--	--	--	--	--	--	--
2/7/94	620	--	--	--	--	--	--	--	--
5/19/94	480	--	--	--	--	--	--	--	--
8/15/94	110	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8260B ( $\mu\text{g/l}$ )	TOG (mg/l)
<b>MW-3 continued</b>									
11/14/94	150	--	--	--	--	--	--	--	--
2/21/95	850	--	--	--	--	--	--	--	--
5/18/95	150	--	--	--	--	--	--	--	--
6/1/97	610	--	--	--	--	--	--	--	--
7/15/97	240	--	--	--	--	--	--	--	--
10/9/97	500	--	--	--	--	--	--	--	--
1/14/98	340	--	--	--	--	--	--	--	--
4/1/98	320	--	--	--	--	--	--	--	--
7/15/98	510	--	--	--	--	--	--	--	--
10/16/98	67	--	--	--	--	--	--	--	--
1/25/99	120	--	--	--	--	--	--	--	--
4/15/99	170	--	--	--	--	--	--	--	--
7/14/99	420	--	--	--	--	--	--	--	--
10/21/99	350	--	--	--	--	--	--	--	--
1/20/00	2060	--	--	--	--	--	--	--	--
4/13/00	200	ND	ND	ND	ND	ND	ND	ND	--
7/14/00	423	--	--	--	--	--	--	--	--
10/26/00	330	--	--	--	--	--	--	--	--
1/3/01	287	--	--	--	--	--	--	--	--
4/4/01	360	--	--	--	--	--	--	--	--
7/17/01	270	--	--	--	--	--	--	--	--
10/1/01	270	--	--	--	--	--	--	--	--
1/31/02	250	--	--	--	--	--	--	--	--
4/18/02	320	--	--	--	--	--	--	--	--
7/28/02	310	--	--	--	--	--	--	--	--
10/9/02	700	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	TOG
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)
<b>MW-3 continued</b>									
1/2/03	210	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
4/1/03	200	--	--	--	--	--	--	--	--
7/1/03	380	--	--	--	--	--	--	ND<2500	--
10/2/03	300	--	--	--	--	--	--	ND<2500	--
1/9/04	200	--	--	--	--	--	--	ND<500	--
4/26/04	160	--	--	--	--	--	--	ND<50	--
7/22/04	330	--	--	--	--	--	--	ND<1000	--
10/29/04	200	--	--	--	--	--	--	ND<50	--
<b>MW-4</b>									
8/31/92	90	--	--	--	--	--	--	--	--
11/30/92	61	--	--	--	--	--	--	--	--
2/4/93	ND	--	--	--	--	--	--	--	--
5/4/93	ND	--	--	--	--	--	--	--	--
8/4/93	81	--	--	--	--	--	--	--	--
11/3/93	68	--	--	--	--	--	--	--	--
2/7/94	ND	--	--	--	--	--	--	--	--
5/19/94	90	--	--	--	--	--	--	--	--
8/15/94	72	--	--	--	--	--	--	--	--
11/14/94	ND	--	--	--	--	--	--	--	--
<b>MW-5</b>									
8/31/92	690	--	--	--	--	--	--	--	--
11/30/92	470	--	--	--	--	--	--	--	ND
2/4/93	5500	--	--	--	--	--	--	--	ND
5/4/93	4600	--	--	--	--	--	--	--	ND
8/4/93	970	--	--	--	--	--	--	--	ND
11/3/93	2100	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	TOG
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)
<b>MW-5 continued</b>									
2/7/94	830	--	--	--	--	--	--	--	--
5/19/94	600	--	--	--	--	--	--	--	--
8/15/94	860	--	--	--	--	--	--	--	--
11/14/94	290	--	--	--	--	--	--	--	--
<b>MW-6</b>									
8/31/92	750	--	--	--	--	--	--	--	--
11/30/92	1400	--	--	--	--	--	--	--	--
2/4/93	890	--	--	--	--	--	--	--	--
5/4/93	1800	--	--	--	--	--	--	--	--
8/4/93	1100	--	--	--	--	--	--	--	--
11/3/93	390	--	--	--	--	--	--	--	--
2/7/94	970	--	--	--	--	--	--	--	--
5/19/94	1400	--	--	--	--	--	--	--	--
8/15/94	790	--	--	--	--	--	--	--	--
11/14/94	800	--	--	--	--	--	--	--	--
2/21/95	730	--	--	--	--	--	--	--	--
1/20/00	67600	--	--	--	--	--	--	--	--
4/13/00	8700	--	--	--	--	--	--	--	--
7/14/00	133000	--	--	--	--	--	--	--	--
10/26/00	61000	--	--	--	--	--	--	--	--
1/3/01	929	--	--	--	--	--	--	--	--
4/4/01	18000	ND	ND	ND	ND	ND	ND	ND	--
7/17/01	20000	--	--	--	--	--	--	--	--
10/1/01	24000	--	--	--	--	--	--	--	--
1/31/02	11000	--	--	--	--	--	--	--	--
4/18/02	3500	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D (µg/l)	EDC (µg/l)	EDB (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	TOG (mg/l)
<b>MW-6 continued</b>									
7/28/02	27000	--	--	--	--	--	--	--	--
10/9/02	170000	--	--	--	--	--	--	--	--
1/2/03	66000	--	--	--	--	--	--	--	--
4/1/03	35000	--	--	--	--	--	--	--	--
7/1/03	11000	--	--	--	--	--	--	ND<25000	--
10/2/03	ND<50	--	--	--	--	--	--	ND<200000	--
1/9/04	20000	--	--	--	--	--	--	ND<50000	--
4/26/04	13000	--	--	--	--	--	--	ND<5000	--
7/22/04	33000	--	--	--	--	--	--	ND<300000	--
10/29/04	78000	--	--	--	--	--	--	ND<5000	--
<b>MW-7</b>									
6/1/97	69	--	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--	--
10/9/97	190	--	--	--	--	--	--	--	--
1/14/98	65	--	--	--	--	--	--	--	--
4/1/98	ND	--	--	--	--	--	--	--	--
7/15/98	74	--	--	--	--	--	--	--	--
10/16/98	ND	--	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--	--
4/15/99	ND	--	--	--	--	--	--	--	--
7/14/99	69	--	--	--	--	--	--	--	--
10/21/99	ND	--	--	--	--	--	--	--	--
1/20/00	ND	--	--	--	--	--	--	--	--
4/13/00	ND	--	--	--	--	--	--	--	--
7/14/00	68.0	--	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D (µg/l)	EDC (µg/l)	EDB (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	TOG (mg/l)
<b>MW-7 continued</b>									
10/1/01	ND<51	--	--	--	--	--	--	--	--
1/31/02	90	--	--	--	--	--	--	--	--
4/18/02	78	--	--	--	--	--	--	--	--
7/28/02	ND<50	--	--	--	--	--	--	--	--
10/9/02	ND<96	--	--	--	--	--	--	--	--
1/3/03	78	--	--	--	--	--	--	--	--
4/1/03	67	--	--	--	--	--	--	--	--
7/1/03	68	--	--	--	--	--	--	ND<500	--
10/2/03	82	--	--	--	--	--	--	ND<500	--
1/9/04	75	--	--	--	--	--	--	ND<500	--
4/26/04	ND<50	--	--	--	--	--	--	ND<50	--
7/22/04	ND<200	--	--	--	--	--	--	ND<1000	--
10/29/04	54	--	--	--	--	--	--	ND<50	--
<b>MW-8</b>									
6/1/97	320	--	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--	--
10/9/97	390	--	--	--	--	--	--	--	--
1/14/98	230	--	--	--	--	--	--	--	--
4/1/98	510	--	--	--	--	--	--	--	--
7/15/98	140	--	--	--	--	--	--	--	--
10/16/98	170	--	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--	--
4/15/99	91	--	--	--	--	--	--	--	--
7/14/99	120	--	--	--	--	--	--	--	--
10/21/99	110	--	--	--	--	--	--	--	--
1/20/00	583	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8260B ( $\mu\text{g/l}$ )	TOG (mg/l)
<b>MW-8 continued</b>									
4/13/00	80	--	--	--	--	--	--	--	--
7/14/00	113	--	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--	--
10/1/01	ND<50	--	--	--	--	--	--	--	--
1/31/02	260	--	--	--	--	--	--	--	--
4/18/02	160	--	--	--	--	--	--	--	--
7/28/02	140	--	--	--	--	--	--	--	--
10/9/02	120	--	--	--	--	--	--	--	--
1/2/03	210	--	--	--	--	--	--	--	--
4/1/03	220	--	--	--	--	--	--	--	--
7/1/03	170	--	--	--	--	--	--	ND<500	--
10/2/03	350	--	--	--	--	--	--	ND<500	--
1/9/04	180	--	--	--	--	--	--	ND<500	--
4/26/04	100	--	--	--	--	--	--	ND<50	--
7/22/04	250	--	--	--	--	--	--	ND<1000	--
10/29/04	120	--	--	--	--	--	--	ND<50	--
<b>MW-9</b>									
2/21/95	71	--	--	--	--	--	--	--	--
5/18/95	ND	--	--	--	--	--	--	--	--
8/17/95	ND	--	--	--	--	--	--	--	--
7/26/96	98	--	--	--	--	--	--	--	--
10/28/96	99	--	--	--	--	--	--	--	--
1/29/97	54	--	--	--	--	--	--	--	--
4/15/97	94	--	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--	--
10/9/97	160	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8260B ( $\mu\text{g/l}$ )	TOG (mg/l)
<b>MW-9 continued</b>									
1/14/98	110	--	--	--	--	--	--	--	--
4/1/98	110	--	--	--	--	--	--	--	--
7/15/98	200	--	--	--	--	--	--	--	--
10/16/98	ND	--	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--	--
4/15/99	ND	--	--	--	--	--	--	--	--
7/14/99	140	--	--	--	--	--	--	--	--
10/21/99	210	--	--	--	--	--	--	--	--
1/20/00	519	--	--	--	--	--	--	--	--
4/13/00	81	--	--	--	--	--	--	--	--
7/14/00	107	--	--	--	--	--	--	--	--
10/26/00	240	--	--	--	--	--	--	--	--
1/3/01	164	--	--	--	--	--	--	--	--
4/4/01	240	--	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--	--
10/1/01	ND<52	--	--	--	--	--	--	--	--
1/31/02	200	--	--	--	--	--	--	--	--
4/18/02	ND<50	--	--	--	--	--	--	--	--
7/28/02	ND<50	--	--	--	--	--	--	--	--
10/9/02	100	--	--	--	--	--	--	--	--
1/2/03	ND<50	--	--	--	--	--	--	--	--
4/1/03	56	--	--	--	--	--	--	--	--
7/1/03	ND<50	--	--	--	--	--	--	ND<500	--
10/2/03	ND<50	--	--	--	--	--	--	ND<500	--
1/9/04	91	--	--	--	--	--	--	ND<500	--
4/26/04	ND<50	--	--	--	--	--	--	ND<50	--

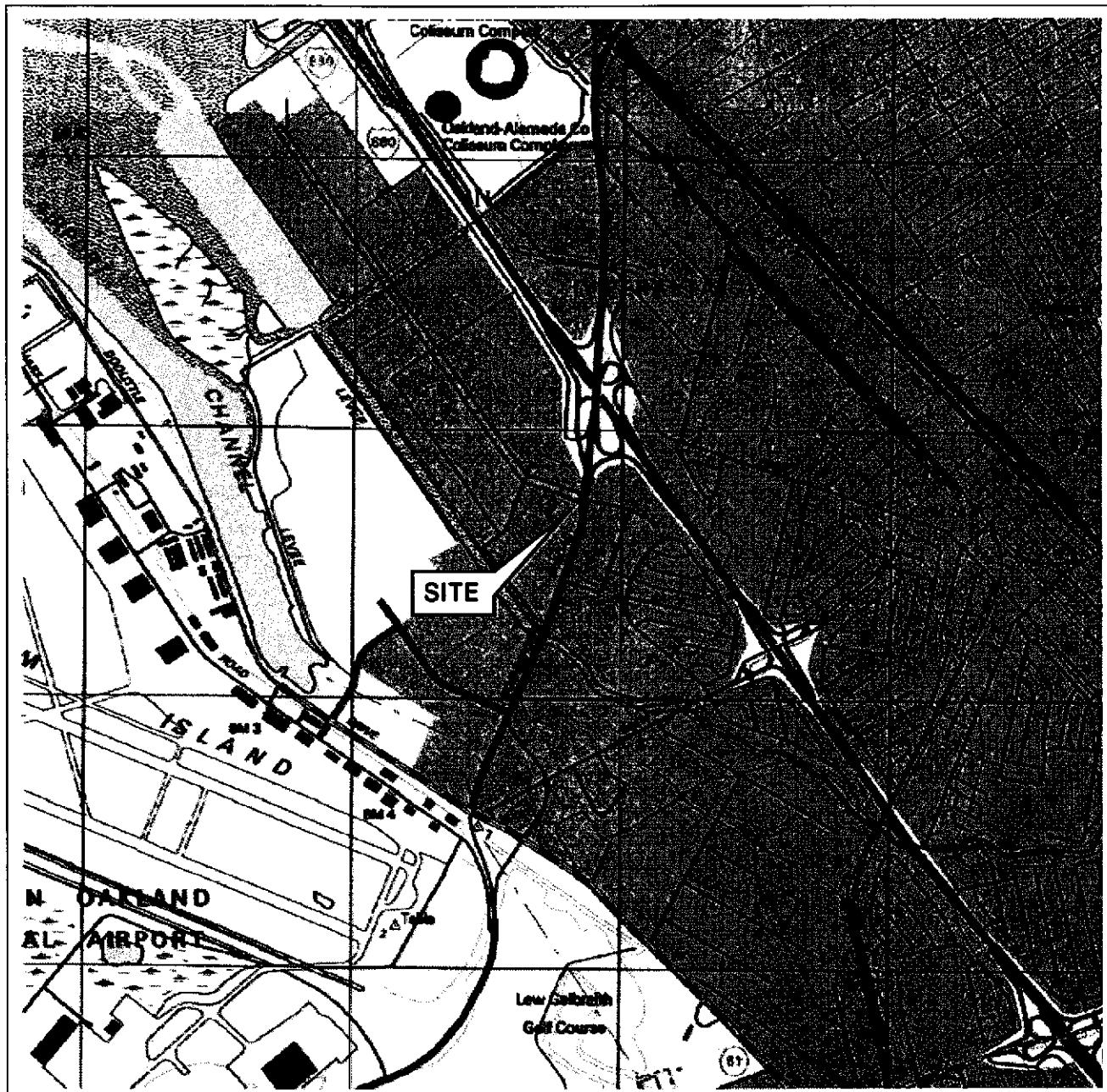
**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8260B ( $\mu\text{g/l}$ )	TOG (mg/l)
<b>MW-9 continued</b>									
7/22/04	ND<200	--	--	--	--	--	--	ND<1000	--
10/29/04	76	--	--	--	--	--	--	ND<50	--
<b>MW-10</b>									
2/21/95	270	--	--	--	--	--	--	--	--
5/18/95	75	--	--	--	--	--	--	--	--
8/17/95	ND	--	--	--	--	--	--	--	--
7/26/96	ND	--	--	--	--	--	--	--	--
10/28/96	ND	--	--	--	--	--	--	--	--
1/29/97	ND	--	--	--	--	--	--	--	--
4/15/97	ND	--	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--	--
10/9/97	ND	--	--	--	--	--	--	--	--
4/1/98	62	--	--	--	--	--	--	--	--
7/15/98	78	--	--	--	--	--	--	--	--
10/16/98	ND	--	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--	--
4/15/99	ND	--	--	--	--	--	--	--	--
7/14/99	180	--	--	--	--	--	--	--	--
10/21/99	.96	--	--	--	--	--	--	--	--
1/20/00	252	--	--	--	--	--	--	--	--
4/13/00	69	--	--	--	--	--	--	--	--
7/14/00	149	--	--	--	--	--	--	--	--
10/26/00	83	--	--	--	--	--	--	--	--
1/3/01	126	--	--	--	--	--	--	--	--
4/4/01	75	--	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--	--

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5043**

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8260B ( $\mu\text{g/l}$ )	TOG ( $\text{mg/l}$ )
<b>MW-10 continued</b>									
10/1/01	100	--	--	--	--	--	--	--	--
1/31/02	170	--	--	--	--	--	--	--	--
4/18/02	130	--	--	--	--	--	--	--	--
7/28/02	58	--	--	--	--	--	--	--	--
10/9/02	ND<94	--	--	--	--	--	--	--	--
1/2/03	64	--	--	--	--	--	--	--	--
4/1/03	76	--	--	--	--	--	--	--	--
7/1/03	87	--	--	--	--	--	--	ND<500	--
10/2/03	160	--	--	--	--	--	--	ND<500	--
1/9/04	74	--	--	--	--	--	--	ND<500	--
4/26/04	ND<50	--	--	--	--	--	--	ND<50	--
7/22/04	ND<200	--	--	--	--	--	--	ND<1000	--
10/29/04	ND<50	--	--	--	--	--	--	ND<50	--

# **FIGURES**



0      1/4      1/2      3/4      1 MILE

SCALE 1:24,000

N

SOURCE:

United States Geological Survey  
7.5 Minute Topographic Maps:  
Son Leandro Quadrangle

QUADRANGLE  
LOCATION

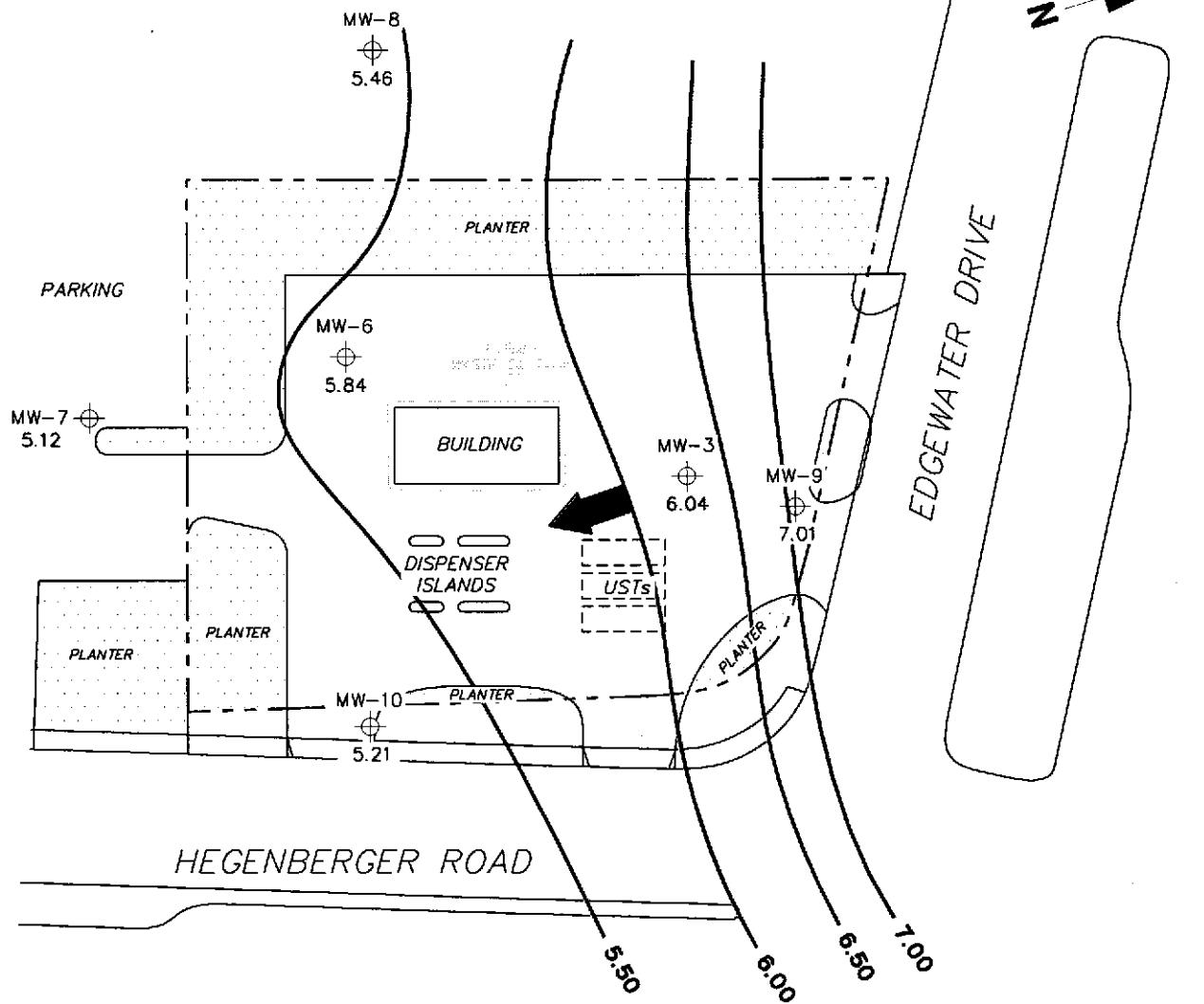
VICINITY MAP

76 Station 5043  
449 Hegenberger Road  
Oakland, California

PS = 1:1

**TRC**

**FIGURE 1**



**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. UST = underground storage tank.

LEGEND

MW-10 Monitoring Well with Groundwater Elevation (feet)

7.00 Groundwater Elevation Contour

General Direction of Groundwater Flow

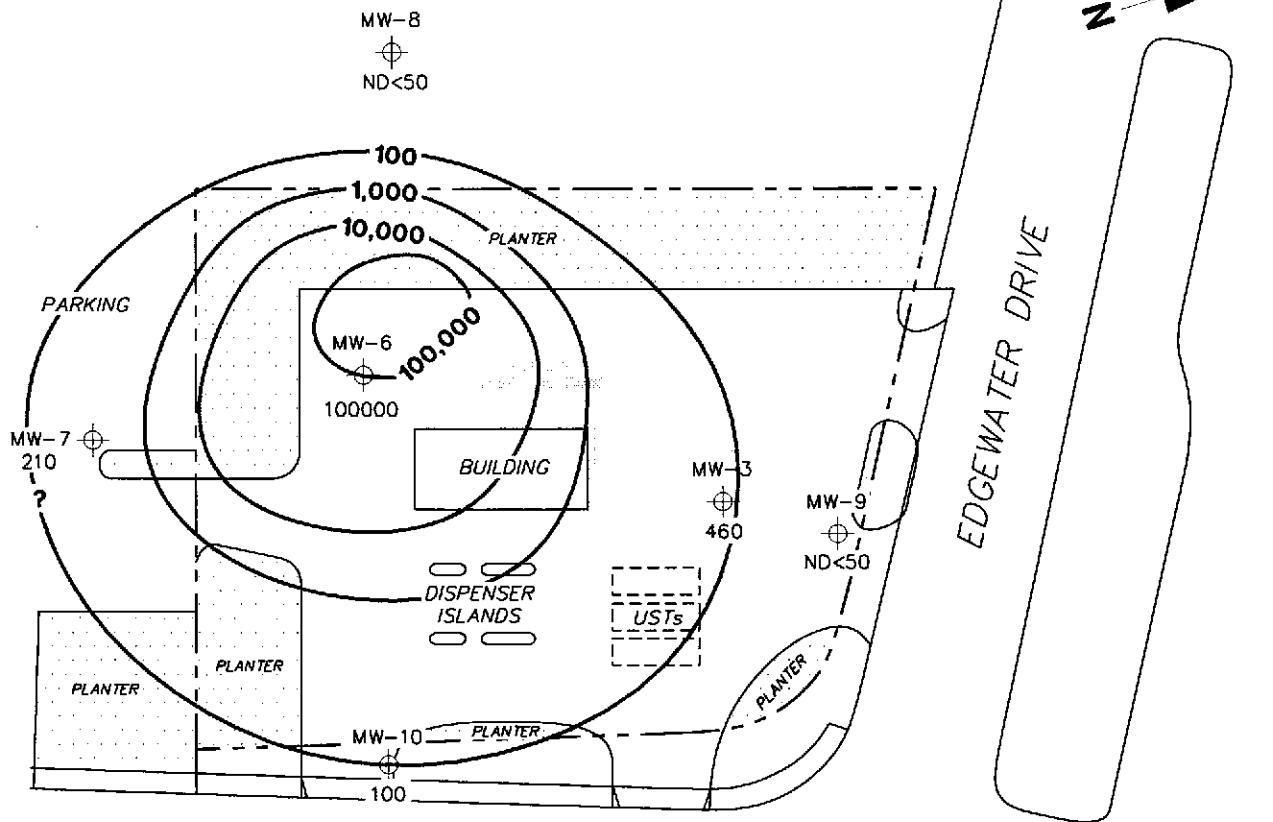
**GROUNDWATER ELEVATION  
CONTOUR MAP**  
October 29, 2004

76 Station 5043  
449 Hegenberger Road  
Oakland, California

SCALE (FEET)  
0 60

**TRC**

**FIGURE 2**



*HEGENBERGER ROAD*

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 TPPH = total purgeable petroleum hydrocarbons.  
 $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

MW-10 Monitoring Well with Dissolved-Phase TPPH Concentration ( $\mu\text{g/l}$ )

-100,000- Dissolved-Phase TPPH Contour ( $\mu\text{g/l}$ )

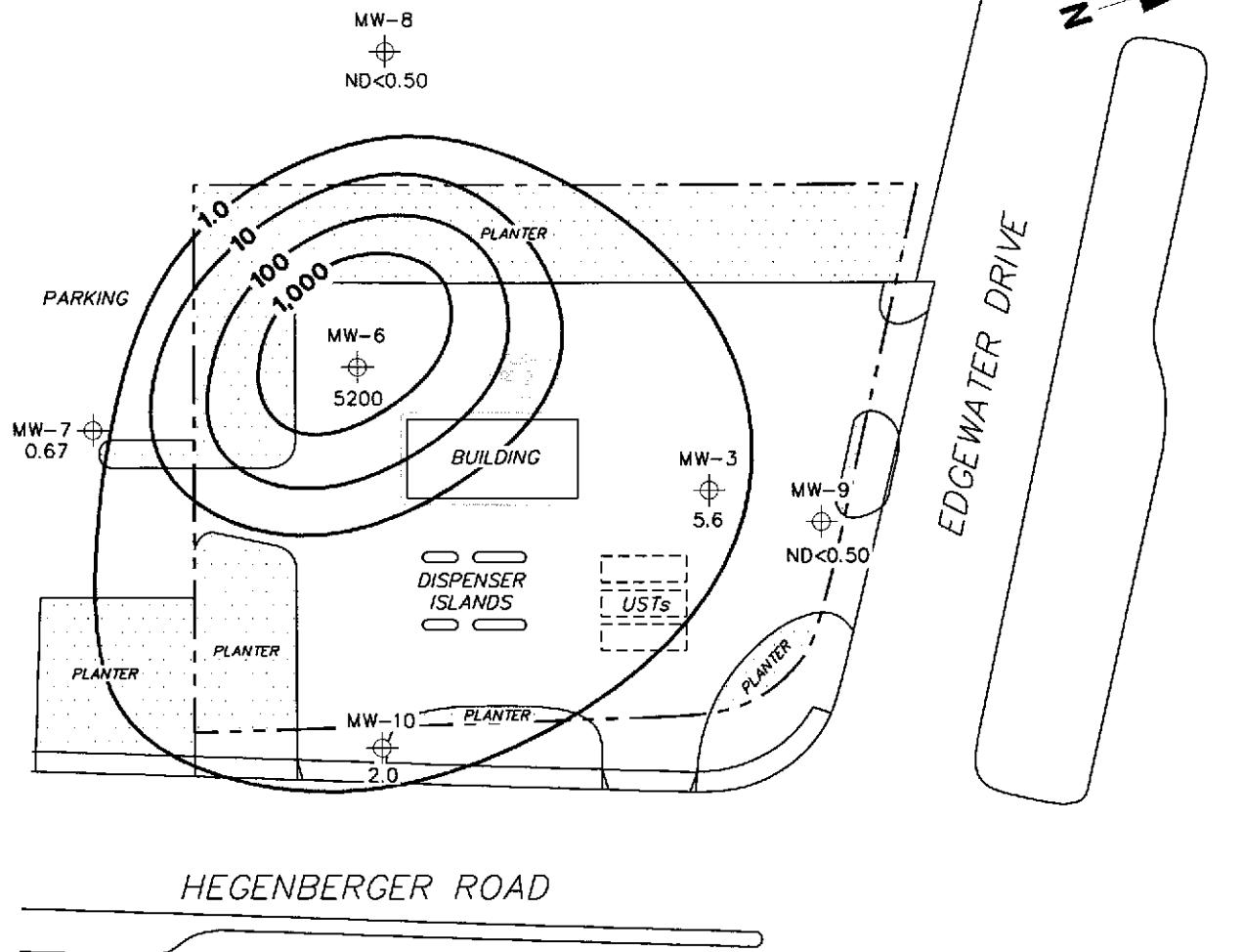
**DISSOLVED-PHASE TPPH CONCENTRATION MAP**  
**October 29, 2004**

76 Station 5043  
 449 Hegenberger Road  
 Oakland, California

SCALE (FEET)  
 0 60

**TRC**

**FIGURE 3**



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank.

LEGEND

MW-10 Monitoring Well with Dissolved-Phase Benzene Concentration ( $\mu\text{g/l}$ )

**-1,000-** Dissolved-Phase Benzene Contour ( $\mu\text{g/l}$ )

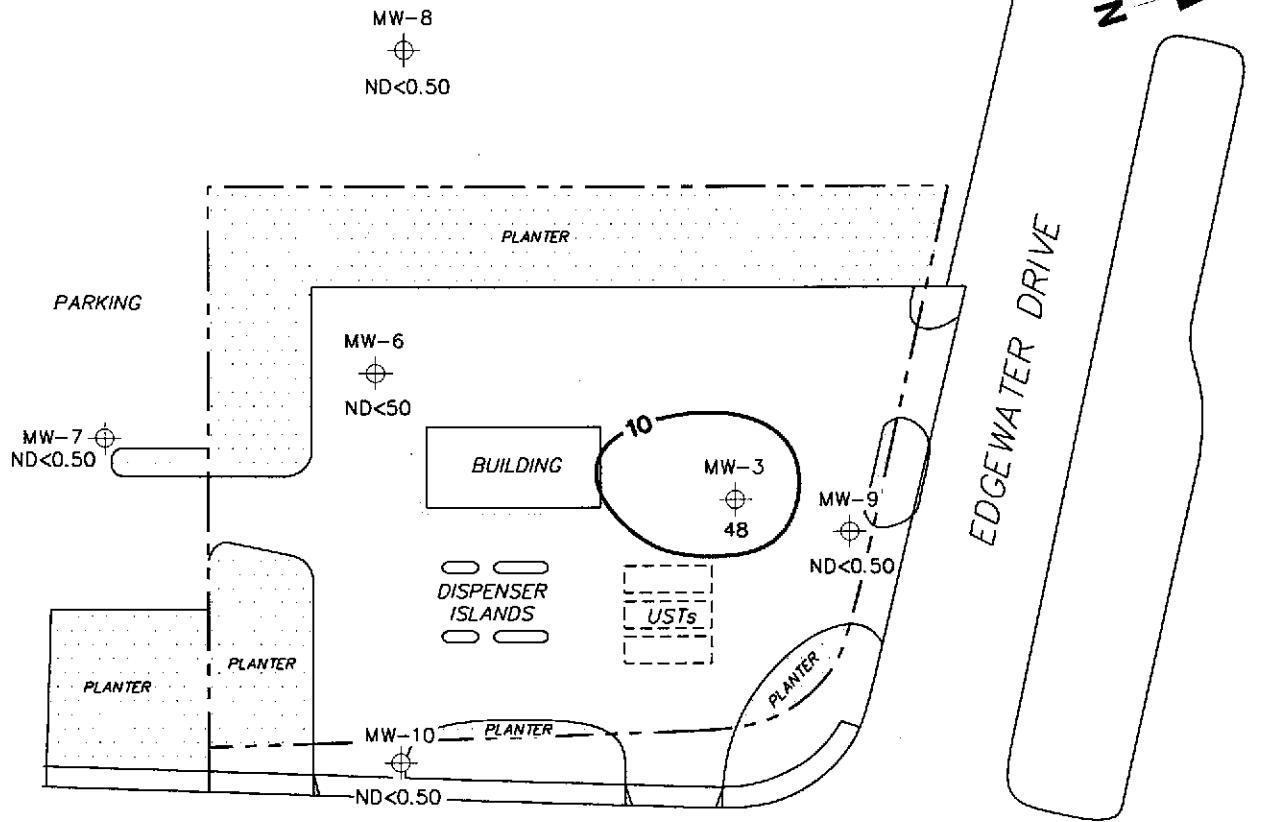
**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**  
**October 29, 2004**

76 Station 5043  
 449 Hegenberger Road  
 Oakland, California

SCALE (FEET)  
 0 60

**TRC**

**FIGURE 4**



HEGENBERGER ROAD

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 MTBE = methyl tertiary butyl ether.  
 $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

MW-10 Monitoring Well with Dissolved-Phase MTBE Concentration ( $\mu\text{g/l}$ )

10 Dissolved-Phase MTBE Contour ( $\mu\text{g/l}$ )

**DISSOLVED-PHASE MTBE CONCENTRATION MAP**  
**October 29, 2004**

76 Station 5043  
 449 Hegenberger Road  
 Oakland, California

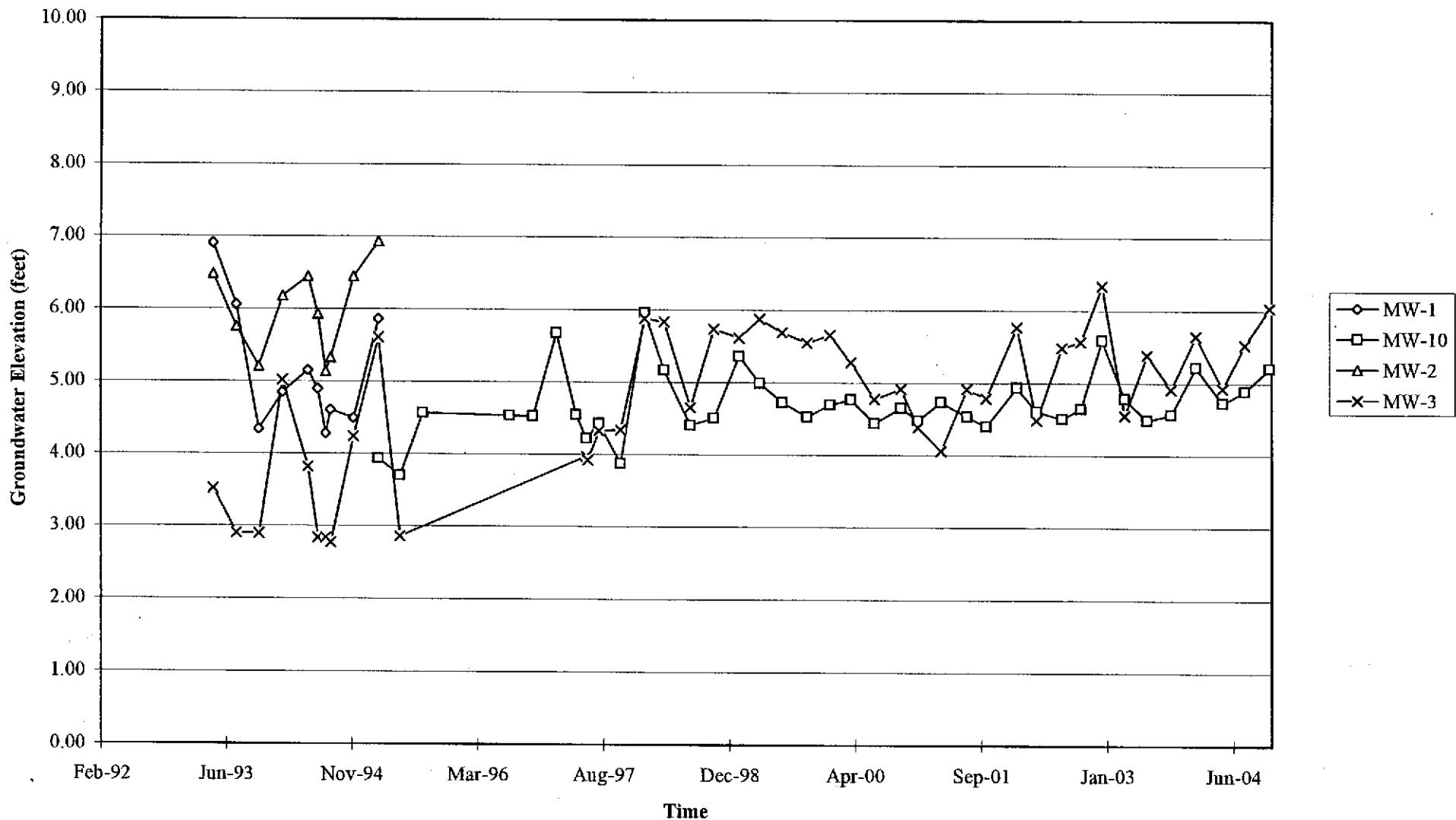
SCALE (FEET)

**TRC**

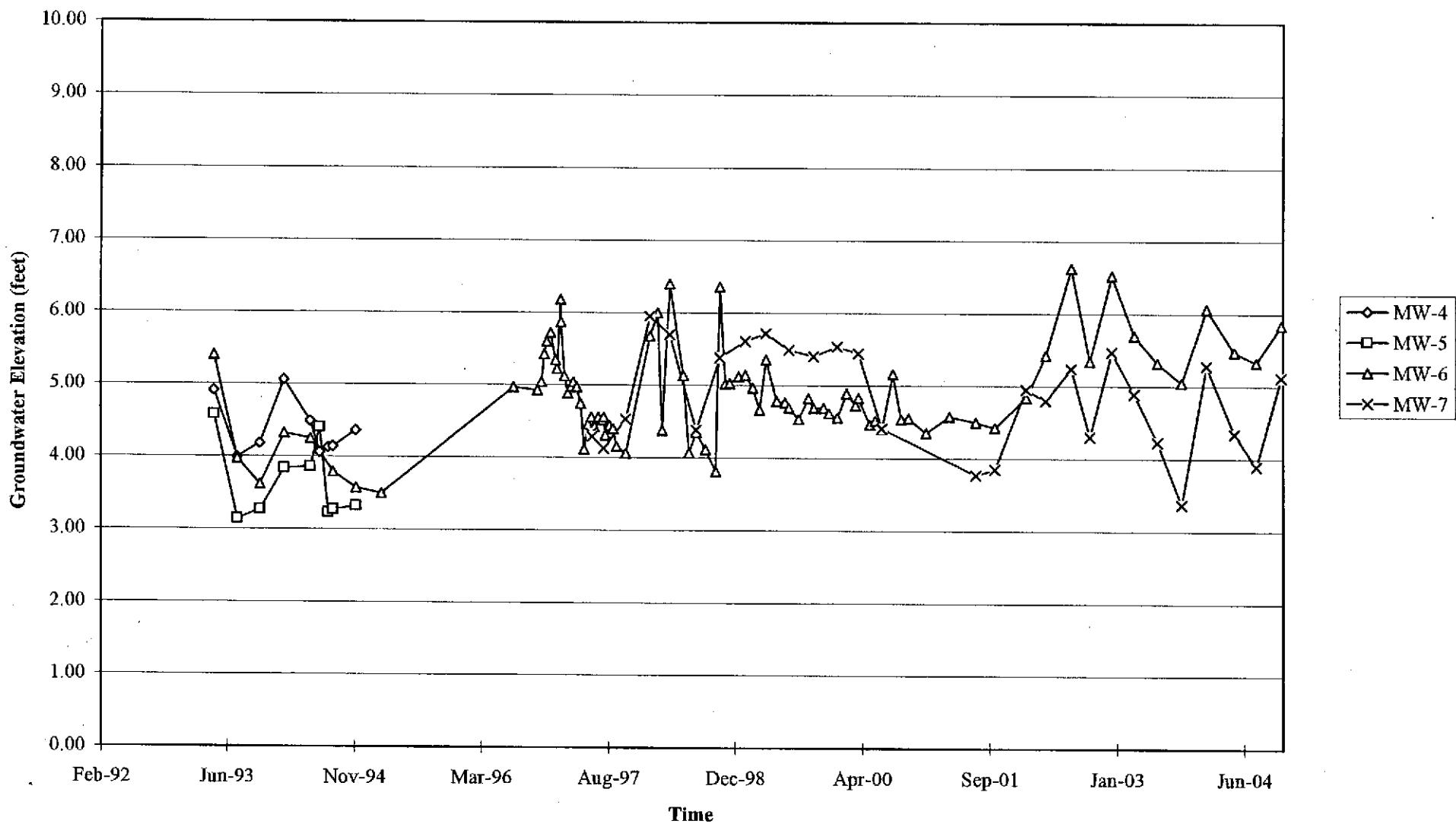
**FIGURE 5**

# **GRAPHS**

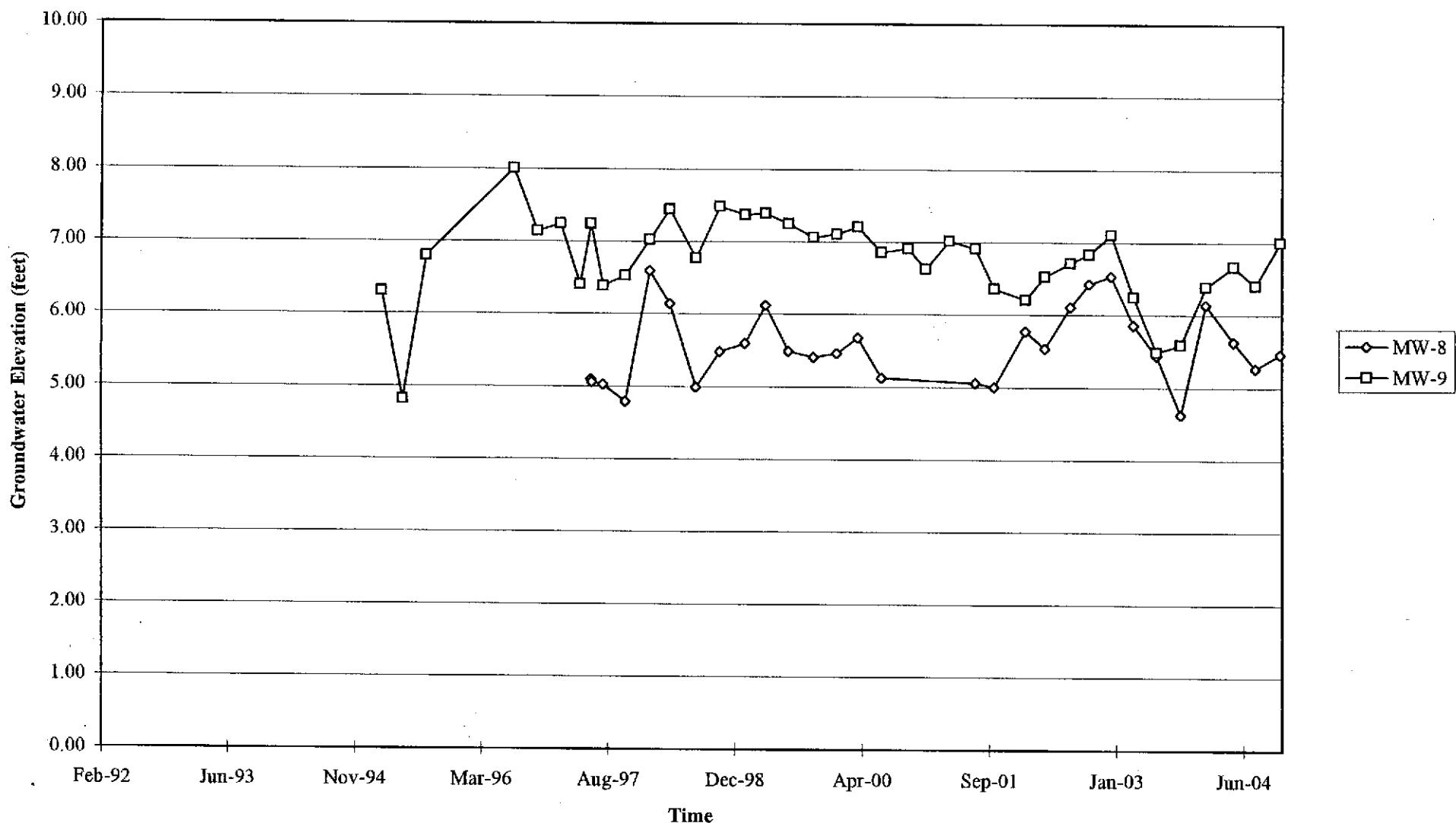
Groundwater Elevations vs. Time  
76 Station 5043



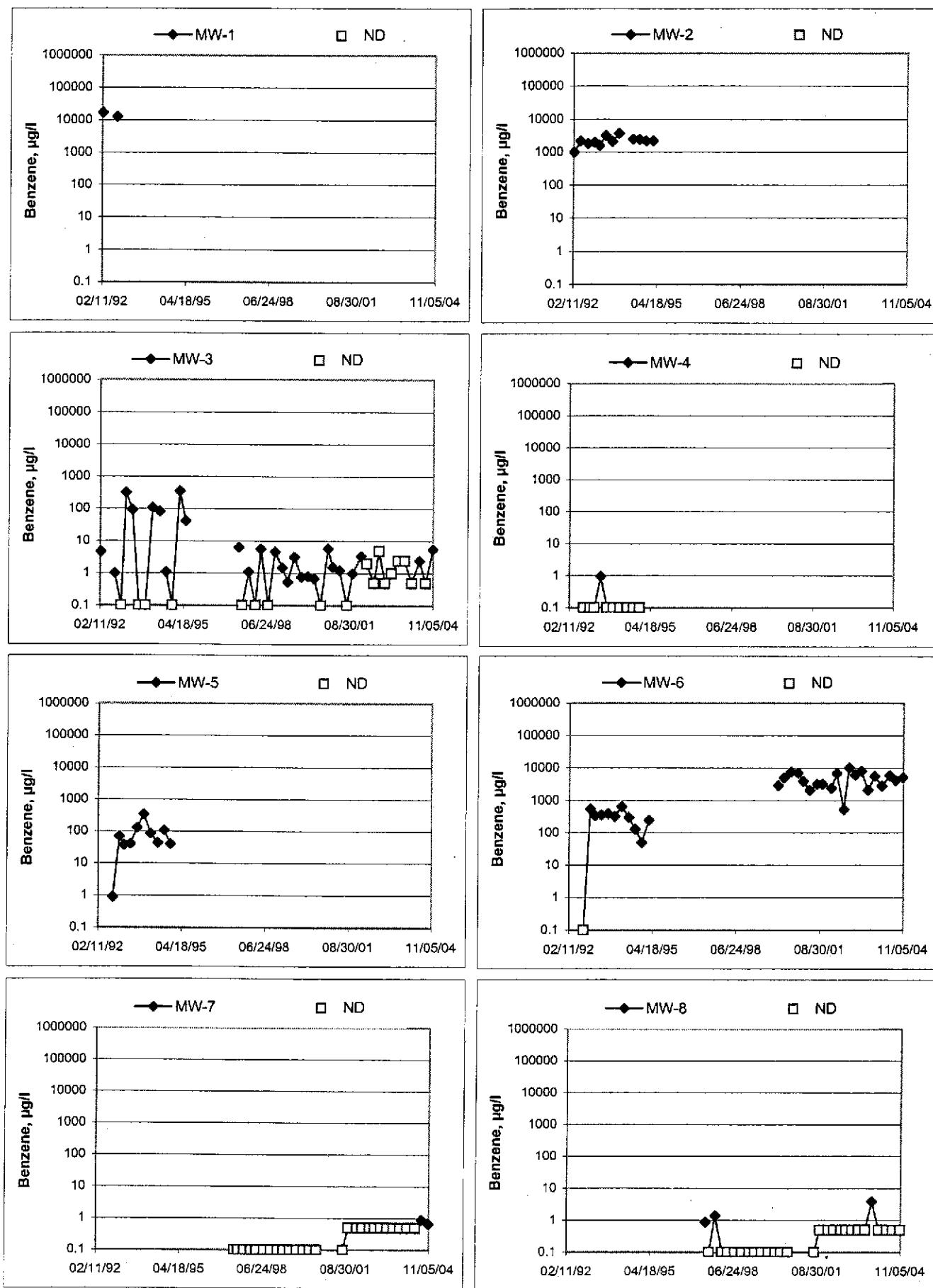
Groundwater Elevations vs. Time  
76 Station 5043



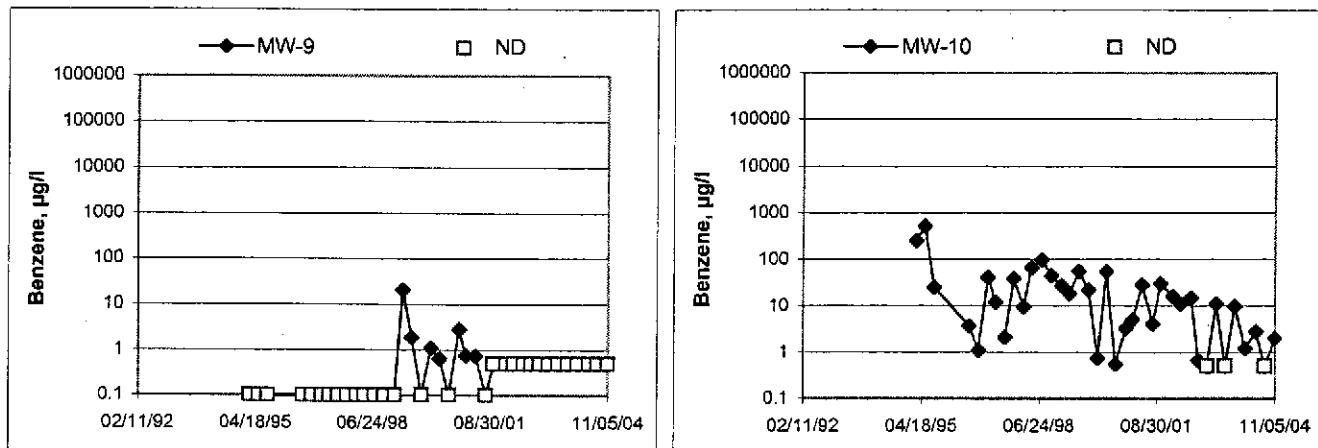
Groundwater Elevations vs. Time  
76 Station 5043



**Benzene Concentrations vs Time**  
76 Station 5043



**Benzene Concentrations vs Time**  
76 Station 5043



## GENERAL FIELD PROCEDURES

### **Groundwater Monitoring and Sampling Assignments**

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater monitoring and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

### **Fluid Level Measurements**

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage, or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Wells that are found to contain LPH are not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed. Bailed fluids are placed in a container separate from normal purge water, and properly disposed.

### **Purging and Groundwater Parameter Measurement**

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurement are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously until they become stable in general accordance with EPA guidelines.

Purge water is generally collected in labeled drums for disposal. Drums may be left on site for disposal by others, or transported to a collection location for eventual transfer to a licensed treatment or recycling facility. In some cases, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

## **Groundwater Sample Collection**

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

Samples are collected by lowering a new, disposable, ½-inch to 4-inch polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

After filling, all containers are labeled with project number (or site number), well designation, sample date, and the samplers initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

## **Sequence of Gauging, Purging, and Sampling**

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least-affected well and ending with the well that has highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected well to the most-affected well.

## **Decontamination**

In order to reduce the possibility of cross-contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

## **Exceptions**

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, and noted on the site TSR, are documented in field notes on the following pages.

## FIELD MONITORING DATA SHEET

Technician: W.D. Zell

Job #/Task #: 4105001 / F020

Date: 10/29/04

Site # 5043

**Project Manager** A-COUNTS

Page 1 of 1

## GROUNDWATER SAMPLING FIELD NOTES

Site: 5843

Technician: Lyon

W.W. M.  $B_{113} = ?$

Project No.: 410,000

Date: 10/29/04

Well No.: MW-7

Purge Method: DIG

Depth to Water (feet): 3.71

Depth to Product (feet): 6

Total Depth (feet): 12

LPH & Water Recovered (gallons): 6

Water Column (feet): 9.10

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 5

1 Well Volume (gallons): 1

Well No.: 744-8

Purge Method: 016

Depth to Water (feet): 3.7

Depth to Product (feet): \_\_\_\_\_ 0

Total Depth (feet): 14.

LPH & Water Recovered (gallons):

Water Column (feet): 11.

Casing Diameter (Inches): 2"

## GROUNDWATER SAMPLING FIELD NOTES

Site: 3043

Technician: Lynne L

Project No.: 410JD701

Date: 20/29/01

Well No.: MW-9

Depth to Water (feet): 1.28

Total Depth (feet): 12.07

Water Column (feet): 11.29

80% Recharge Depth (feet): 3-1/3

Purge Method: 019

Depth to Product (feet): 6

LPH & Water Recovered (gallons): 6

Casing Diameter (Inches): 2"

1 Well Volume (gallons): \_\_\_\_\_ 2

Well No.: MW-3

Depth to Water (feet): 200

Total Depth (feet): 14.03

Water Column (feet): 12.63

80% Recharge Depth (feet): 4.40

Purge Method: 019

Depth to Product (feet): \_\_\_\_\_ 6

LPH & Water Recovered (gallons): 6

Casing Diameter (Inches): 2 1/2

1 Well Volume (gallons): 2

## **GROUNDWATER SAMPLING FIELD NOTES**

Site: 5643

Technician: WYDZI

Date: 10/29/04

Well No.: M60-6

Depth to Water (feet): 3.03

Total Depth (feet): 12.74

Water Column (feet): 9.71

80% Recharge Depth (feet): 4.97

Digitized by srujanika@gmail.com

Purge Method: OIA

Depth to Product (feet): 0

LPH & Water Recovered (gallons): 0

Casing Diameter (Inches): 2"

1 Well Volume (gallons): 2

Well No.: MV-1b

Purge Method: Dig

Depth to Water (feet): 3.41

Depth to Product (feet): 2

Total Depth (feet): 12.75

LPH & Water Recovered (gallons): 0

Water Column (feet): 9.34

Casing Diameter (Inches): 2"

TRC Alton Geoscience- Irvine

November 12, 2004

21 Technology Drive  
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20  
Project: Conoco Phillips # 5043  
Site: 449 Hegenberger Rd. Oakland

Attached is our report for your samples received on 10/29/2004 14:50

This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
12/13/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,  
please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,



Dimple Sharma  
Project Manager

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-9	10/29/2004 09:39	Water	1
MW-3	10/29/2004 09:10	Water	2
MW-10	10/29/2004 08:05	Water	3
MW-6	10/29/2004 08:57	Water	4
MW-7	10/29/2004 08:30	Water	5
MW-8	10/29/2004 08:38	Water	6

## Diesel

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: MW-9

Lab ID: 2004-11-0014 - 1

Sampled: 10/29/2004 09:39

Extracted: 11/11/2004 11:20

Matrix: Water

QC Batch#: 2004/11/11-3A.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	76	50	ug/L	1.00	11/12/2004 03:37	Q2
<b>Surrogate(s)</b>						
o-Terphenyl	88.2	60-130	%	1.00	11/12/2004 03:37	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

Prep(s):	3510/8015M	Test(s):	8015M
Sample ID:	<b>MW-3</b>	Lab ID:	2004-11-0014 - 2
Sampled:	10/29/2004 09:10	Extracted:	11/10/2004 14:44
Matrix:	Water	QC Batch#:	2004/11/10-5B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	200	50	ug/L	1.00	11/11/2004 11:31	Q2
<b>Surrogate(s)</b> o-Terphenyl	64.5	60-130	%	1.00	11/11/2004 11:31	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: MW-10

Lab ID: 2004-11-0014 - 3

Sampled: 10/29/2004 08:05

Extracted: 11/10/2004 14:44

Matrix: Water

QC Batch#: 2004/11/10-5B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	11/11/2004 11:59	
Surrogate(s) o-Terphenyl	73.0	60-130	%	1.00	11/11/2004 11:59	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: MW-6

Lab ID: 2004-11-0014 - 4

Sampled: 10/29/2004 08:57

Extracted: 11/10/2004 14:44

Matrix: Water

QC Batch#: 2004/11/10-5B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	78000	1000	ug/L	20.00	11/11/2004 14:17	Q2
<i>Surrogate(s)</i> o-Terphenyl	NA	60-130	%	20.00	11/11/2004 14:17	S3

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

Prep(s): 3510/8015M                          Test(s): 8015M  
Sample ID: MW-7                                  Lab ID: 2004-11-0014 - 5  
Sampled: 10/29/2004 08:30                          Extracted: 11/11/2004 11:20  
Matrix: Water    QC Batch#: 2004/11/11-3A.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	54	50	ug/L	1.00	11/12/2004 04:04	Q2
<b>Surrogate(s)</b>						
o-Terphenyl	64.6	60-130	%	1.00	11/12/2004 04:04	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
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Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

Prep(s): 3510/8015M

Test(s): 8015M

Sample ID: MW-8

Lab ID: 2004-11-0014 - 6

Sampled: 10/29/2004 08:38

Extracted: 11/10/2004 14:44

Matrix: Water

QC Batch#: 2004/11/10-5B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	120	50	ug/L	1.00	11/11/2004 11:59	Q2
<b>Surrogate(s)</b> o-Terphenyl	73.1	60-130	%	1.00	11/11/2004 11:59	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

---

**Batch QC Report**

---

Prep(s): 3510/8015M

Test(s): 8015M

**Method Blank****Water****QC Batch # 2004/11/10-5B.10**

MB: 2004/11/10-5B.10-001

Date Extracted: 11/10/2004 14:44

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	11/11/2004 10:37	
<b>Surrogates(s)</b> o-Terphenyl	96.0	60-130	%	11/11/2004 10:37	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

**Batch QC Report**

---

Prep(s): 3510/8015M

Test(s): 8015M

Method Blank

Water

QC Batch # 2004/11/11-3A.10

MB: 2004/11/11-3A.10-001

Date Extracted: 11/11/2004 11:20

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	11/11/2004 17:03	
<b>Surrogates(s)</b> o-Terphenyl	82.6	60-130	%	11/11/2004 17:03	

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

**Batch QC Report**

---

Prep(s): 3510/8015M

Test(s): 8015M

**Laboratory Control Spike****Water****QC Batch # 2004/11/10-5B.10**

LCS 2004/11/10-5B.10-002  
LCSD 2004/11/10-5B.10-003

Extracted: 11/10/2004  
Extracted: 11/10/2004

Analyzed: 11/11/2004 10:11  
Analyzed: 11/11/2004 10:38

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD %	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Diesel	731	739	1000	73.1	73.9	1.1	60-130	25		
<i>Surrogates(s)</i> o-Terphenyl	18.5	18.0	20.0	92.6	89.8		60-130			

## Diesel

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

**Batch QC Report**

---

Prep(s): 3510/8015M

Test(s): 8015M

**Laboratory Control Spike****Water****QC Batch # 2004/11/11-3A.10**

LCS	2004/11/11-3A.10-002	Extracted: 11/11/2004	Analyzed: 11/11/2004 17:30
LCSD	2004/11/11-3A.10-003	Extracted: 11/11/2004	Analyzed: 11/11/2004 18:00

Compound	Conc.	ug/L	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %	Flags		
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	772	846	1000	77.2	84.6	9.1	60-130	25		
<b>Surrogates(s)</b>										
o-Terphenyl	17.1	18.4	20.0	85.5	92.1		60-130			

**Diesel**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

**Legend and Notes**

---

**Result Flag**

Q2

Quantit. of unknown hydrocarbon(s) in sample based on diesel.

S3

Surrogate recovery not reportable due to required dilution.

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-9	10/29/2004 09:39	Water	1
MW-3	10/29/2004 09:10	Water	2
MW-10	10/29/2004 08:05	Water	3
MW-6	10/29/2004 08:57	Water	4
MW-7	10/29/2004 08:30	Water	5
MW-8	10/29/2004 08:38	Water	6

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

Prep(s): 5030B

Test(s): 8260FAB

Sample ID: MW-9

Lab ID: 2004-11-0014 - 1

Sampled: 10/29/2004 09:39

Extracted: 11/5/2004 10:01

Matrix: Water

QC Batch#: 2004/11/05-1B.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/05/2004 10:01	
Benzene	ND	0.50	ug/L	1.00	11/05/2004 10:01	
Toluene	ND	0.50	ug/L	1.00	11/05/2004 10:01	
Ethylbenzene	ND	0.50	ug/L	1.00	11/05/2004 10:01	
Total xylenes	1.0	1.0	ug/L	1.00	11/05/2004 10:01	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	11/05/2004 10:01	
Ethanol	ND	50	ug/L	1.00	11/05/2004 10:01	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	87.7	73-130	%	1.00	11/05/2004 10:01	
Toluene-d8	98.2	81-114	%	1.00	11/05/2004 10:01	

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

Prep(s): 5030B

Test(s): 8260FAB

Sample ID: MW-3

Lab ID: 2004-11-0014 - 2

Sampled: 10/29/2004 09:10

Extracted: 11/5/2004 10:24

Matrix: Water

QC Batch#: 2004/11/05-1B.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	460	50	ug/L	1.00	11/05/2004 10:24	
Benzene	5.6	0.50	ug/L	1.00	11/05/2004 10:24	
Toluene	15	0.50	ug/L	1.00	11/05/2004 10:24	
Ethylbenzene	10	0.50	ug/L	1.00	11/05/2004 10:24	
Total xylenes	46	1.0	ug/L	1.00	11/05/2004 10:24	
Methyl tert-butyl ether (MTBE)	48	0.50	ug/L	1.00	11/05/2004 10:24	
Ethanol	ND	50	ug/L	1.00	11/05/2004 10:24	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.8	73-130	%	1.00	11/05/2004 10:24	
Toluene-d8	99.6	81-114	%	1.00	11/05/2004 10:24	

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

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Prep(s): 5030B    Test(s): 8260FAB  
Sample ID: MW-10    Lab ID: 2004-11-0014 - 3  
Sampled: 10/29/2004 08:05                                  Extracted: 11/9/2004 01:40  
Matrix: Water    QC Batch#: 2004/11/08-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	100	50	ug/L	1.00	11/09/2004 01:40	
Benzene	2.0	0.50	ug/L	1.00	11/09/2004 01:40	
Toluene	1.2	0.50	ug/L	1.00	11/09/2004 01:40	
Ethylbenzene	1.1	0.50	ug/L	1.00	11/09/2004 01:40	
Total xylenes	3.6	1.0	ug/L	1.00	11/09/2004 01:40	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	11/09/2004 01:40	
Ethanol	ND	50	ug/L	1.00	11/09/2004 01:40	
<i>Surrogate(s)</i>						
1,2-Dichloroethane-d4	102.3	73-130	%	1.00	11/09/2004 01:40	
Toluene-d8	97.5	81-114	%	1.00	11/09/2004 01:40	

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

Prep(s): 5030B

Test(s): 8260FAB

Sample ID: MW-6

Lab ID: 2004-11-0014 - 4

Sampled: 10/29/2004 08:57

Extracted: 11/5/2004 10:46

Matrix: Water

QC Batch#: 2004/11/05-1B.64

Analysis Flag: L2 ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	100000	5000	ug/L	100.00	11/05/2004 10:46	
Benzene	5200	50	ug/L	100.00	11/05/2004 10:46	
Toluene	6100	50	ug/L	100.00	11/05/2004 10:46	
Ethylbenzene	4200	50	ug/L	100.00	11/05/2004 10:46	
Total xylenes	15000	100	ug/L	100.00	11/05/2004 10:46	
Methyl tert-butyl ether (MTBE)	ND	50	ug/L	100.00	11/05/2004 10:46	
Ethanol	ND	5000	ug/L	100.00	11/05/2004 10:46	
<i>Surrogate(s)</i>						
1,2-Dichloroethane-d4	98.3	73-130	%	100.00	11/05/2004 10:46	
Toluene-d8	103.1	81-114	%	100.00	11/05/2004 10:46	

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

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Prep(s): 5030B                          Test(s): 8260FAB  
Sample ID: MW-7                          Lab ID: 2004-11-0014 - 5  
Sampled: 10/29/2004 08:30                  Extracted: 11/5/2004 03:15  
Matrix: Water                              QC Batch#: 2004/11/04-2B.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	210	50	ug/L	1.00	11/05/2004 03:15	
Benzene	0.67	0.50	ug/L	1.00	11/05/2004 03:15	
Toluene	1.6	0.50	ug/L	1.00	11/05/2004 03:15	
Ethylbenzene	1.7	0.50	ug/L	1.00	11/05/2004 03:15	
Total xylenes	5.8	1.0	ug/L	1.00	11/05/2004 03:15	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	11/05/2004 03:15	
Ethanol	ND	50	ug/L	1.00	11/05/2004 03:15	
<i>Surrogate(s)</i>						
1,2-Dichloroethane-d4	97.4	73-130	%	1.00	11/05/2004 03:15	
Toluene-d8	99.1	81-114	%	1.00	11/05/2004 03:15	

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

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Irvine, CA 92718

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Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

Prep(s): 5030B

Test(s): 8260FAB

Sample ID: MW-8

Lab ID: 2004-11-0014 - 6

Sampled: 10/29/2004 08:38

Extracted: 11/5/2004 03:37

Matrix: Water

QC Batch#: 2004/11/04-2B.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/05/2004 03:37	
Benzene	ND	0.50	ug/L	1.00	11/05/2004 03:37	
Toluene	ND	0.50	ug/L	1.00	11/05/2004 03:37	
Ethylbenzene	0.82	0.50	ug/L	1.00	11/05/2004 03:37	
Total xylenes	2.5	1.0	ug/L	1.00	11/05/2004 03:37	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	11/05/2004 03:37	
Ethanol	ND	50	ug/L	1.00	11/05/2004 03:37	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	96.4	73-130	%	1.00	11/05/2004 03:37	
Toluene-d8	98.3	81-114	%	1.00	11/05/2004 03:37	

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Method Blank

Water

QC Batch # 2004/11/04-2B.64

MB: 2004/11/04-2B.64-010

Date Extracted: 11/04/2004 19:10

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/04/2004 19:10	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	11/04/2004 19:10	
Benzene	ND	0.5	ug/L	11/04/2004 19:10	
Toluene	ND	0.5	ug/L	11/04/2004 19:10	
Ethylbenzene	ND	0.5	ug/L	11/04/2004 19:10	
Total xylenes	ND	1.0	ug/L	11/04/2004 19:10	
Ethanol	ND	50	ug/L	11/04/2004 19:10	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	90.4	73-130	%	11/04/2004 19:10	
Toluene-d8	97.6	81-114	%	11/04/2004 19:10	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

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Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

Method Blank

Water

QC Batch # 2004/11/05-1B.64

MB: 2004/11/05-1B.64-059

Date Extracted: 11/05/2004 08:59

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/05/2004 08:59	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	11/05/2004 08:59	
Benzene	ND	0.5	ug/L	11/05/2004 08:59	
Toluene	ND	0.5	ug/L	11/05/2004 08:59	
Ethylbenzene	ND	0.5	ug/L	11/05/2004 08:59	
Total xylenes	ND	1.0	ug/L	11/05/2004 08:59	
Ethanol	ND	50	ug/L	11/05/2004 08:59	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	92.8	73-130	%	11/05/2004 08:59	
Toluene-d8	99.4	81-114	%	11/05/2004 08:59	

**Gas/BTEX Fuel Oxygenates by 8260B**

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21 Technology Drive

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Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

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**Batch QC Report**

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Prep(s): 5030B

Test(s): 8260FAB

**Method Blank**

Water

**QC Batch # 2004/11/08-2A.64**

MB: 2004/11/08-2A.64-035

Date Extracted: 11/08/2004 18:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/08/2004 18:35	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	11/08/2004 18:35	
Benzene	ND	0.5	ug/L	11/08/2004 18:35	
Toluene	ND	0.5	ug/L	11/08/2004 18:35	
Ethylbenzene	ND	0.5	ug/L	11/08/2004 18:35	
Total xylenes	ND	1.0	ug/L	11/08/2004 18:35	
Ethanol	ND	50	ug/L	11/08/2004 18:35	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	95.8	73-130	%	11/08/2004 18:35	
Toluene-d8	96.4	81-114	%	11/08/2004 18:35	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

**Laboratory Control Spike****Water****QC Batch # 2004/11/04-2B.64**

LCS 2004/11/04-2B.64-047  
LCSD

Extracted: 11/04/2004

Analyzed: 11/04/2004 18:47

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.1		25	88.4			65-165	20		
Benzene	22.0		25	88.0			69-129	20		
Toluene	22.0		25	88.0			70-130	20		
<i>Surrogates(s)</i>										
1,2-Dichloroethane-d4	435		500	87.0			73-130			
Toluene-d8	499		500	99.8			81-114			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

---

**Batch QC Report**

---

Prep(s): 5030B

Test(s): 8260FAB

**Laboratory Control Spike****Water****QC Batch # 2004/11/05-1B.64**LCS 2004/11/05-1B.64-036  
LCSD

Extracted: 11/05/2004

Analyzed: 11/05/2004 08:36

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD %	Ctrl.Limits %	Flags	
	LCS	LCSD		LCS	LCSD			Rec.	RPD
Methyl tert-butyl ether (MTBE)	22.1		25	88.4			65-165	20	
Benzene	22.8		25	91.2			69-129	20	
Toluene	21.9		25	87.6			70-130	20	
<i>Surrogates(s)</i>									
1,2-Dichloroethane-d4	439		500	87.8			73-130		
Toluene-d8	502		500	100.4			81-114		

**Gas/BTEX Fuel Oxygenates by 8260B**

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

**Laboratory Control Spike****Water****QC Batch # 2004/11/08-2A.64**LCS 2004/11/08-2A.64-012  
LCSD

Extracted: 11/08/2004

Analyzed: 11/08/2004 18:12

Compound	Conc.	ug/L	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	21.9		25	87.6			65-165	20		
Benzene	21.8		25	87.2			69-129	20		
Toluene	21.8		25	87.2			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	448		500	89.6			73-130			
Toluene-d8	483		500	96.6			81-114			

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

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Batch QC Report

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Prep(s): 5030B

Test(s): 8260FAB

## Matrix Spike ( MS / MSD )

## Water

## QC Batch # 2004/11/04-2B.64

MS/MSD

Lab ID: 2004-11-0016 - 001

MS: 2004/11/04-2B.64-054

Extracted: 11/04/2004

Analyzed: 11/04/2004 20:54

MSD: 2004/11/04-2B.64-017

Extracted: 11/04/2004

Dilution: 1.00

Analyzed: 11/04/2004 21:17

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Methyl tert-butyl ether	56.1	54.6	27.3	25	115.2	109.2	5.3	65-165	20		
Benzene	25.4	23.7	ND	25	101.6	94.8	6.9	69-129	20		
Toluene	25.3	23.6	ND	25	101.2	94.4	7.0	70-130	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	463	460		500	92.6	92.0		73-130			
Toluene-d8	491	498		500	98.2	99.6		81-114			

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

## Batch QC Report

Prep(s): 5030B Test(s): 8260FAB

Matrix Spike ( MS / MSD )	Water	QC Batch # 2004/11/05-1B.64
MS/MSD		Lab ID: 2004-10-0977 - 002
MS: 2004/11/05-1B.64-053	Extracted: 11/05/2004	Analyzed: 11/05/2004 11:53
		Dilution: 1.00
MSD: 2004/11/05-1B.64-015	Extracted: 11/05/2004	Analyzed: 11/05/2004 12:15
		Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	18.1	21.2	ND	25	72.4	84.8	15.8	69-129	20		
Toluene	18.2	21.6	ND	25	72.8	86.4	17.1	70-130	20		
Methyl tert-butyl ether	101	98.5	73.5	25	110.0	100.0	9.5	65-165	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	461	449		500	92.2	89.8		73-130			
Toluene-d8	501	502		500	100.2	100.4		81-114			

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20  
Conoco Phillips # 5043

Received: 10/29/2004 14:50

Site: 449 Hegenberger Rd. Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

## Matrix Spike ( MS / MSD )

## Water

## QC Batch # 2004/11/08-2A.64

MS/MSD

Lab ID: 2004-11-0186 - 001

MS: 2004/11/08-2A.64-056

Extracted: 11/09/2004

Analyzed: 11/09/2004 00:56

MSD: 2004/11/08-2A.64-018

Extracted: 11/09/2004

Dilution: 1.00

Analyzed: 11/09/2004 01:18

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	20.1	23.6	ND	25	80.4	94.4	16.0	65-165	20		
Benzene	17.9	21.3	ND	25	71.6	85.2	17.3	69-129	20		
Toluene	17.0	22.2	ND	25	68.0	88.8	26.5	70-130	20	M5	R1
<i>Surrogate(s)</i>											
1,2-Dichloroethane-d4	489	478		500	97.8	95.6		73-130			
Toluene-d8	493	517		500	98.6	103.4		81-114			

**Gas/BTEX Fuel Oxygenates by 8260B**

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Project: 41050001FA20

Received: 10/29/2004 14:50

Conoco Phillips # 5043

Site: 449 Hegenberger Rd. Oakland

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**Legend and Notes**

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**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present  
in the sample.**Result Flag**

M5

MS/MSD spike recoveries were below acceptance limits.  
See blank spike (LCS).

R1

Analyte RPD was out of QC limits.

STL San Francisco

**Sample Receipt Checklist**Submission #: 2004- 11 - 0014Checklist completed by: (initials) XN Date: 11, 01 /04Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

Yes / No / Present ✓

Chain of custody present?

Yes ✓ No /

Chain of custody signed when relinquished and received?

Yes ✓ No /

Chain of custody agrees with sample labels?

Yes ✓ No /

Samples in proper container/bottle?

Yes ✓ No /

Sample containers intact?

Yes ✓ No /

Sufficient sample volume for indicated test?

Yes ✓ No /

All samples received within holding time?

Yes ✓ No /Container/Temp: Blank temperature in compliance ( $4^{\circ}\text{C} \pm 2$ )?Temp: 2  $^{\circ}\text{C}$  Yes ✓ No /Potential reason for  $> 6^{\circ}\text{C}$  – Ice melted  Ice in bags  Not enough ice  Not enough blue ice  Samples in boxes Sampled < 4 hr. ago?  Ice not required (e.g. air or bulk sample) Ice Present Yes ✓ No /

Water - VOA vials have zero headspace?

No VOA vials submitted Yes ✓ No /

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small ~O), M (medium ~ O) or L (large ~ O))

Water - pH acceptable upon receipt?  Yes  No pH adjusted – Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc – Lot #(s) \_\_\_\_\_

For any item check-listed "No", provided detail of discrepancy in comment section below:

**Comments:**  
\_\_\_\_\_  
\_\_\_\_\_**Project Management [Routing for instruction of indicated discrepancy(ies)]**Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_\_ / \_\_\_\_\_ /04 Client contacted:  Yes  NoSummary of discussion:  
\_\_\_\_\_  
\_\_\_\_\_Corrective Action (per PM/Client):  
\_\_\_\_\_  
\_\_\_\_\_

STL-San Francisco

1220 Quarry Lane  
Pleasanton, CA 94566  
(925) 484-1919 (925) 484-1096 fax

## ConocoPhillips Chain Of Custody Record

95221

ConocoPhillips Site Manager: <b>2004-11-0014</b>		ConocoPhillips Work Order Number: <b>1347TRC500</b>
INVOICE REMITTANCE ADDRESS:		ConocoPhillips Cost Object:
CONOCOPHILLIPS Attn: Dee Hutchinson 3611 South Harbor, Suite 200 Santa Ana, CA. 92704		

SAMPLING COMPANY: TRC		Valid Value ID: CONOCOPHILLIPS SITE NUMBER <b>SD43</b>	GLOBAL ID NO.: <b>T0600101476</b>														
ADDRESS: 21 Technology Drive, Irvine CA 92618		SITE ADDRESS [Street and City]: <b>449 MELLOW BEE RD. DTK LANDS</b>	CONOCOPHILLIPS SITE MANAGER: <b>Thomas Kosel</b>														
PROJECT CONTACT (Hardcopy or PDF Report to): Anju Farfan		EDF DELIVERABLE TO (RP or Designee): Peter Thomson, TRC p.thomson@trcsolutions.com	PHONE NO.: 949-341-7408														
TELEPHONE: 949-341-7440	FAX: 949-753-0111	E-MAIL: afarfan@trcsolutions.com	E-MAIL: LAB USE ONLY														
SAMPLER NAME(S) (Print): <b>WDEZL</b>	CONSULTANT PROJECT NUMBER 41050001/FA20	REQUESTED ANALYSES															
TURNAROUND TIME (CALENDAR DAYS): <input type="checkbox"/> 14 DAYS <input type="checkbox"/> 7 DAYS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> LESS THAN 24 HOURS																	
SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED <input checked="" type="checkbox"/>		FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes  <b>20C</b>															
* Field Point name only required if different from Sample ID		TEMPERATURE ON RECEIPT C°															
LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING DATE	MATRIX	NO. OF CONT.	8015m - TPHd Extractable	8260B - TPHdg/BTEX/IMBE	8260B - TPHdg / BTEX / 8 Oxygenates	8260B - TPHdg / BTEX / 8 oxygenates + methanol (8015M)	8260B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M / 8021B - TPHg/BTEX/IMBE	Lead	<input type="checkbox"/> Total	<input type="checkbox"/> STLC	<input type="checkbox"/> TCCLP	TPHd 04/04/04 TPH 04/04/04 8260B 8260B / 8260B 8260B / 8260B 8260B / 8260B 8260B / 8260B 8260B / 8260B	
	<b>MW-9</b>	<b>10/29 04</b>	<b>6639 GW</b>	<b>4</b>									X	X	X	X	
	<b>MW-3</b>		<b>6610</b>														
	<b>MW-10</b>		<b>0805</b>														
	<b>MW-6</b>		<b>0857</b>														
	<b>MW-7</b>		<b>0830</b>														
	<b>MW-8</b>		<b>0838</b>														

Relinquished by: (Signature) <i>John C. L.</i>	Received by: (Signature) <i>REFRIGIRATOR</i>	Date: <b>10/29/04</b>	Time: <b>1620</b>
Relinquished by: (Signature) <i>Almae C. L.</i>	Received by: (Signature) <i>M. J.</i>	Date: <b>10/29/04</b>	Time: <b>1120</b>
Relinquished by: (Signature) <i>M. J.</i>	Received by: (Signature) <i>Denise Harrington / STL-SF</i>	Date: <b>10/29/04</b>	Time: <b>1450</b>

## **STATEMENTS**

### **Purge Water Disposal**

Non-hazardous groundwater produced during purging and sampling was accumulated at TRC's groundwater monitoring facility at Concord, California, for transportation by Onyx Transportation, Inc., to the ConocoPhillips Refinery at Rodeo, California. Disposal at the Rodeo facility was authorized by ConocoPhillips in accordance with "ESD Standard Operating Procedures – Water Quality and Compliance", as revised on February 7, 2003. Documentation of compliance with ConocoPhillips requirements is provided by an ESD Form R-149, which is on file at TRC's Concord Office. Purge water suspected of containing potentially hazardous material, such as liquid-phase hydrocarbons, was accumulated separately in a drum for transportation and disposal by Filter Recycling, Inc.

### **Limitations**

The fluid level monitoring and groundwater sampling activities summarized in this report have been performed under the responsible charge of a California Registered Geologist or Registered Civil Engineer and have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the conclusions and professional opinions presented in this report. The conclusions are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.