

20459



76 Broadway  
Sacramento, CA 95818  
phone 916.558.7676  
fax 916.558.7639

November 5, 2004

Alameda County  
NOV 16 2004  
Environmental Health

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

Re: **Document Transmittal**  
Fuel Leak Case  
76 Station #6419  
6401 Dublin Blvd.  
Dublin, CA

Dear Mr. Hwang:

Please find attached TRC's *Quarterly Status Report, dated 11/09/04*, and TRC's *Semi-annual Monitoring Report, dated 10/26/04* 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,

Thomas H. Kosel  
Site Manger, Risk Management and Remediation  
ConocoPhillips  
76 Broadway, Sacramento, CA 95818

Attachment

cc: Roger Batra, TRC



Customer-Focused Solutions

November 5, 2004

TRC Project No. 42017001

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

**RE: Quarterly Status Report - Third Quarter 2004  
76 Service Station #6419, 6401 Dublin Boulevard, Dublin, California  
Alameda County**

Dear Mr. Hwang:

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

#### **PREVIOUS ASSESSMENTS**

The subject site is an active service station located on the western corner of Dublin Boulevard and Dougherty Road in Dublin, California. The site is bounded to the southeast by Dublin Boulevard, to the northeast by Dougherty Road, and to the northwest and southwest by a shopping center parking lot. Properties in the immediate site vicinity are commercial, including service stations and retail shopping facilities.

Current aboveground site facilities consist of two dispenser islands, a car wash, and a station building/convenience store. Two 12,000-gallon gasoline underground storage tanks (USTs) are located in the common pit immediately east of the station building.

September 1993: Two 10,000-gallon gasoline USTs, one 550-gallon waste oil UST, and the associated product piping were removed from the site with confirmation sampling. Groundwater was observed entering the UST excavation. Concentrations of petroleum hydrocarbons in confirmation soil samples beneath the fuel USTs were non-detect to low. Concentrations of petroleum hydrocarbons and volatile organic compounds (VOCs) in confirmation soil samples beneath the waste oil UST were non-detect to low, and concentrations of metals were considered background levels. Petroleum hydrocarbon and lead concentrations in confirmation soil samples from the dispenser islands were non-detect, and low, respectively. Petroleum hydrocarbon and lead concentrations in confirmation soil samples from the piping trenches were non-detect, and low, respectively.

February 1994: Three onsite monitoring wells were installed.

June 1999: Four onsite monitoring wells were installed to a depth of approximately 19 feet below ground surface (bgs).

November 1999: A four-inch diameter groundwater observation and extraction well (TPW-1) was installed in the gasoline UST pit backfill to allow purging of methyl tertiary butyl ether (MTBE) impacted groundwater.

September 2001: Two offsite monitoring wells were installed to a depth of 20 feet bgs.

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

### **SENSITIVE RECEPTORS**

A sensitive receptor survey has not been conducted for this site.

### **MONITORING AND SAMPLING**

Historically, dissolved hydrocarbon concentrations in groundwater have ranged from non-detect to 9,200 ppb of TPH-g, non-detect to 130 ppb of benzene, and non-detect to 140,000 ppb of MTBE, with onsite well MW-1 showing the highest concentrations.

Seven onsite and two offsite wells are currently monitored semi-annually. All wells were sampled this quarter. The groundwater gradient and flow direction were 0.01 foot/foot to the south.

### **CHARACTERIZATION STATUS**

Total purgeable petroleum hydrocarbons (TPPH) were detected in three of nine monitoring wells, with a maximum concentration of 340 micrograms per liter ( $\mu\text{g/l}$ ) in onsite well MW-4.

Benzene was not detected in the nine monitoring wells, though the detection limits exceeded the maximum contaminant level (MCL) in three samples.

MTBE was detected in all of the nine monitoring wells, with a maximum concentration of 2,300  $\mu\text{g/l}$  in onsite well MW-3.

### **REMEDIATION STATUS**

September 1993: Approximately 19,000 gallons of groundwater were removed from the UST excavation and properly disposed offsite. A hydrocarbon sheen was observed on the surface of the groundwater in the southwest corner of the excavation. Approximately 850 cubic yards of excavated soil was properly disposed offsite. Two 12,000-gallon and one 520-gallon double-wall gasteel replacement USTs were installed in the same pit.

July 1998: A soil vapor extraction test was conducted. Approximately 0.53 pounds of TPH-g and 6.5 pounds of MTBE (approximately 1 gallon of gasoline/additive) were extracted during the four-day test. The effective radius of influence was thought to be less than 40 feet.

December 1999 through December 2002: Approximately 649,600 gallons of groundwater containing an estimated 130.21 pounds of MTBE were removed from the tank pit observation and extraction well and removed from the site. Batch extractions were ended February 5, 2003, based on asymptotic levels of cumulative pounds of MTBE removed. The purged groundwater was transported to, treated, and disposed of at the ConocoPhillips refinery located in Rodeo, California.

Remediation is not currently being conducted at the site.

#### **RECENT CORRESPONDENCE**

No correspondence this quarter.

#### **CURRENT QUARTER ACTIVITIES**

September 17, 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**

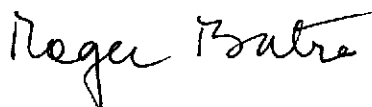
Await agency directives for additional assessment work, if any.

Continue semi-annual monitoring and sampling to assess plume stability and concentration trends at key wells.

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

Sincerely,

TRC



Roger Batra  
Senior Project Manager

QSR – Third Quarter 2004  
76 Service Station #6419, Dublin, California  
November 5, 2004  
Page 4

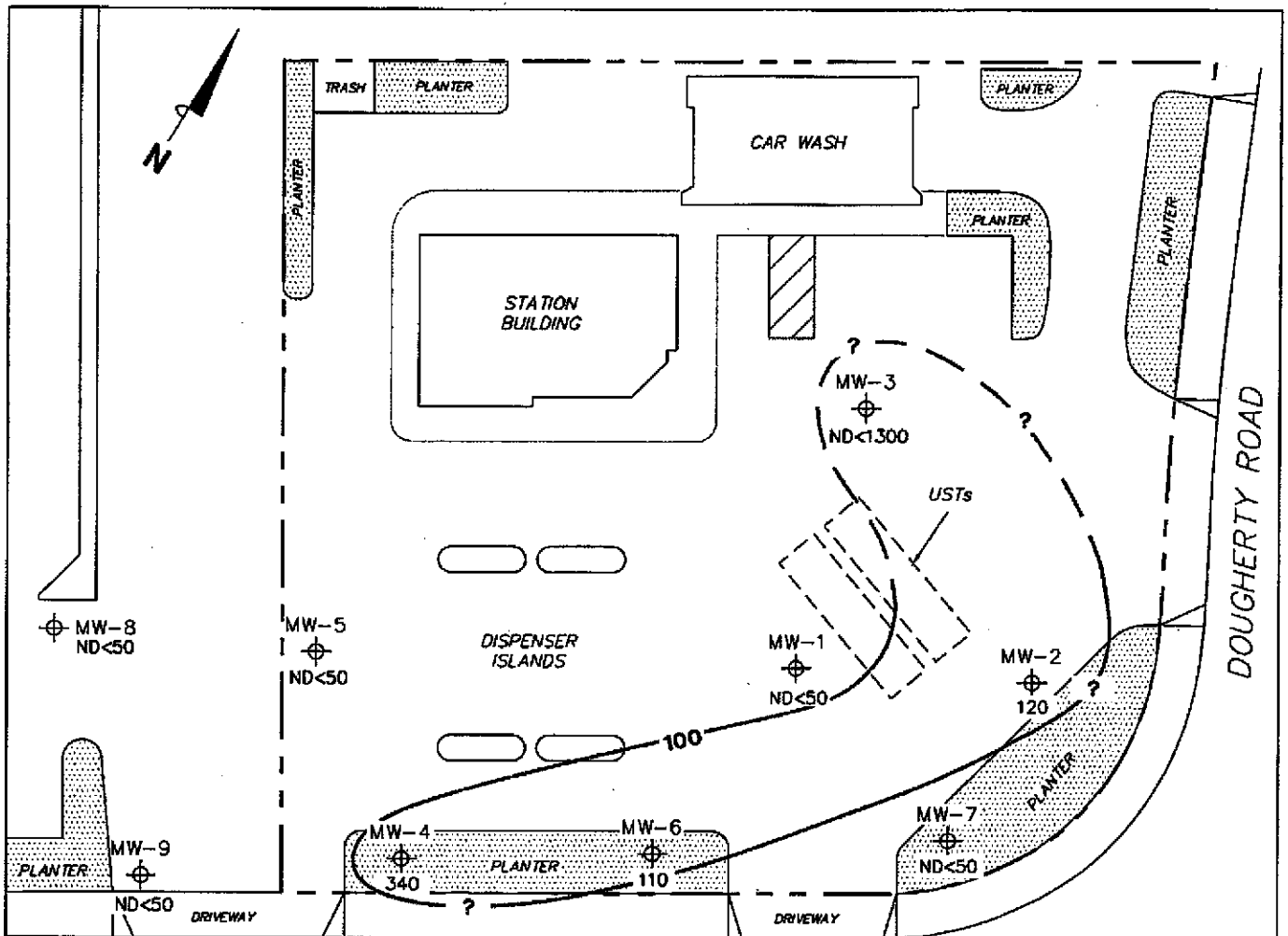
Attachments:

Figure 3 – Dissolved-Phase TPPH Concentration Map, September 17, 2004, from Semi-Annual Monitoring Report, April through September 2004, dated October 26, 2004 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, September 17, 2004, from Semi-Annual Monitoring Report, April through September 2004, dated October 26, 2004 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, September 17, 2004, Semi-Annual Monitoring Report, April through September 2004, dated October 26, 2004 by TRC.

cc: Thomas Kosel, ConocoPhillips (hard copy and electronic upload)



DUBLIN BOULEVARD

**NOTES:**

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

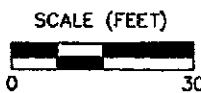
**LEGEND**

- MW-9 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)
- 100- Dissolved-Phase TPPH Contour (µg/l)

**DISSOLVED-PHASE TPPH CONCENTRATION MAP**  
September 17, 2004

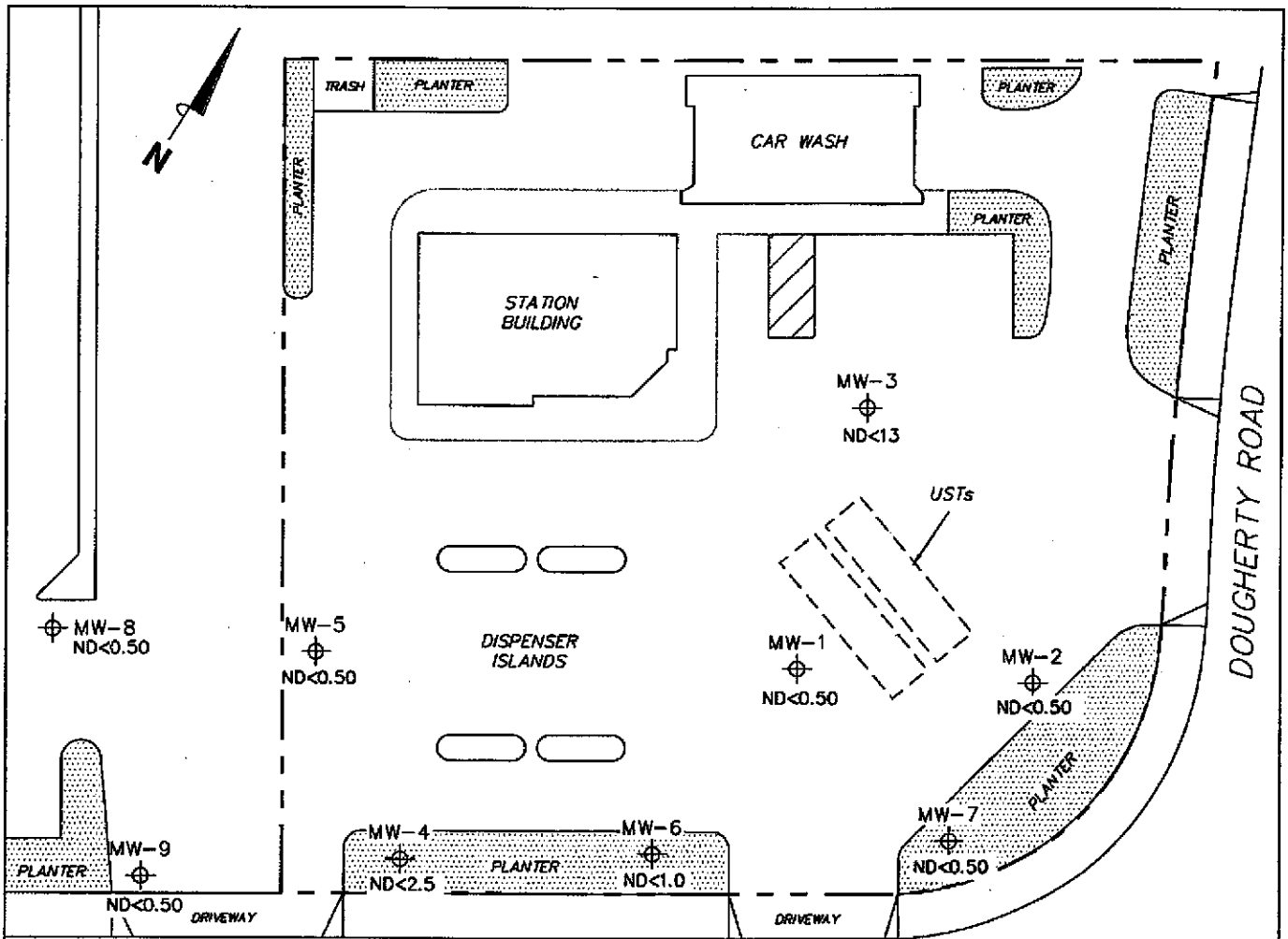
76 Station 6419  
6401 Dublin Boulevard  
Dublin, California

**TRC**



**FIGURE 3**

PS=1:1



DUBLIN BOULEVARD

DOUGHERTY ROAD

**NOTES:**

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank.

**LEGEND**

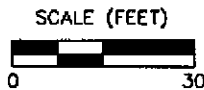
MW-9 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**  
**September 17, 2004**

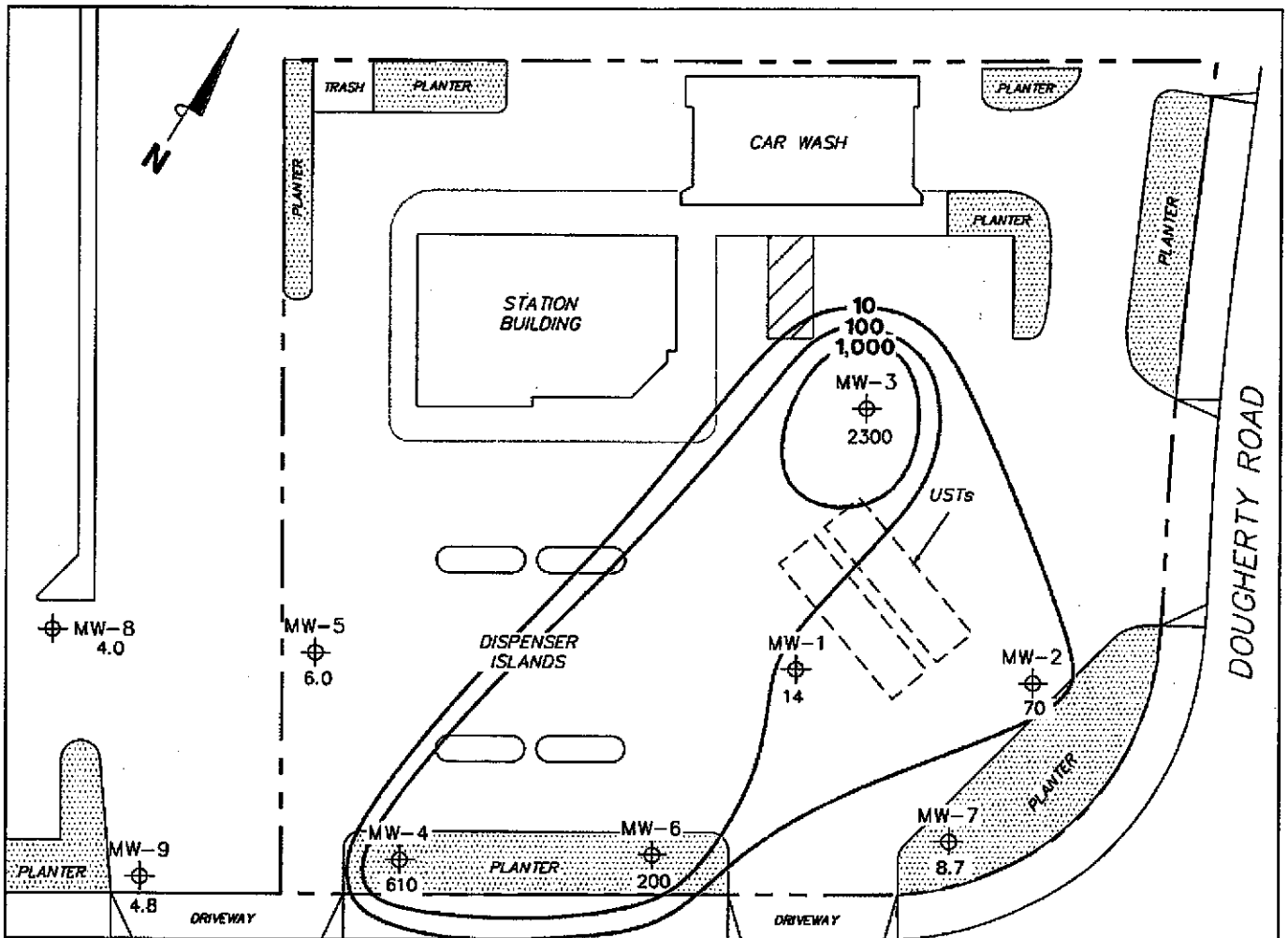
76 Station 6419  
 6401 Dublin Boulevard  
 Dublin, California

**FIGURE 4**

**TRC**



PS=1:1



DUBLIN BOULEVARD

**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. µg/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-9 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)
- 1,000- Dissolved-Phase MTBE Contour (µg/l)

**DISSOLVED-PHASE MTBE  
CONCENTRATION MAP  
September 17, 2004**

76 Station 6419  
6401 Dublin Boulevard  
Dublin, California

**FIGURE 5**

**TRC**

SCALE (FEET)



PS=1:1



# **TRC**

*Customer-Focused Solutions*

October 26, 2004

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

ATTN: MR. THOMAS H. KOSEL

SITE: 76 STATION 6419  
6401 DUBLIN BOULEVARD  
DUBLIN, CALIFORNIA

RE: SEMI-ANNUAL MONITORING REPORT  
APRIL THROUGH SEPTEMBER 2004

Dear Mr. Kosel:

Please find enclosed our Semi-Annual Monitoring Report for 76 Station 6419, located at 6401 Dublin Boulevard, Dublin, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC



Anju Farfan  
QMS Operations Manager

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

Enclosures  
20-0400/6419R03.QMS



Customer-Focused Solutions

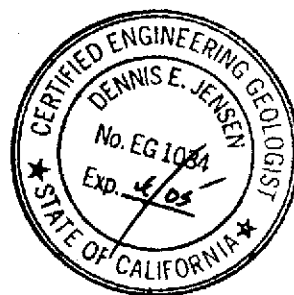
**SEMI-ANNUAL MONITORING REPORT  
APRIL THROUGH SEPTEMBER 2004**

76 STATION 6419  
6401 Dublin Boulevard  
Dublin, California

Prepared For:

Mr. Thomas H. Kosel  
ConocoPhillips Company  
76 Broadway  
Sacramento, California 95818

By:



Senior Project Geologist, Irvine Operations  
October 26, 2004

### LIST OF ATTACHMENTS

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 Concentration Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration 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**  
**April 2004 through September 2004**  
**76 Station 6419**  
**6401 Dublin Boulevard**  
**Dublin, CA**

Project Coordinator: **Thomas H. Kosel**  
Telephone: **916-558-7666**

Water Sampling Contractor: **TRC**  
Compiled by: **Valentina Tobon**

Date(s) of Gauging/Sampling Event: **09/17/04**

**Sample Points**

Groundwater wells: **9** onsite, **0** offsite      Wells gauged: **9**      Wells sampled: **9**  
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: **6.8 feet**      Maximum: **8 feet**  
Average groundwater elevation (relative to available local datum): **322.83 feet**  
Average change in groundwater elevation since previous event: **-0.63 feet**  
Interpreted groundwater gradient and flow direction:  
    Current event: **0.01 ft/ft, south**  
    Previous event: **0.01 ft/ft, south (02/24/04)**

**Selected Laboratory Results**

Wells with detected **Benzene**: **0**      Wells above MCL (1.0 µg/l): **n/a**  
    Maximum reported benzene concentration: **n/a**  
  
Wells with **TPPH 8260B**      **3**      Maximum: **340 µg/l (MW-4)**  
Wells with **MTBE**      **9**      Maximum: **2,300 µg/l (MW-3)**

**Notes:**

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This report presents the results of groundwater monitoring and sampling activities performed by TRC. Please contact the primary consultant for other specific information on this site.

# TABLES

## TABLE KEY

### STANDARD ABBREVIATIONS

--	=	not analyzed, measured, or collected
LPH	=	liquid-phase hydrocarbons
Trace	=	less than 0.01 foot of LPH in well
µg/l	=	micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l	=	milligrams per liter (approx. equivalent to parts per million, ppm)
ND <	=	not detected at or above laboratory detection limit
TOC	=	top of casing (surveyed reference elevation)

### ANALYTES

BTEX	=	benzene, toluene, ethylbenzene, and (total) xylenes
DIPE	=	di-isopropyl ether
ETBE	=	ethyl tertiary butyl ether
MTBE	=	methyl tertiary butyl ether
PCB	=	polychlorinated biphenyls
PCE	=	tetrachloroethene
TBA	=	tertiary butyl alcohol
TCA	=	trichloroethane
TCE	=	trichloroethene
TPH-G	=	total petroleum hydrocarbons with gasoline distinction
TPH-D	=	total petroleum hydrocarbons with diesel distinction
TPPH	=	total purgeable petroleum hydrocarbons
TRPH	=	total recoverable petroleum hydrocarbons
TAME	=	tertiary amyl methyl ether
1,1-DCA	=	1,1-dichloroethane
1,2-DCA	=	1,2-dichloroethane (same as EDC, ethylene dichloride)
1,1-DCE	=	1,1-dichloroethene
1,2-DCE	=	1,2-dichloroethene (cis- and trans-)

### NOTES

1. Elevations are in feet above mean sea level. Depths are in feet below surveyed top-of-casing.
2. Groundwater elevations for wells with LPH are calculated as:  $\text{Surface Elevation} - \text{Measured Depth to Water} + (\text{Dp} \times \text{LPH Thickness})$ , where Dp is the density of the LPH, if known. A value of 0.75 is used for gasoline and when the density is not known. A value of 0.83 is used for diesel.
3. Wells with LPH are generally not sampled for laboratory analysis (see General Field Procedures).
4. Comments shown on tables are general. Additional explanations may be included in field notes and laboratory reports, both of which are included as part of this report.
5. A "J" flag indicates that a reported analytical result is an estimated concentration value between the method detection limit (MDL) and the practical quantification limit (PQL) specified by the laboratory.
6. Other laboratory flags (qualifiers) may have been reported. See the official laboratory report (attached) for a complete list of laboratory flags.
7. Concentration graphs based on tables (presented following Figures) show non-detect results prior to the Second Quarter 2000 plotted at fixed values for graphical display. Non-detect results reported since that time are plotted at reporting limits stated in the official laboratory report.
8. Groundwater vs. Time graphs may be corrected for apparent level changes due to resurvey.

### REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 6419 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

**Table 1**  
**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 17, 2004**  
**76 Station 6419**

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-1</b>	<b>(Screen Interval in feet: 4.0-19.0)</b>													
09/17/04	330.17	7.08	0.00	323.09	-1.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	14	
<b>MW-2</b>	<b>(Screen Interval in feet: 4.0-20.0)</b>													
09/17/04	330.24	7.22	0.00	323.02	-1.35	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	70	
<b>MW-3</b>	<b>(Screen Interval in feet: 4.0-20.0)</b>													
09/17/04	330.59	7.61	0.00	322.98	-1.50	--	ND<1300	ND<13	ND<13	ND<13	ND<25	--	2300	
<b>MW-4</b>	<b>(Screen Interval in feet: 4.0-19.0)</b>													
09/17/04	330.35	8.00	0.00	322.35	-1.45	--	340	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	610	
<b>MW-5</b>	<b>(Screen Interval in feet: 4.0-19.0)</b>													
09/17/04	330.18	7.41	0.00	322.77	-1.53	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.4	--	6.0	
<b>MW-6</b>	<b>(Screen Interval in feet: 4.0-19.0)</b>													
09/17/04	330.47	7.64	0.00	322.83	-1.53	--	110	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	200	
<b>MW-7</b>	<b>(Screen Interval in feet: 4.0-19.0)</b>													
09/17/04	330.41	7.45	0.00	322.96	-1.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.7	
<b>MW-8</b>	<b>(Screen Interval in feet: DNA)</b>													
09/17/04	329.97	7.23	0.00	322.74	6.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.0	
<b>MW-9</b>	<b>(Screen Interval in feet: DNA)</b>													
09/17/04	329.51	6.80	0.00	322.71	-1.53	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.8	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 1994 Through September 2004**  
**76 Station 6419**

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)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>MW-1</b>		<b>(Screen Interval in feet: 4.0-19.0)</b>												
03/14/94	330.45	7.27	0.00	323.18	--	1800	--	17	ND	ND	ND	--	--	
08/25/94	330.45	8.57	0.00	321.88	-1.30	9200	--	48	ND	540	ND	--	--	
09/30/94	330.45	8.78	0.00	321.67	-0.21	--	--	--	--	--	--	--	--	
10/20/94	330.45	8.98	0.00	321.47	-0.20	--	--	--	--	--	--	--	--	
11/18/94	330.45	7.69	0.00	322.76	1.29	5100	--	33	ND	560	38	--	--	
12/20/94	330.45	7.58	0.00	322.87	0.11	--	--	--	--	--	--	--	--	
01/17/95	330.45	6.03	0.00	324.42	1.55	--	--	--	--	--	--	--	--	
02/15/95	330.45	6.29	0.00	324.16	-0.26	3300	--	13	ND	180	5.2	--	--	
03/13/95	330.45	5.64	0.00	324.81	0.65	--	--	--	--	--	--	--	--	
04/06/95	330.45	5.62	0.00	324.83	0.02	--	--	--	--	--	--	--	--	
05/17/95	330.45	6.26	0.00	324.19	-0.64	130	--	0.75	ND	1.5	ND	--	--	
06/15/95	330.45	6.75	0.00	323.70	-0.49	--	--	--	--	--	--	--	--	
08/25/95	330.45	7.91	0.00	322.54	-1.16	490	--	9.1	ND	21	2	--	--	
11/28/95	330.45	9.03	0.00	321.42	-1.12	1400	--	18	3	98	3.6	--	--	
02/26/96	330.45	5.77	0.00	324.68	3.26	560	--	9.3	ND	22	ND	1300	--	
08/23/96	330.45	7.78	0.00	322.67	-2.01	ND	--	ND	ND	ND	ND	640	--	
02/17/97	330.23	5.73	0.00	324.50	1.83	120	--	1	0.95	ND	ND	280	--	
08/18/97	330.23	7.38	0.00	322.85	-1.65	ND	--	ND	ND	ND	ND	100	--	
02/02/98	330.23	5.10	0.00	325.13	2.28	ND	--	130	ND	ND	ND	32000	--	
08/24/98	330.23	6.73	0.00	323.50	-1.63	ND	--	ND	ND	ND	ND	26000	24000	
02/10/99	330.23	5.46	0.00	324.77	1.27	ND	--	ND	ND	ND	ND	84000	100000	
04/12/99	330.23	6.38	0.00	323.85	-0.92	ND	--	ND	ND	ND	ND	140000	120000	
05/21/99	330.21	5.95	0.00	324.26	0.41	--	--	--	--	--	--	--	--	
08/02/99	330.21	6.75	0.00	323.46	-0.80	ND	--	ND	ND	ND	ND	91000	140000	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 1994 Through September 2004**  
**76 Station 6419**

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-1 continued</b>														
02/11/00	330.21	6.44	0.00	323.77	0.31	ND	--	ND	ND	ND	ND	38000	39000	
07/26/00	330.18	7.08	0.00	323.10	-0.67	146	--	ND	ND	ND	ND	30900	42800	
02/02/01	330.18	6.99	0.00	323.19	0.09	ND	--	ND	ND	ND	ND	5380	6430	
05/16/01	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/24/01	330.18	7.72	0.00	322.46	--	ND<50	--	8.3	ND<0.50	ND<0.50	ND<0.50	10000	6600	
10/11/01	330.17	7.72	0.00	322.45	-0.01	--	--	--	--	--	--	--	--	
02/06/02	330.17	6.43	0.00	323.74	1.29	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	450	420	
07/30/02	330.17	7.45	0.00	322.72	-1.02	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	2400	
02/17/03	330.17	6.18	0.00	323.99	1.27	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	600	
08/18/03	330.17	6.25	0.00	323.92	-0.07	--	3900	ND<20	ND<20	ND<20	ND<40	--	2700	
02/24/04	330.17	5.59	0.00	324.58	0.66	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1400	
09/17/04	330.17	7.08	0.00	323.09	-1.49	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	14	
<b>MW-2 (Screen Interval in feet: 4.0-20.0)</b>														
03/14/94	330.40	7.23	0.00	323.17	--	ND	--	ND	2.8	1.1	8	--	--	
08/25/94	330.40	8.41	0.00	321.99	-1.18	ND	--	ND	ND	ND	ND	--	--	
09/30/94	330.40	8.73	0.00	321.67	-0.32	--	--	--	--	--	--	--	--	
10/20/94	330.40	8.92	0.00	321.48	-0.19	--	--	--	--	--	--	--	--	
11/18/94	330.40	7.67	0.00	322.73	1.25	ND	--	ND	ND	ND	ND	--	--	
12/20/94	330.40	7.48	0.00	322.92	0.19	--	--	--	--	--	--	--	--	
01/17/95	330.40	6.00	0.00	324.40	1.48	--	--	--	--	--	--	--	--	
02/15/95	330.40	6.16	0.00	324.24	-0.16	ND	--	ND	ND	ND	ND	--	--	
03/13/95	330.40	5.59	0.00	324.81	0.57	--	--	--	--	--	--	--	--	
04/06/95	330.40	5.51	0.00	324.89	0.08	--	--	--	--	--	--	--	--	
05/17/95	330.40	6.15	0.00	324.25	-0.64	ND	--	ND	ND	ND	ND	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 1994 Through September 2004**  
**76 Station 6419**

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
MW-2 continued														
06/15/95	330.40	6.61	0.00	323.79	-0.46	--	--	--	--	--	--	--	--	
08/25/95	330.40	7.45	0.00	322.95	-0.84	ND	--	ND	ND	ND	ND	--	--	
11/28/95	330.40	8.85	0.00	321.55	-1.40	ND	--	ND	ND	ND	ND	--	--	
02/26/96	330.40	5.49	0.00	324.91	3.36	ND	--	ND	ND	ND	ND	--	--	
08/23/96	330.40	7.44	0.00	322.96	-1.95	--	--	--	--	--	--	--	--	SAMPLED ANNUALLY
02/17/97	330.27	5.64	0.00	324.63	1.67	ND	--	ND	ND	ND	ND	ND	--	
08/18/97	330.27	7.40	0.00	322.87	-1.76	--	--	--	--	--	--	--	--	
02/02/98	330.27	5.09	0.00	325.18	2.31	ND	--	ND	ND	ND	ND	62	--	
08/24/98	330.27	6.70	0.00	323.57	-1.61	--	--	--	--	--	--	--	--	
02/10/99	330.27	5.56	0.00	324.71	1.14	ND	--	ND	ND	ND	ND	130	--	
05/21/99	330.30	5.98	0.00	324.32	--	--	--	--	--	--	--	--	--	
08/02/99	330.30	6.72	0.00	323.58	-0.74	ND	--	ND	ND	ND	ND	120	--	
02/11/00	330.30	6.43	0.00	323.87	0.29	ND	--	ND	ND	ND	ND	39	--	
07/26/00	330.24	7.03	0.00	323.21	-0.66	ND	--	ND	ND	ND	ND	89.9	--	
02/02/01	330.24	6.81	0.00	323.43	0.22	ND	--	ND	ND	ND	ND	20.1	--	
05/16/01	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/24/01	330.24	7.57	0.00	322.67	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	36	--	
10/11/01	330.24	7.62	0.00	322.62	-0.05	--	--	--	--	--	--	--	--	
02/06/02	330.24	6.40	0.00	323.84	1.22	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	23	21	
07/30/02	330.24	7.12	0.00	323.12	-0.72	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11	
02/17/03	330.24	6.17	0.00	324.07	0.95	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25	
08/18/03	330.24	6.36	0.00	323.88	-0.19	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
02/24/04	330.24	5.87	0.00	324.37	0.49	--	ND<100	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	100	
09/17/04	330.24	7.22	0.00	323.02	-1.35	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	70	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 1994 Through September 2004**  
**76 Station 6419**

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-3 (Screen Interval in feet: 4.0-20.0)</b>														
03/14/94	331.11	7.93	0.00	323.18	--	150	--	ND	ND	ND	ND	--	--	
08/25/94	331.11	9.20	0.00	321.91	-1.27	130	--	ND	ND	ND	ND	--	--	
09/30/94	331.11	9.43	0.00	321.68	-0.23	--	--	--	--	--	--	--	--	
10/20/94	331.11	9.64	0.00	321.47	-0.21	--	--	--	--	--	--	--	--	
11/18/94	331.11	8.39	0.00	322.72	1.25	130	--	ND	ND	ND	ND	--	--	
12/20/94	331.11	8.20	0.00	322.91	0.19	--	--	--	--	--	--	--	--	
01/17/95	331.11	6.72	0.00	324.39	1.48	--	--	--	--	--	--	--	--	
02/15/95	331.11	6.93	0.00	324.18	-0.21	130	--	ND	ND	ND	ND	--	--	
03/13/95	331.11	6.30	0.00	324.81	0.63	--	--	--	--	--	--	--	--	
04/06/95	331.11	8.20	0.00	322.91	-1.90	--	--	--	--	--	--	--	--	
05/17/95	331.11	6.88	0.00	324.23	1.32	99	--	ND	ND	ND	ND	--	--	
06/15/95	331.11	7.35	0.00	323.76	-0.47	--	--	--	--	--	--	--	--	
08/25/95	331.11	8.20	0.00	322.91	-0.85	ND	--	ND	ND	ND	ND	--	--	
11/28/95	331.11	9.52	0.00	321.59	-1.32	ND	--	ND	ND	ND	ND	--	--	
02/26/96	331.11	6.25	0.00	324.86	3.27	ND	--	ND	ND	ND	ND	--	--	
08/23/96	331.11	7.98	0.00	323.13	-1.73	--	--	--	--	--	--	--	--	SAMPLED ANNUALLY
02/17/97	330.68	6.07	0.00	324.61	1.48	ND	--	ND	ND	ND	ND	68	--	
08/18/97	330.68	7.82	0.00	322.86	-1.75	--	--	--	--	--	--	--	--	
02/02/98	330.68	5.50	0.00	325.18	2.32	ND	--	ND	ND	ND	ND	100	--	
08/24/98	330.68	7.12	0.00	323.56	-1.62	--	--	--	--	--	--	--	--	
02/10/99	330.68	5.80	0.00	324.88	1.32	ND	--	ND	ND	ND	ND	92	--	
05/21/99	330.49	6.16	0.00	324.33	--	--	--	--	--	--	--	--	--	
08/02/99	330.49	6.95	0.00	323.54	-0.79	ND	--	ND	ND	ND	ND	140	--	
02/11/00	330.49	6.71	0.00	323.78	0.24	ND	--	ND	ND	ND	ND	46	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 1994 Through September 2004**  
**76 Station 6419**

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-3 continued</b>														
07/26/00	330.60	7.35	0.00	323.25	-0.53	ND	--	ND	ND	ND	ND	927	--	
02/02/01	330.60	7.17	0.00	323.43	0.18	ND	--	ND	ND	ND	ND	2240	--	
05/16/01	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/24/01	330.60	7.88	0.00	322.72	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2500	--	
10/11/01	330.59	7.83	0.00	322.76	0.04	--	--	--	--	--	--	--	--	
02/06/02	330.59	6.73	0.00	323.86	1.10	ND<1000	--	ND<10	ND<10	ND<10	ND<10	4300	3300	
07/30/02	330.59	7.38	0.00	323.21	-0.65	--	ND<2500	ND<25	ND<25	ND<25	ND<50	--	4900	
02/17/03	330.59	6.49	0.00	324.10	0.89	--	ND<2500	ND<25	ND<25	ND<25	ND<50	--	4400	
08/18/03	330.59	6.70	0.00	323.89	-0.21	--	4400	ND<20	ND<20	ND<20	ND<40	--	3300	
02/24/04	330.59	6.11	0.00	324.48	0.59	--	ND<2500	ND<25	ND<25	ND<25	ND<50	--	3000	
09/17/04	330.59	7.61	0.00	322.98	-1.50	--	ND<1300	ND<13	ND<13	ND<13	ND<25	--	2300	
<b>MW-4 (Screen Interval in feet: 4.0-19.0)</b>														
05/21/99	330.36	6.43	0.00	323.93	--	ND	--	ND	ND	ND	ND	960	910	
08/02/99	330.36	7.34	0.00	323.02	-0.91	ND	--	10	ND	13	11	ND	--	
02/11/00	330.36	6.92	0.00	323.44	0.42	ND	--	ND	ND	ND	ND	2700	--	
07/26/00	330.35	7.68	0.00	322.67	-0.77	ND	--	ND	ND	ND	ND	3710	--	
02/02/01	330.35	7.40	0.00	322.95	0.28	ND	--	ND	ND	ND	ND	5340	--	
08/24/01	330.35	8.14	0.00	322.21	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7800	--	
10/11/01	330.35	8.29	0.00	322.06	-0.15	--	--	--	--	--	--	--	--	
02/06/02	330.35	7.28	0.00	323.07	1.01	ND<100	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	2300	3100	
07/30/02	330.35	7.76	0.00	322.59	-0.48	--	ND<500	ND<5.0	ND<5.0	5.8	ND<10	--	1600	
02/17/03	330.35	6.85	0.00	323.50	0.91	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	2200	
08/18/03	330.35	7.30	0.00	323.05	-0.45	--	2000	ND<10	ND<10	ND<10	ND<20	--	1400	
02/24/04	330.35	6.55	0.00	323.80	0.75	--	ND<2000	ND<20	ND<20	ND<20	ND<40	--	2000	

**Table 2**  
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**March 1994 Through September 2004**  
**76 Station 6419**

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-4 continued</b>														
09/17/04	330.35	8.00	0.00	322.35	-1.45	--	340	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	610	
<b>MW-5 (Screen Interval in feet: 4.0-19.0)</b>														
05/21/99	330.20	5.99	0.00	324.21	--	ND	--	ND	ND	ND	ND	32	33	
08/02/99	330.20	6.83	0.00	323.37	-0.84	ND	--	ND	ND	ND	ND	230	--	
02/11/00	330.20	6.34	0.00	323.86	0.49	ND	--	ND	ND	ND	ND	98	--	
07/26/00	330.20	7.06	0.00	323.14	-0.72	ND	--	ND	ND	ND	ND	25.9	--	
02/02/01	330.20	6.81	0.00	323.39	0.25	ND	--	ND	ND	ND	ND	18	--	
08/24/01	330.20	7.60	0.00	322.60	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	18	--	
10/11/01	330.18	7.34	0.00	322.84	0.24	--	--	--	--	--	--	--	--	
02/06/02	330.18	6.55	0.00	323.63	0.79	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.7	7.9	
07/30/02	330.18	7.15	0.00	323.03	-0.60	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.6	
02/17/03	330.18	6.27	0.00	323.91	0.88	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.8	
08/18/03	330.18	6.57	0.00	323.61	-0.30	--	75	ND<0.50	ND<0.50	ND<0.50	ND<1	--	3.8	
02/24/04	330.18	5.88	0.00	324.30	0.69	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.3	
09/17/04	330.18	7.41	0.00	322.77	-1.53	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.4	--	6.0	
<b>MW-6 (Screen Interval in feet: 4.0-19.0)</b>														
05/21/99	330.49	6.24	0.00	324.25	--	ND	--	ND	ND	ND	ND	200	2300	
08/02/99	330.49	7.10	0.00	323.39	-0.86	ND	--	ND	ND	ND	ND	ND	--	
02/11/00	330.49	6.60	0.00	323.89	0.50	ND	--	ND	ND	ND	ND	2500	--	
07/26/00	330.49	7.31	0.00	323.18	-0.71	ND	--	ND	ND	ND	ND	4280	--	
02/02/01	330.49	7.02	0.00	323.47	0.29	ND	--	ND	ND	ND	ND	1990	--	
08/24/01	330.49	7.84	0.00	322.65	--	ND<200	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	1100	--	
10/11/01	330.47	8.03	0.00	322.44	-0.21	--	--	--	--	--	--	--	--	
02/06/02	330.47	6.78	0.00	323.69	1.25	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	610	680	

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**March 1994 Through September 2004**  
**76 Station 6419**

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)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>MW-6 continued</b>														
07/30/02	330.47	7.40	0.00	323.07	-0.62	--	180	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	160	
02/17/03	330.47	6.49	0.00	323.98	0.91	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	400	
08/18/03	330.47	6.81	0.00	323.66	-0.32	--	320	ND<1	ND<1	ND<1	ND<2	--	280	
02/24/04	330.47	6.11	0.00	324.36	0.70	--	130	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	200	
09/17/04	330.47	7.64	0.00	322.83	-1.53	--	110	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	200	
<b>MW-7 (Screen Interval in feet: 4.0-19.0)</b>														
05/21/99	330.43	6.13	0.00	324.30	--	ND	--	ND	ND	ND	ND	22	22	
08/02/99	330.43	6.92	0.00	323.51	-0.79	ND	--	ND	ND	ND	ND	31	--	
02/11/00	330.43	6.50	0.00	323.93	0.42	ND	--	ND	ND	ND	ND	20	--	
07/26/00	330.43	7.18	0.00	323.25	-0.68	ND	--	ND	ND	ND	ND	17.9	--	
02/02/01	330.43	6.95	0.00	323.48	0.23	ND	--	ND	ND	ND	ND	ND	--	
08/24/01	330.43	7.72	0.00	322.71	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.4	--	
10/11/01	330.41	7.87	0.00	322.54	-0.17	--	--	--	--	--	--	--	--	
02/06/02	330.41	6.62	0.00	323.79	1.25	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.9	3.2	
07/30/02	330.41	--	0.00	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.3	
02/17/03	330.41	--	0.00	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.7	
08/18/03	330.41	6.64	0.00	323.77	--	--	76	ND<0.50	ND<0.50	ND<0.50	ND<1	--	63	
02/24/04	330.41	6.01	0.00	324.40	0.63	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.2	
09/17/04	330.41	7.45	0.00	322.96	-1.44	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	8.7	
<b>MW-8 (Screen Interval in feet: DNA)</b>														
10/11/01	329.97	7.57	0.00	322.40	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND<2.0	
02/06/02	329.97	6.35	0.00	323.62	1.22	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND<1.0	
07/30/02	329.97	6.95	0.00	323.02	-0.60	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
02/17/03	329.97	6.11	0.00	323.86	0.84	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 1994 Through September 2004**  
**76 Station 6419**

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-8 continued</b>														
08/18/03	329.97	6.33	0.00	323.64	-0.22	--	53	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
02/24/04	329.97	13.37	0.00	316.60	-7.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
09/17/04	329.97	7.23	0.00	322.74	6.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.0	
<b>MW-9 (Screen Interval in feet: DNA)</b>														
10/11/01	329.51	7.12	0.00	322.39	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	22	15	
02/06/02	329.51	5.94	0.00	323.57	1.18	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	19	14	
07/30/02	329.51	6.53	0.00	322.98	-0.59	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9	
02/17/03	329.51	5.63	0.00	323.88	0.90	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9	
08/18/03	329.51	5.99	0.00	323.52	-0.36	--	57	ND<0.50	ND<0.50	ND<0.50	ND<1	--	6.2	
02/24/04	329.51	5.27	0.00	324.24	0.72	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.6	
09/17/04	329.51	6.80	0.00	322.71	-1.53	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.8	

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 6419**

Date Sampled	TPH-D (µg/l)	EDC (µg/l)	EDB (µg/l)	Total Lead (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	Nickel (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	1,2 DCE (µg/l)
<b>MW-1</b>															
03/14/94	810	--	--	ND	--	--	--	--	--	--	--	0.030	ND	0.012	--
08/25/94	910	--	--	0.024	--	--	--	--	--	--	--	--	--	--	--
11/18/94	910	--	--	ND	--	--	--	--	--	--	--	--	--	--	--
02/15/95	660	--	--	ND	--	4.3	--	--	--	--	--	--	--	--	--
05/17/95	200	--	--	ND	--	1.2	--	--	--	--	--	--	--	--	--
08/25/95	--	--	--	--	--	2.71	--	--	--	--	--	--	--	--	--
11/28/95	--	--	--	--	--	3.25	--	--	--	--	--	--	--	--	--
02/26/96	--	--	--	--	5.23	1.41	--	--	--	--	--	--	--	--	--
08/23/96	--	--	--	--	3.83	--	--	--	--	--	--	--	--	--	--
02/17/97	--	--	--	--	0.82	0.78	--	--	--	--	--	--	--	--	--
08/18/97	--	--	--	--	1.28	2.35	--	--	--	--	--	--	--	--	--
07/26/00	--	--	ND	--	--	--	ND	ND	ND	ND	--	--	--	--	ND
05/16/01	--	--	--	--	1.54	--	--	--	--	--	--	--	--	--	--
08/24/01	--	--	ND<100	--	--	3.1	ND<100	ND<1000	ND<100	ND<100	ND<25000	--	--	--	ND<100
02/06/02	--	--	ND<5.0	--	--	--	ND<5.0	ND<100	ND<5.0	ND<5.0	ND<2500	--	--	--	ND<5.0
07/30/02	--	--	ND<40	--	--	--	ND<40	ND<2000	ND<40	ND<40	ND<10000	--	--	--	ND<40
02/17/03	--	--	ND<10	--	--	--	ND<10	ND<500	ND<10	ND<10	ND<2500	--	--	--	ND<10
08/18/03	--	--	ND<80	--	--	--	ND<80	ND<4000	ND<80	ND<80	ND<20000	--	--	--	ND<80
02/24/04	--	ND<40	ND<40	--	--	--	ND<40	ND<2000	ND<40	ND<40	ND<10000	--	--	--	--
09/17/04	--	ND<0.5	ND<0.5	--	--	--	ND<0.5	470	ND<1.0	ND<0.5	ND<50	--	--	--	--
<b>MW-2</b>															
02/15/95	--	--	--	--	--	1.9	--	--	--	--	--	--	--	--	--
02/26/96	--	--	--	--	0.62	0.43	--	--	--	--	--	--	--	--	--
08/23/96	--	--	--	--	2.04	--	--	--	--	--	--	--	--	--	--
02/17/97	--	--	--	--	0.9	0.82	--	--	--	--	--	--	--	--	--
08/18/97	--	--	--	--	1.16	--	--	--	--	--	--	--	--	--	--



**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 6419**

Date Sampled	TPH-D (µg/l)	EDC (µg/l)	EDB (µg/l)	Total Lead (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	Nickel (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	1,2 DCE (µg/l)
<b>MW-2 continued</b>															
05/16/01	--	--	--	--	1.47	--	--	--	--	--	--	--	--	--	--
08/24/01	--	--	--	--	--	2.6	--	--	--	--	--	--	--	--	--
02/06/02	--	--	ND<1.0	--	--	--	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500	--	--	--	ND<1.0
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<1000	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<50	--	--	--	--
<b>MW-3</b>															
02/15/95	--	--	--	--	--	2.6	--	--	--	--	--	--	--	--	--
03/13/95	--	--	--	--	--	1.13	--	--	--	--	--	--	--	--	--
08/25/95	--	--	--	--	--	1.86	--	--	--	--	--	--	--	--	--
11/28/95	--	--	--	--	--	6.81	--	--	--	--	--	--	--	--	--
02/26/96	--	--	--	--	16.83	1.11	--	--	--	--	--	--	--	--	--
08/23/96	--	--	--	--	3.29	--	--	--	--	--	--	--	--	--	--
02/17/97	--	--	--	--	0.8	0.8	--	--	--	--	--	--	--	--	--
08/18/97	--	--	--	--	1.43	--	--	--	--	--	--	--	--	--	--
05/16/01	--	--	--	--	1.65	2.6	--	--	--	--	--	--	--	--	--
02/06/02	--	--	ND<33	--	--	--	ND<33	ND<670	ND<33	ND<33	ND<17000	--	--	--	ND<33
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<20000	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<25000	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<1300	--	--	--	--
<b>MW-4</b>															
02/06/02	--	--	ND<25	--	--	--	ND<25	ND<500	ND<25	ND<25	ND<12000	--	--	--	ND<25
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<10000	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<20000	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<250	--	--	--	--
<b>MW-5</b>															

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 6419**

Date Sampled	TPH-D	EDC	EDB	Total Lead	Pre-Purge DO	Post Purge DO	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	Nickel	Cadmium	Chromium	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-5 continued</b>															
08/24/01	--	--	--	--	--	2.3	--	--	--	--	--	--	--	--	--
02/06/02	--	--	ND<25	--	--	--	ND<25	ND<500	ND<25	ND<25	ND<12000	--	--	--	ND<25
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<50	--	--	--	--
<b>MW-6</b>															
05/21/99	--	--	--	--	--	--	ND<8.3	ND<170	ND<8.3	ND<8.3	--	--	--	--	--
08/24/01	--	--	--	--	--	2.7	--	--	--	--	--	--	--	--	--
02/06/02	--	--	ND<8.3	--	--	--	--	--	--	--	ND<4200	--	--	--	ND<8.3
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<1000	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<1000	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<100	--	--	--	--
<b>MW-7</b>															
08/24/01	--	--	--	--	--	2.7	--	--	--	--	--	--	--	--	--
02/06/02	--	--	ND<1.0	--	--	--	ND<1.0	ND<20	1.4	ND<1.0	ND<500	--	--	--	ND<1.0
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<50	--	--	--	--
<b>MW-8</b>															
10/11/01	--	--	ND<2.0	--	--	--	ND<2.0	ND<20	ND<2.0	ND<2.0	ND<500	--	--	--	ND<2.0
02/06/02	--	--	ND<1.0	--	--	--	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500	--	--	--	ND<1.0
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<50	--	--	--	--
<b>MW-9</b>															

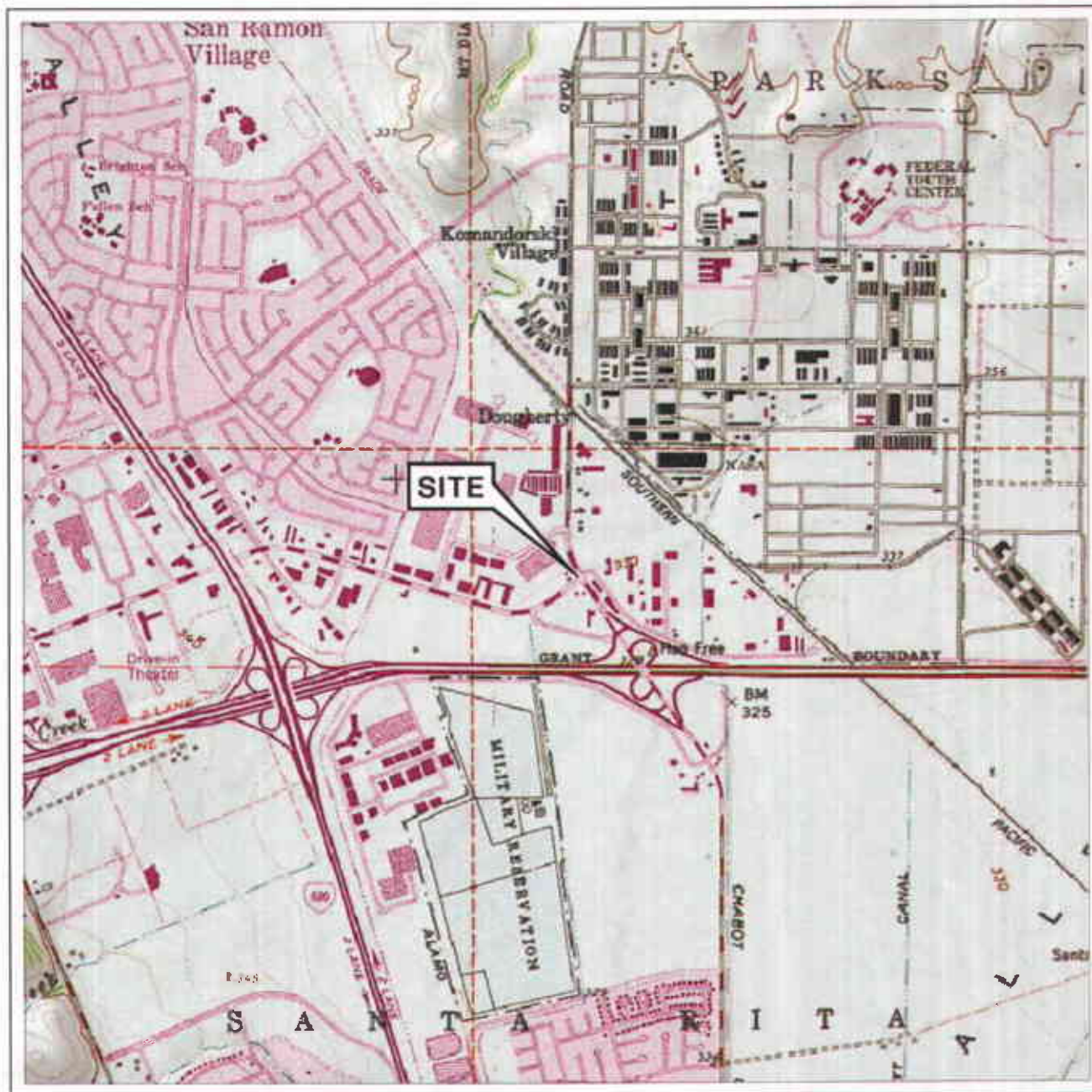
**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 6419**

Date Sampled	TPH-D (µg/l)	EDC (µg/l)	EDB (µg/l)	Total Lead (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	Nickel (µg/l)	Cadmium (µg/l)	Chromium (µg/l)	1,2 DCE (µg/l)
MW-9 continued															
10/11/01	--	--	ND<2.0	--	--	--	ND<2.0	ND<20	ND<2.0	ND<2.0	ND<500	--	--	--	ND<2.0
02/06/02	--	--	ND<1.0	--	--	--	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500	--	--	--	ND<1.0
08/18/03	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
02/24/04	--	--	--	--	--	--	--	--	--	--	ND<500	--	--	--	--
09/17/04	--	--	--	--	--	--	--	--	--	--	ND<50	--	--	--	--

**Table 3b**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 6419**

Date Sampled	T-Zinc  ( $\mu\text{g/l}$ )
MW-1 03/14/94	0.039

# FIGURES



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



SCALE 1:24,000



SOURCE:

United States Geological Survey  
7.5 Minute Topographic Map:  
Dublin Quadrangle

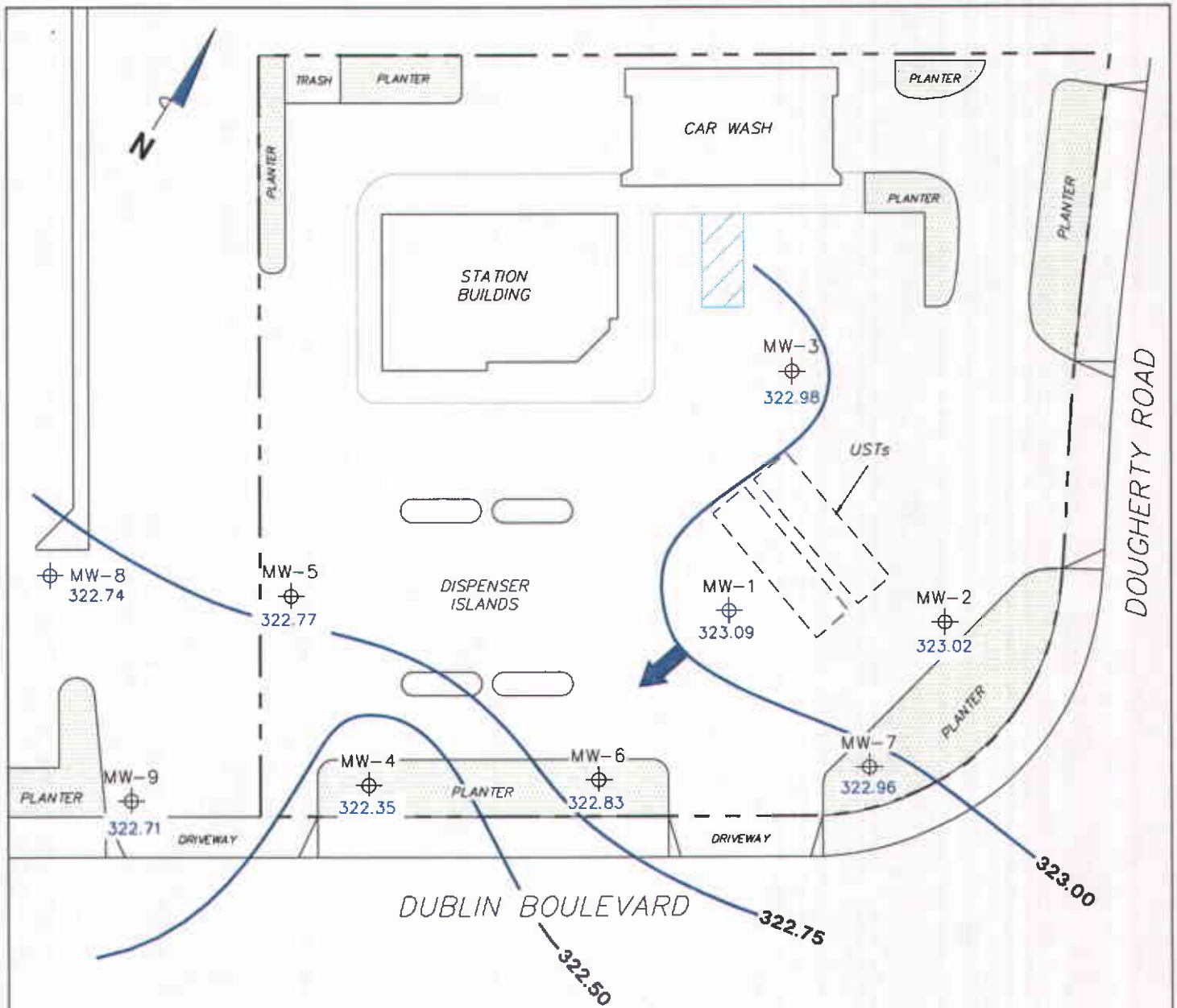


VICINITY MAP

76 Station 6419  
6401 Dublin Boulevard  
Dublin, California

FIGURE 1

**TRC**



**NOTES:**

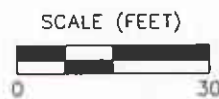
Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. UST = underground storage tank.

LEGEND	
MW-9	Monitoring Well with Groundwater Elevation (feet)
323.00	Groundwater Elevation Contour
	General Direction of Groundwater Flow

**GROUNDWATER ELEVATION  
CONTOUR MAP  
September 17, 2004**

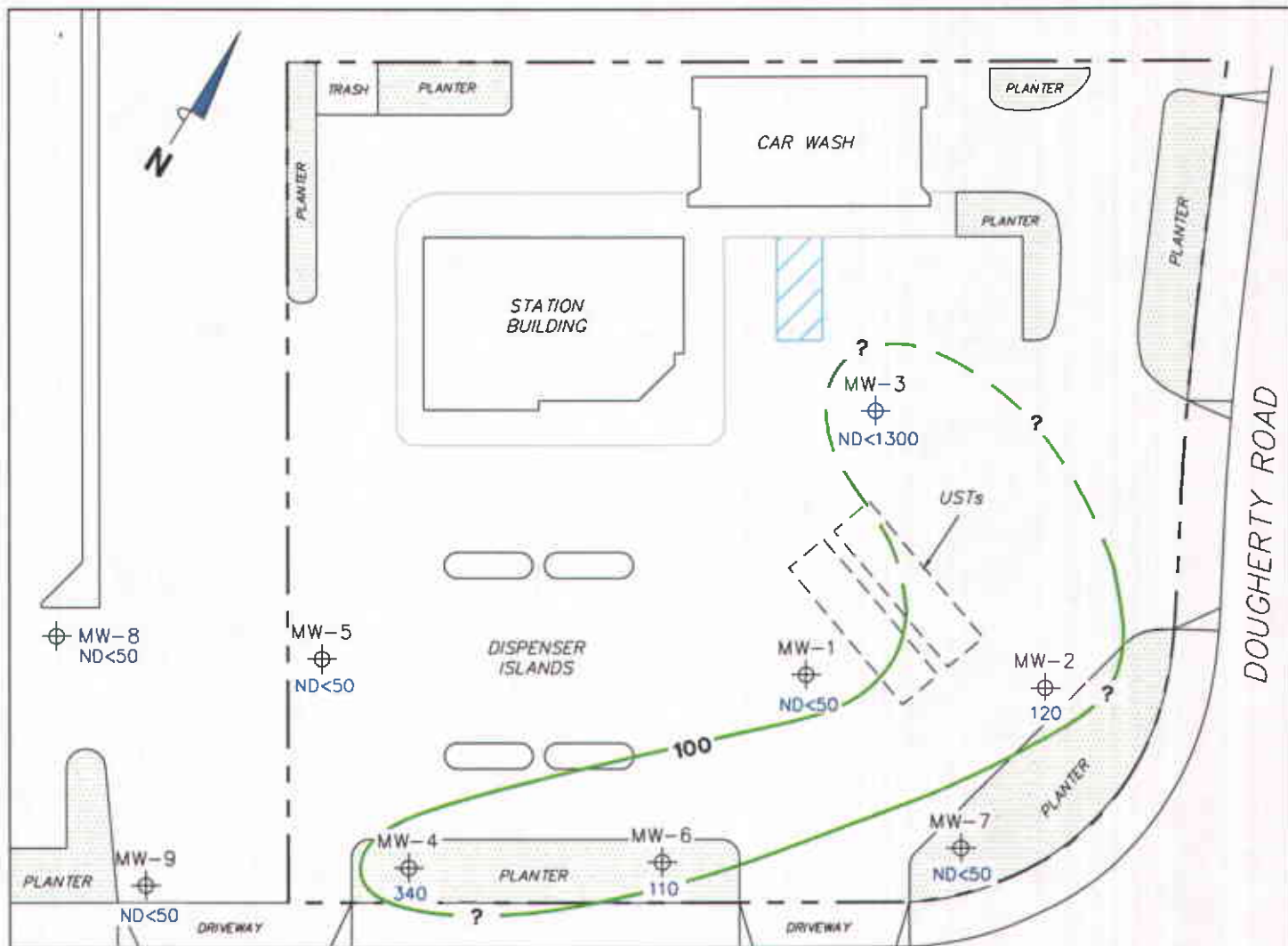
76 Station 6419  
6401 Dublin Boulevard  
Dublin, California

**TRC**



**FIGURE 2**

PS-1:1





DUBLIN BOULEVARD

**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 TPPH = total purgeable petroleum hydrocarbons.  
 µg/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-9  Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)

 Dissolved-Phase TPPH Contour (µg/l)

**DISSOLVED-PHASE TPPH CONCENTRATION MAP**  
**September 17, 2004**

76 Station 6419  
 6401 Dublin Boulevard  
 Dublin, California



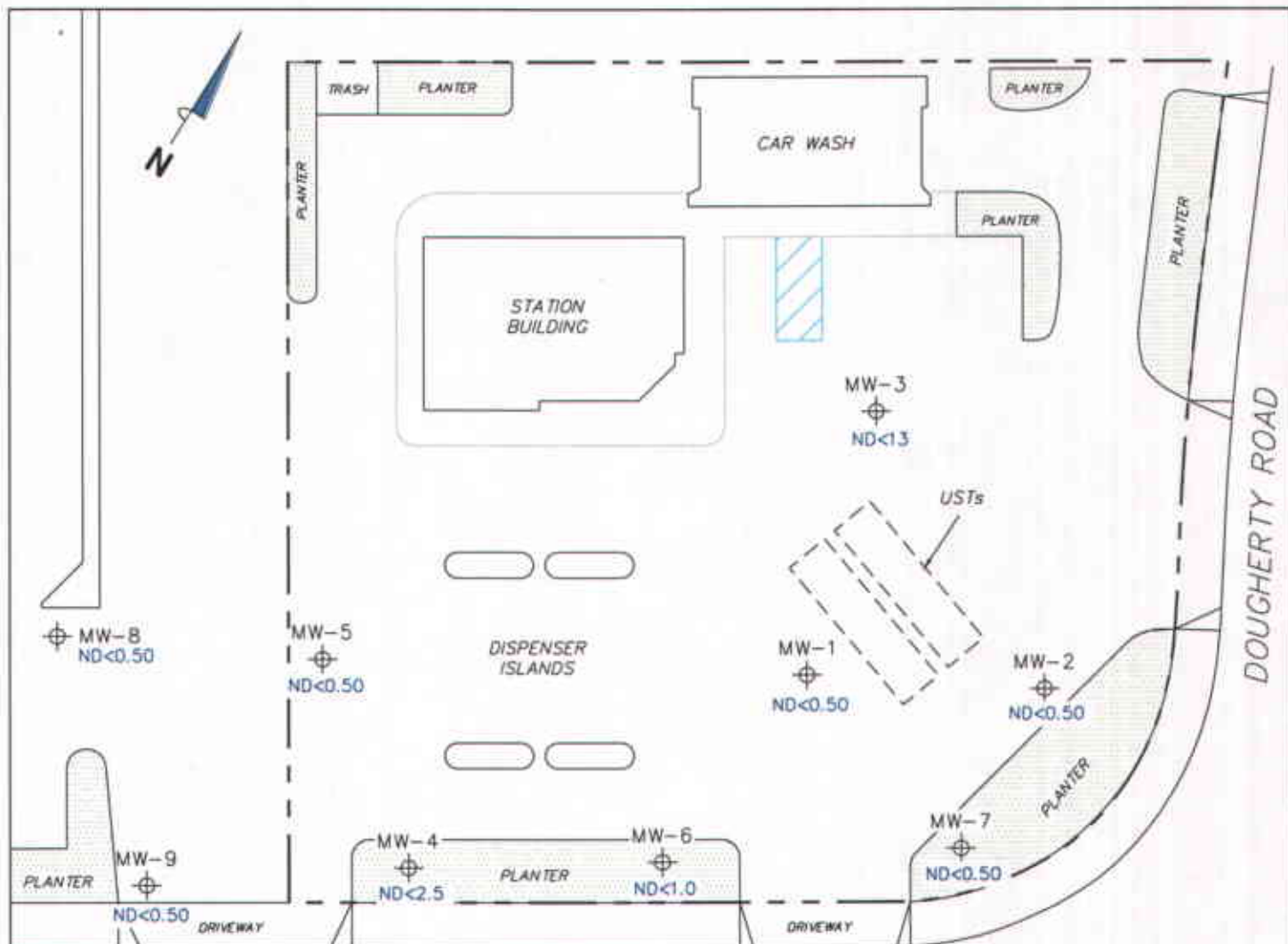
SCALE (FEET)



**FIGURE 3**

PS=1:1






DUBLIN BOULEVARD

DOUGHERTY ROAD

**NOTES:**

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank.

**LEGEND**

MW-9  Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

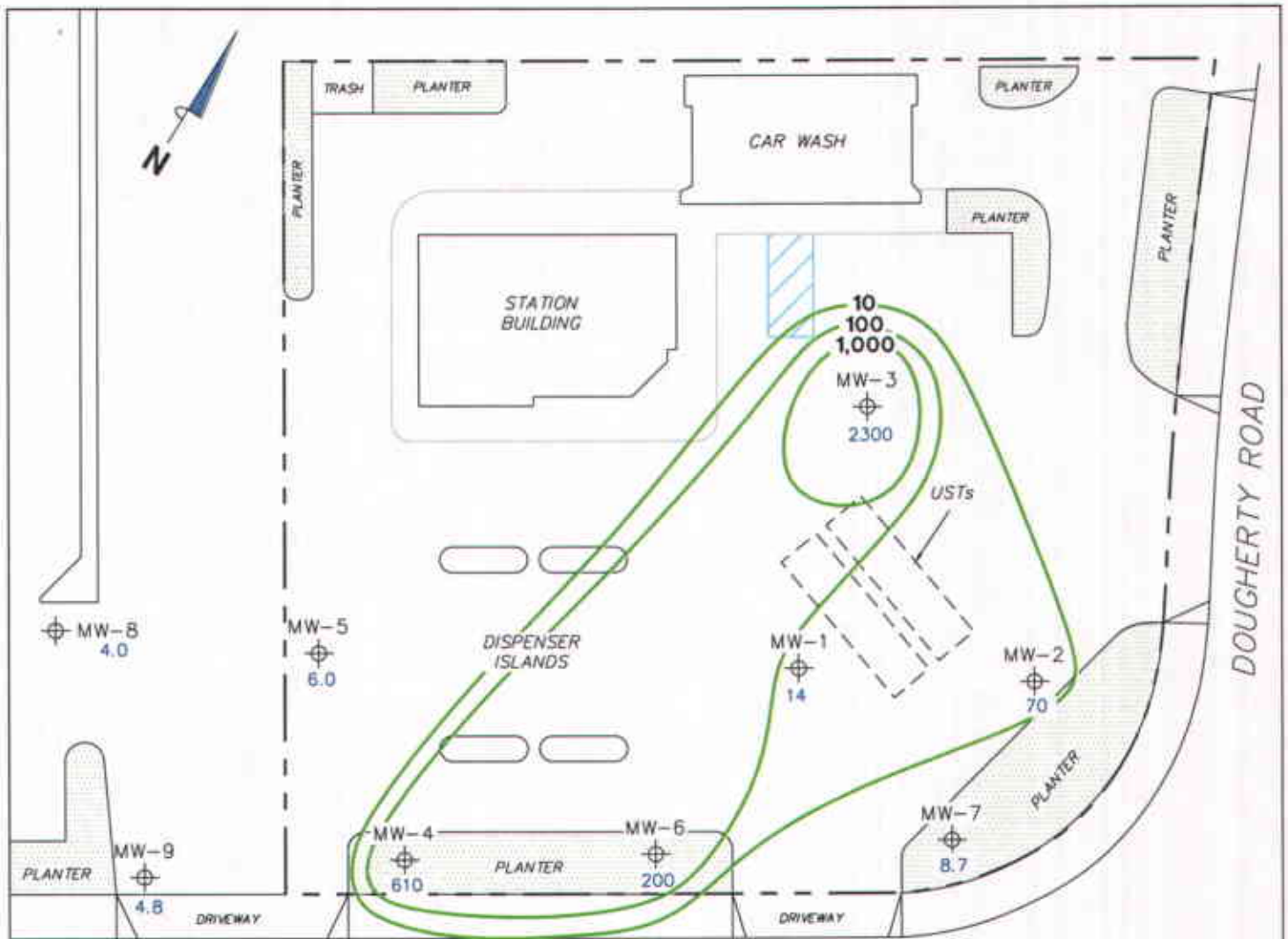
**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**  
September 17, 2004

76 Station 6419  
6401 Dublin Boulevard  
Dublin, California



**FIGURE 4**

PS=1:1



DUBLIN BOULEVARD

**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. µg/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-9 Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

1,000 Dissolved-Phase MTBE Contour (µg/l)

**DISSOLVED-PHASE MTBE CONCENTRATION MAP**  
September 17, 2004

76 Station 6419  
6401 Dublin Boulevard  
Dublin, California

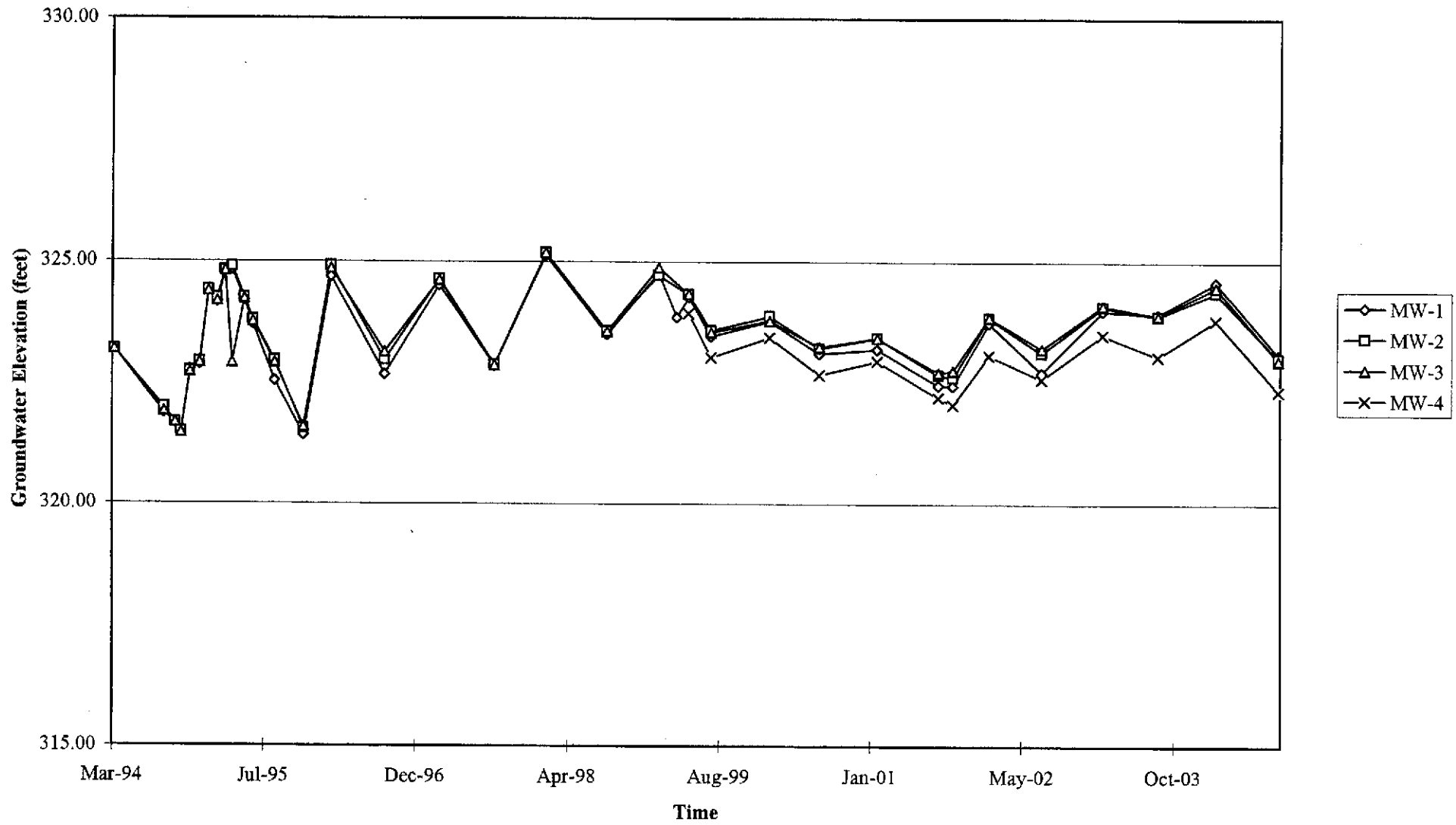


**FIGURE 5**

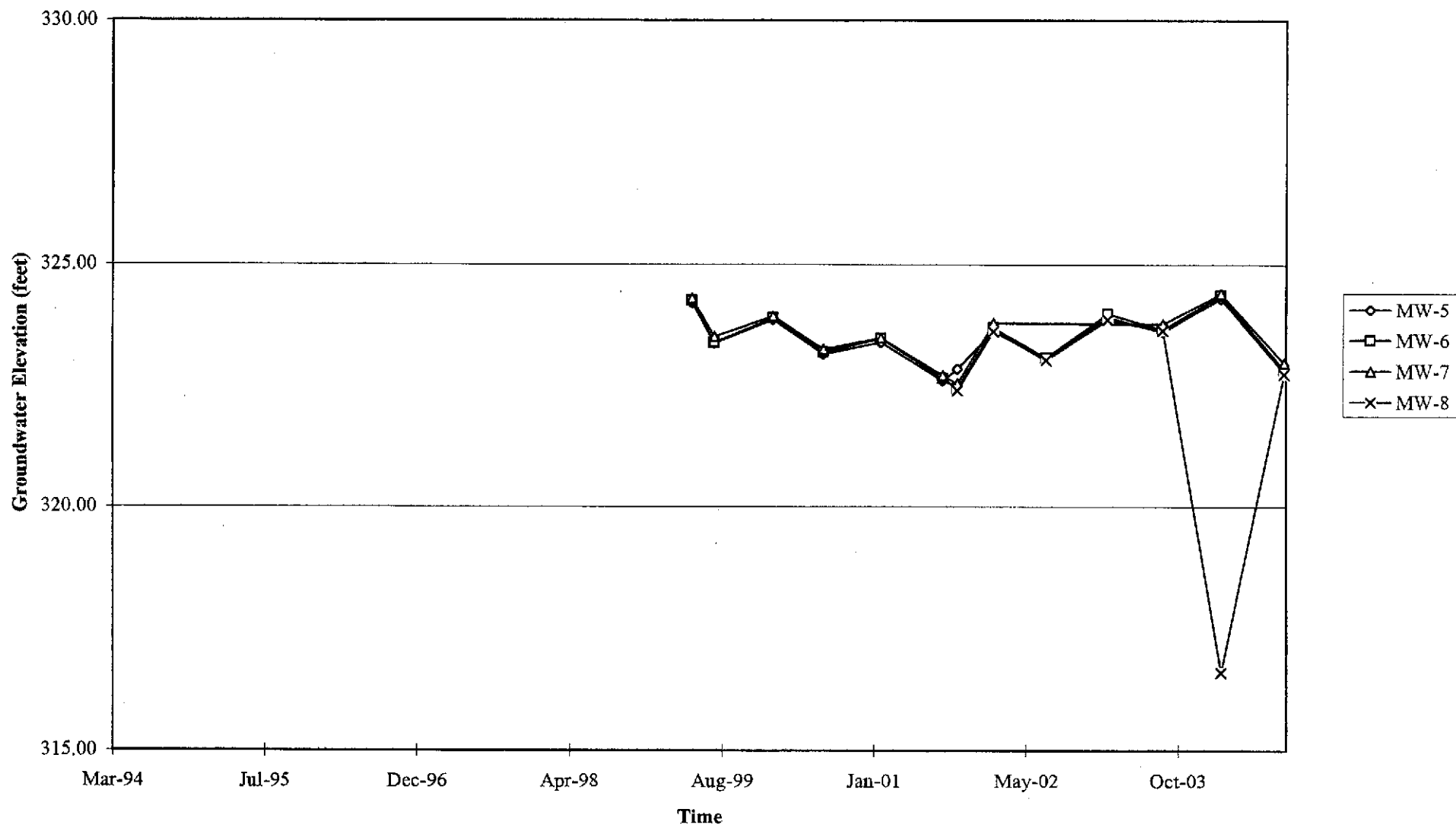
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# GRAPHS

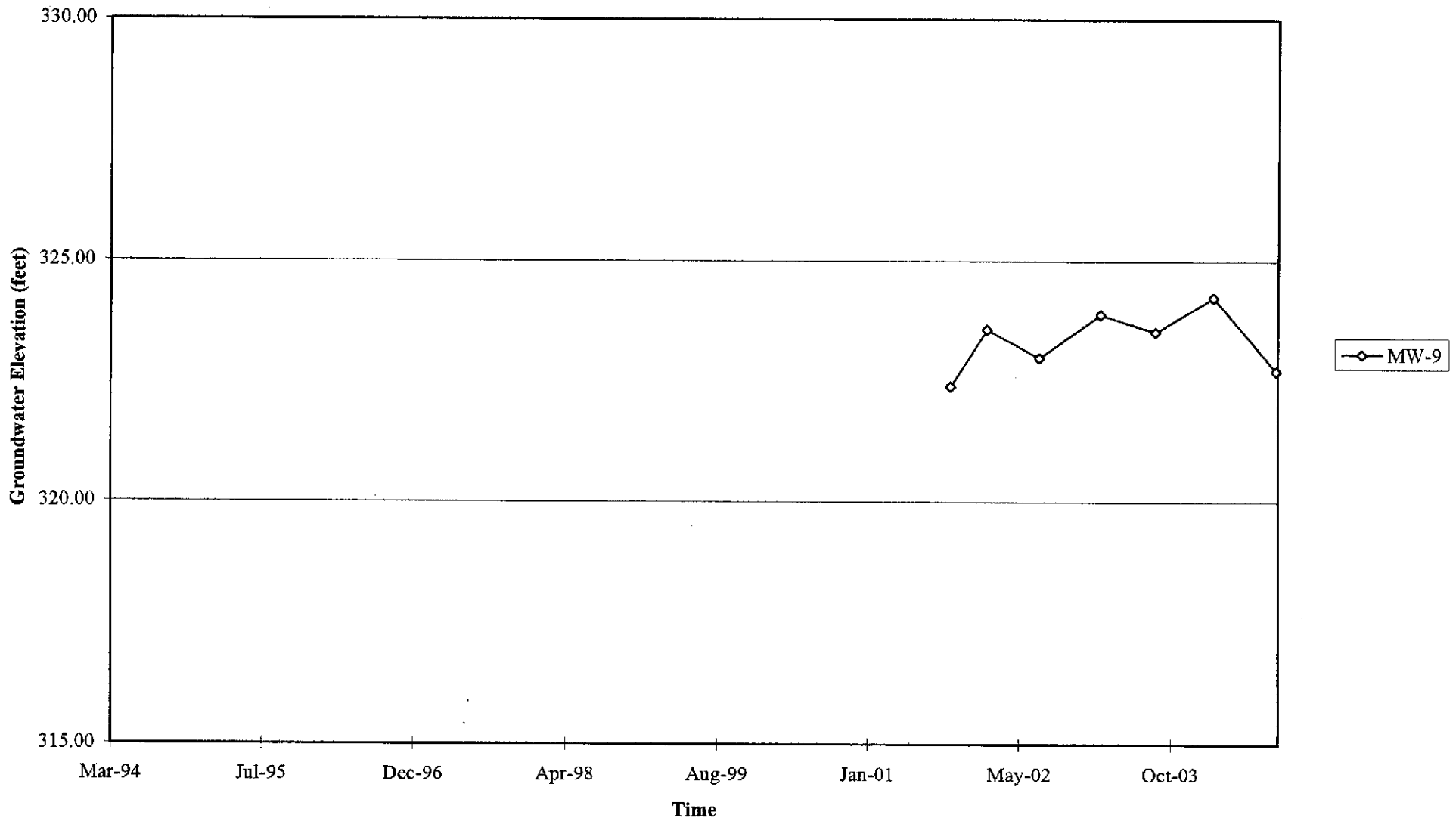
Groundwater Elevations vs. Time  
76 Station 6419



Groundwater Elevations vs. Time  
76 Station 6419

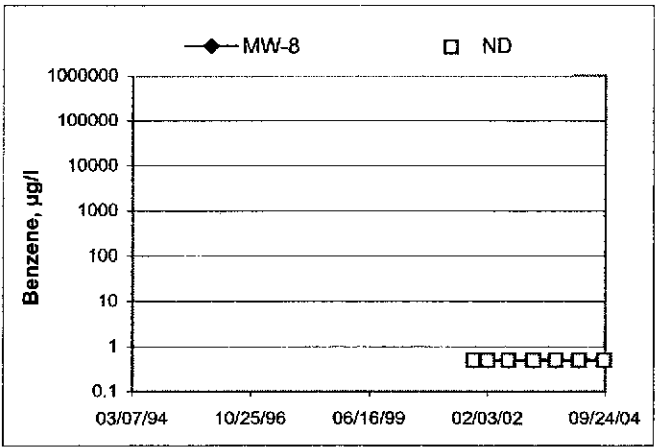
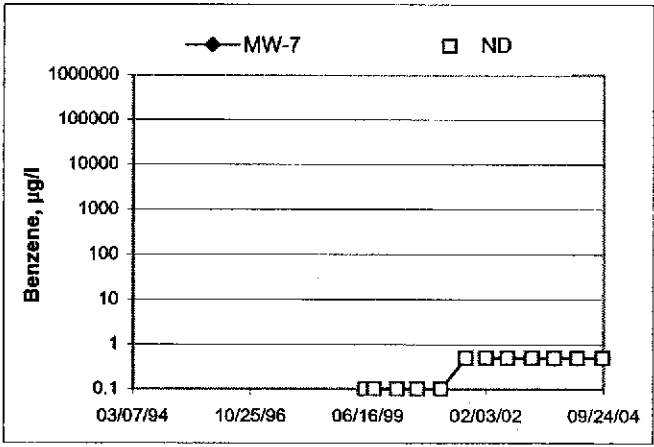
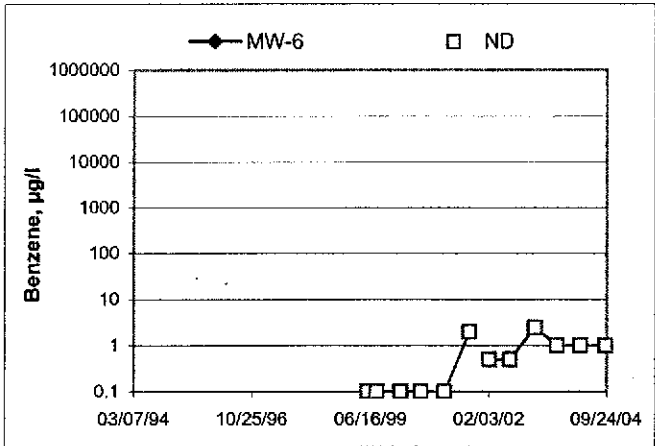
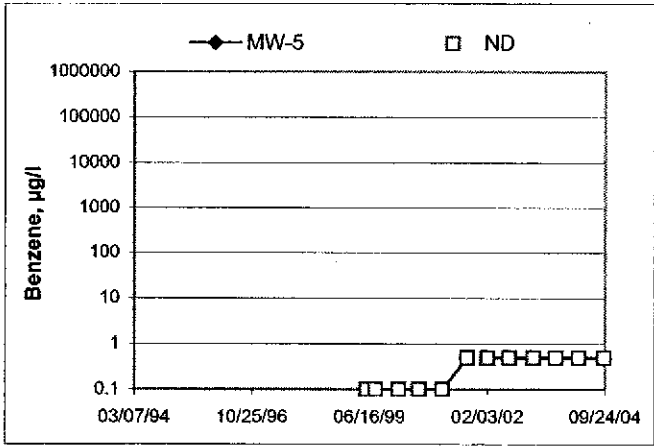
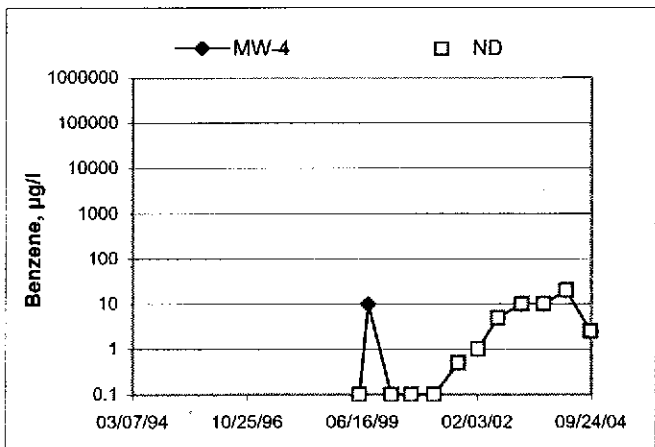
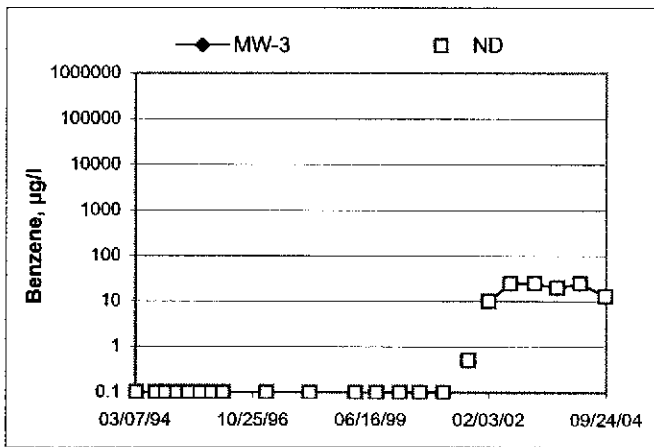
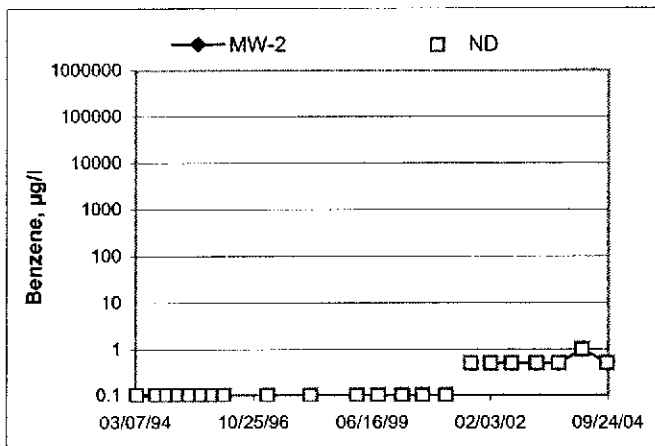
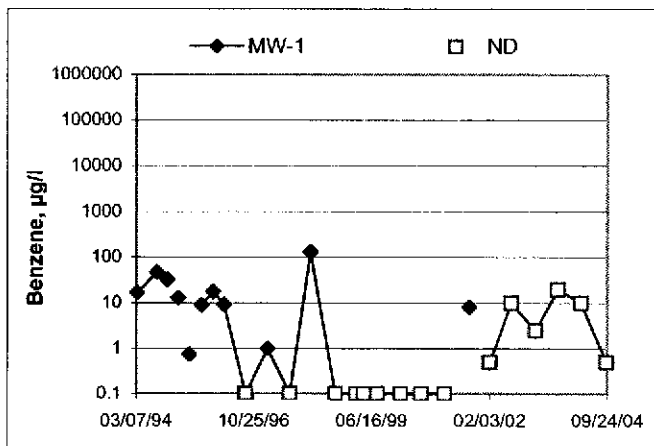


Groundwater Elevations vs. Time  
76 Station 6419

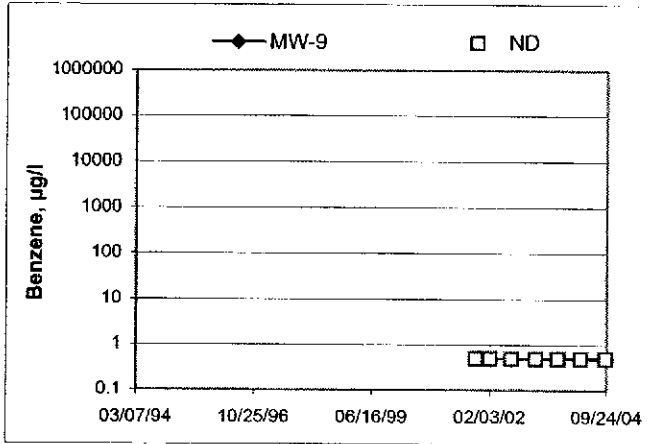


Benzene Concentrations vs Time

76 Station 6419



**Benzene Concentrations vs Time**  
76 Station 6419





## 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: Michael Kubzoff Job #/Task #: 41050001 / FA20

Date: 09-17-04

Site # 6419 Project Manager Adrienne Collins

Page 1 of 1

Well #	TOC	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-8	X	1115	2007	723	0	0	1527	2"
MW-9	X	1119	2002	680	0	0	1533	2"
MW-5	X	1123	1932	741	0	0	1524	2"
MW-4	X	1134	1905	800	0	0	1510	2"
MW-3	X	1150	1845	761	0	0	1457	2"
MW-2	X	1157	1761	722	0	0	1430	2"
MW-1	X	1200	929	708	0	0	1449	2"
MW-7	X	1143	1938	745	0	0	1445	2"
MW-6	X	1139	1928	764	0	0	1504	2"

<del>FIELD DATA COMPLETE</del>	<del>QA/QC</del>	<del>COC</del>	<del>WELL BOX CONDITION SHEETS</del>
WTT CERTIFICATE	MANIFEST	DRUM INVENTORY	TRAFFIC CONTROL



## GROUNDWATER SAMPLING FIELD NOTES

Technician: Mike Kubick  
 Site: 6419 Project No.: 41050001 Date: 09-17-09

Well No.: mw-1 Purge Method: Dis  
 Depth to Water (feet): 708 Depth to Product (feet): 8  
 Total Depth (feet): 929 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 2.21 Casing Diameter (Inches): 2  
 80% Recharge Depth (feet): 7.52 1 Well Volume (gallons): 0.50

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F. C)	pH	Turbidity	D.O
1239			0.50	1193	26.7	8.26		
			1	1190	25.9	8.37		
	1243		1.50	1295	25.5	8.38		
Static at Time Sampled			Total Gallons Purged		Time Sampled			
7:17			~ 2.1		1449			
Comments:								

Well No.: mw-7 Purge Method: Dis  
 Depth to Water (feet): 745 Depth to Product (feet): 8  
 Total Depth (feet): 1038 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 11.93 Casing Diameter (Inches): 2  
 80% Recharge Depth (feet): 9.84 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F. C)	pH	Turbidity	D.O
1229			2	1244	20.7	7.62		
			4	1235	20.8	7.54		
	1234		6	1244	20.9	7.55		
Static at Time Sampled			Total Gallons Purged		Time Sampled			
7:48			6		1445			
Comments:								

## GROUNDWATER SAMPLING FIELD NOTES

Technician: Mike Kubacki  
 Site: 6419 Project No.: 41050001 Date: 09-17-04

Well No.: mw-3 Purge Method: Di  
 Depth to Water (feet): 761 Depth to Product (feet): 0  
 Total Depth (feet): 1845 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 10.84 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 9.78 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C.)	pH	Turbidity	D.O.
1251			2	1230	25.1	8.38		
			4	1238	24.7	8.50		
	1257		6	1240	24.4	8.46		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
767		1			14.57			
Comments:								

Well No.: mw-2 Purge Method: Di  
 Depth to Water (feet): 722 Depth to Product (feet): 0  
 Total Depth (feet): 1761 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 10.39 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 9.30 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C.)	pH	Turbidity	D.O.
1215			2	1657	25.5	8.14		
			4	1644	23.9	8.19		
	1223		6	1630	22.5	7.91		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
7.23		6			1430			
Comments:								

## GROUNDWATER SAMPLING FIELD NOTES

Technician: M. W. Kobzoff

Site: 6414

Project No.: 4105001

Date: 09-17-07

Well No.: MW-8  
 Depth to Water (feet): 723  
 Total Depth (feet): 2007  
 Water Column (feet): 12.84  
 80% Recharge Depth (feet): 9.60

Purge Method: Din  
 Depth to Product (feet): 6  
 LPH & Water Recovered (gallons): 6  
 Casing Diameter (Inches): 2"  
 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C.)	pH	Turbidity	D.O.
1322			2	1406	24.1	7.17		
			4	1442	23.9	7.26		
	1326		6	1405	22.9	7.35		
Static at Time Sampled			Total Gallons Purged			Time Sampled		
7.27			6			1527		
Comments:								

Well No.: MW-9  
 Depth to Water (feet): 680  
 Total Depth (feet): 2002  
 Water Column (feet): 13.22  
 80% Recharge Depth (feet): 9.44

Purge Method: Din  
 Depth to Product (feet): 6  
 LPH & Water Recovered (gallons): 6  
 Casing Diameter (Inches): 2"  
 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C.)	pH	Turbidity	D.O.
1342			2	1029	23.3	7.21		
			4	1042	24.0	7.29		
	1347		6	1106	23.9	7.17		
Static at Time Sampled			Total Gallons Purged			Time Sampled		
6.82			6			1533		
Comments:								

## GROUNDWATER SAMPLING FIELD NOTES

Technician: Mimi Kubacki  
 Site: 6419 Project No.: 4105000 Date: 09-17-09

Well No.: MW-5 Purge Method: Di  
 Depth to Water (feet): 741 Depth to Product (feet): 6  
 Total Depth (feet): 1932 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 11.91 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 9.79 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C.)	pH	Turbidity	D.O.
1333			2	1227	22.8	7.41		
			4	1176	22.6	7.47		
	1336		6	1163	22.5	7.49		
Static at Time Sampled			Total Gallons Purged			Time Sampled		
7.45			6			1524		
Comments:								

Well No.: MW-4 Purge Method: Di  
 Depth to Water (feet): 800 Depth to Product (feet): 6  
 Total Depth (feet): 1905 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 11.05 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 10.21 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C.)	pH	Turbidity	D.O.
1313			2	1252	21.4	7.39		
			4	1242	20.7	7.61		
	1317		6	1239	21.4	7.70		
Static at Time Sampled			Total Gallons Purged			Time Sampled		
802			6			1510		
Comments:								

## GROUNDWATER SAMPLING FIELD NOTES

Technician: Mik Kozell  
 Site: 641A Project No.: 41050001 Date: 09-17-07  
 Well No.: MW-6 Purge Method: Di  
 Depth to Water (feet): 764 Depth to Product (feet): 6  
 Total Depth (feet): 1928 LPH & Water Recovered (gallons): 6  
 Water Column (feet): 1164 Casing Diameter (Inches): 2"  
 80% Recharge Depth (feet): 9.97 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
1303			2	1466	22.4	8.10		
			4	1461	21.9	8.21		
	1308		6	1408	21.9	8.17		
Static at Time Sampled		Total Gallons Purged				Time Sampled		
7.66		6				1504		
Comments: _____								

Well No.: \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ LPH & Water Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
Static at Time Sampled		Total Gallons Purged				Time Sampled		
Comments: _____								



TRC Alton Geoscience- Irvine

October 04, 2004

21 Technology Drive  
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20

Project: Conoco Phillips #6419

Site: 6401 Dublin Blvd.

Attached is our report for your samples received on 09/20/2004 16:30  
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  
11/04/2004 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](mailto:dsharma@stl-inc.com)

Sincerely,



Dimple Sharma  
Project Manager

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-8	09/17/2004 15:27	Water	1
MW-9	09/17/2004 15:33	Water	2
MW-5	09/17/2004 15:24	Water	3
MW-4	09/17/2004 15:10	Water	4
MW-3	09/17/2004 14:57	Water	5
MW-2	09/17/2004 14:30	Water	6
MW-1	09/17/2004 14:49	Water	7
MW-7	09/17/2004 14:45	Water	8
MW-6	09/17/2004 15:04	Water	9

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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s): 5030B      Test(s): 8260FAB  
 Sample ID: MW-8      Lab ID: 2004-09-0604 - 1  
 Sampled: 09/17/2004 15:27      Extracted: 9/30/2004 22:16  
 Matrix: Water      QC Batch#: 2004/09/30-2A.64  
 Analysis Flag: ,gx ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	09/30/2004 22:16	
Benzene	ND	0.50	ug/L	1.00	09/30/2004 22:16	
Toluene	ND	0.50	ug/L	1.00	09/30/2004 22:16	
Ethylbenzene	ND	0.50	ug/L	1.00	09/30/2004 22:16	
Total xylenes	ND	1.0	ug/L	1.00	09/30/2004 22:16	
Methyl tert-butyl ether (MTBE)	4.0	0.50	ug/L	1.00	09/30/2004 22:16	
Ethanol	ND	50	ug/L	1.00	09/30/2004 22:16	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	113.5	72-128	%	1.00	09/30/2004 22:16	
Toluene-d8	107.0	80-113	%	1.00	09/30/2004 22:16	

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

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Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
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Project: 41050001FA20  
Conoco Phillips #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s): 5030B Test(s): 8260FAB  
Sample ID: MW-9 Lab ID: 2004-09-0604 - 2  
Sampled: 09/17/2004 15:33 Extracted: 9/30/2004 22:39  
Matrix: Water QC Batch#: 2004/09/30-2A.64  
Analysis Flag: ,gx ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	09/30/2004 22:39	
Benzene	ND	0.50	ug/L	1.00	09/30/2004 22:39	
Toluene	ND	0.50	ug/L	1.00	09/30/2004 22:39	
Ethylbenzene	ND	0.50	ug/L	1.00	09/30/2004 22:39	
Total xylenes	ND	1.0	ug/L	1.00	09/30/2004 22:39	
Methyl tert-butyl ether (MTBE)	4.8	0.50	ug/L	1.00	09/30/2004 22:39	
Ethanol	ND	50	ug/L	1.00	09/30/2004 22:39	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	113.7	72-128	%	1.00	09/30/2004 22:39	
Toluene-d8	106.3	80-113	%	1.00	09/30/2004 22:39	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s): 5030B Test(s): 8260FAB  
Sample ID: MW-5 Lab ID: 2004-09-0604 - 3  
Sampled: 09/17/2004 15:24 Extracted: 9/30/2004 23:01  
Matrix: Water QC Batch#: 2004/09/30-2A.64  
Analysis Flag: ,gx ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	09/30/2004 23:01	
Benzene	ND	0.50	ug/L	1.00	09/30/2004 23:01	
Toluene	ND	0.50	ug/L	1.00	09/30/2004 23:01	
Ethylbenzene	ND	0.50	ug/L	1.00	09/30/2004 23:01	
Total xylenes	1.4	1.0	ug/L	1.00	09/30/2004 23:01	
Methyl tert-butyl ether (MTBE)	6.0	0.50	ug/L	1.00	09/30/2004 23:01	
Ethanol	ND	50	ug/L	1.00	09/30/2004 23:01	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	114.8	72-128	%	1.00	09/30/2004 23:01	
Toluene-d8	105.8	80-113	%	1.00	09/30/2004 23:01	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	<b>MW-4</b>	Lab ID:	2004-09-0604 - 4
Sampled:	09/17/2004 15:10	Extracted:	10/1/2004 12:44
Matrix:	Water	QC Batch#:	2004/10/01-1C.64
Analysis Flag: o ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	340	250	ug/L	5.00	10/01/2004 12:44	dp
Benzene	ND	2.5	ug/L	5.00	10/01/2004 12:44	
Toluene	ND	2.5	ug/L	5.00	10/01/2004 12:44	
Ethylbenzene	ND	2.5	ug/L	5.00	10/01/2004 12:44	
Total xylenes	ND	5.0	ug/L	5.00	10/01/2004 12:44	
Methyl tert-butyl ether (MTBE)	610	2.5	ug/L	5.00	10/01/2004 12:44	
Ethanol	ND	250	ug/L	5.00	10/01/2004 12:44	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	105.9	72-128	%	5.00	10/01/2004 12:44	
Toluene-d8	103.4	80-113	%	5.00	10/01/2004 12:44	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	MW-3	Lab ID:	2004-09-0604 - 5
Sampled:	09/17/2004 14:57	Extracted:	10/1/2004 13:07
Matrix:	Water	QC Batch#:	2004/10/01-1C.64

Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1300	ug/L	25.00	10/01/2004 13:07	
Benzene	ND	13	ug/L	25.00	10/01/2004 13:07	
Toluene	ND	13	ug/L	25.00	10/01/2004 13:07	
Ethylbenzene	ND	13	ug/L	25.00	10/01/2004 13:07	
Total xylenes	ND	25	ug/L	25.00	10/01/2004 13:07	
Methyl tert-butyl ether (MTBE)	2300	13	ug/L	25.00	10/01/2004 13:07	
Ethanol	ND	1300	ug/L	25.00	10/01/2004 13:07	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	98.5	72-128	%	25.00	10/01/2004 13:07	
Toluene-d8	99.4	80-113	%	25.00	10/01/2004 13:07	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s): 5030B	Test(s): 8260FAB
Sample ID: MW-2	Lab ID: 2004-09-0604 - 6
Sampled: 09/17/2004 14:30	Extracted: 10/1/2004 13:29
Matrix: Water	QC Batch#: 2004/10/01-1C.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	120	50	ug/L	1.00	10/01/2004 13:29	dp
Benzene	ND	0.50	ug/L	1.00	10/01/2004 13:29	
Toluene	ND	0.50	ug/L	1.00	10/01/2004 13:29	
Ethylbenzene	ND	0.50	ug/L	1.00	10/01/2004 13:29	
Total xylenes	ND	1.0	ug/L	1.00	10/01/2004 13:29	
Methyl tert-butyl ether (MTBE)	70	0.50	ug/L	1.00	10/01/2004 13:29	
Ethanol	ND	50	ug/L	1.00	10/01/2004 13:29	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.0	72-128	%	1.00	10/01/2004 13:29	
Toluene-d8	99.3	80-113	%	1.00	10/01/2004 13:29	



**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s): 5030B	Test(s): 8260FAB
Sample ID: MW-1	Lab ID: 2004-09-0604 - 7
Sampled: 09/17/2004 14:49	Extracted: 10/1/2004 13:51
Matrix: Water	QC Batch#: 2004/10/01-1C.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	10/01/2004 13:51	
Benzene	ND	0.50	ug/L	1.00	10/01/2004 13:51	
Toluene	ND	0.50	ug/L	1.00	10/01/2004 13:51	
Ethylbenzene	ND	0.50	ug/L	1.00	10/01/2004 13:51	
Total xylenes	ND	1.0	ug/L	1.00	10/01/2004 13:51	
tert-Butyl alcohol (TBA)	470	5.0	ug/L	1.00	10/01/2004 13:51	
Methyl tert-butyl ether (MTBE)	14	0.50	ug/L	1.00	10/01/2004 13:51	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	1.00	10/01/2004 13:51	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	1.00	10/01/2004 13:51	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	1.00	10/01/2004 13:51	
1,2-DCA	ND	0.5	ug/L	1.00	10/01/2004 13:51	
EDB	ND	0.5	ug/L	1.00	10/01/2004 13:51	
Ethanol	ND	50	ug/L	1.00	10/01/2004 13:51	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	98.0	72-128	%	1.00	10/01/2004 13:51	
Toluene-d8	100.9	80-113	%	1.00	10/01/2004 13:51	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s): 5030B	Test(s): 8260FAB
Sample ID: MW-7	Lab ID: 2004-09-0604 - 8
Sampled: 09/17/2004 14:45	Extracted: 10/1/2004 00:53
Matrix: Water	QC Batch#: 2004/09/30-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	10/01/2004 00:53	
Benzene	ND	0.50	ug/L	1.00	10/01/2004 00:53	
Toluene	ND	0.50	ug/L	1.00	10/01/2004 00:53	
Ethylbenzene	ND	0.50	ug/L	1.00	10/01/2004 00:53	
Total xylenes	ND	1.0	ug/L	1.00	10/01/2004 00:53	
Methyl tert-butyl ether (MTBE)	8.7	0.50	ug/L	1.00	10/01/2004 00:53	
Ethanol	ND	50	ug/L	1.00	10/01/2004 00:53	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	112.1	72-128	%	1.00	10/01/2004 00:53	
Toluene-d8	105.7	80-113	%	1.00	10/01/2004 00:53	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	MW-6	Lab ID:	2004-09-0604 - 9
Sampled:	09/17/2004 15:04	Extracted:	10/1/2004 14:14
Matrix:	Water	QC Batch#:	2004/10/01-1C.64
Analysis Flag: o ( See Legend and Note Section )			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	110	100	ug/L	2.00	10/01/2004 14:14	dp
Benzene	ND	1.0	ug/L	2.00	10/01/2004 14:14	
Toluene	ND	1.0	ug/L	2.00	10/01/2004 14:14	
Ethylbenzene	ND	1.0	ug/L	2.00	10/01/2004 14:14	
Total xylenes	ND	2.0	ug/L	2.00	10/01/2004 14:14	
Methyl tert-butyl ether (MTBE)	200	1.0	ug/L	2.00	10/01/2004 14:14	
Ethanol	ND	100	ug/L	2.00	10/01/2004 14:14	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.5	72-128	%	2.00	10/01/2004 14:14	
Toluene-d8	97.2	80-113	%	2.00	10/01/2004 14:14	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stf-inc.com \* CA DHS ELAP# 2496

10/04/2004 16:04

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

Method Blank

Water

QC Batch # 2004/09/30-2A.64

MB: 2004/09/30-2A.64-050

Date Extracted: 09/30/2004 18:50

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	09/30/2004 18:50	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	09/30/2004 18:50	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/30/2004 18:50	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	09/30/2004 18:50	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	09/30/2004 18:50	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	09/30/2004 18:50	
1,2-DCA	ND	0.5	ug/L	09/30/2004 18:50	
EDB	ND	0.5	ug/L	09/30/2004 18:50	
Benzene	ND	0.5	ug/L	09/30/2004 18:50	
Toluene	ND	0.5	ug/L	09/30/2004 18:50	
Ethylbenzene	ND	0.5	ug/L	09/30/2004 18:50	
Total xylenes	ND	1.0	ug/L	09/30/2004 18:50	
Ethanol	ND	50	ug/L	09/30/2004 18:50	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	105.2	72-128	%	09/30/2004 18:50	
Toluene-d8	105.5	80-113	%	09/30/2004 18:50	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

**Batch QC Report**

Prep(s): 5030B  
Method Blank  
MB: 2004/10/01-1C.64-055

Water

Test(s): 8260FAB  
QC Batch # 2004/10/01-1C.64  
Date Extracted: 10/01/2004 07:37

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	10/01/2004 07:37	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	10/01/2004 07:37	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	10/01/2004 07:37	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	10/01/2004 07:37	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	10/01/2004 07:37	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	10/01/2004 07:37	
1,2-DCA	ND	0.5	ug/L	10/01/2004 07:37	
EDB	ND	0.5	ug/L	10/01/2004 07:37	
Benzene	ND	0.5	ug/L	10/01/2004 07:37	
Toluene	ND	0.5	ug/L	10/01/2004 07:37	
Ethylbenzene	ND	0.5	ug/L	10/01/2004 07:37	
Total xylenes	ND	1.0	ug/L	10/01/2004 07:37	
Ethanol	ND	50	ug/L	10/01/2004 07:37	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	103.8	72-128	%	10/01/2004 07:37	
Toluene-d8	107.4	80-113	%	10/01/2004 07:37	

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike

Water

QC Batch # 2004/09/30-2A.64

LCS 2004/09/30-2A.64-005

Extracted: 09/30/2004

Analyzed: 09/30/2004 18:05

LCSD 2004/09/30-2A.64-027

Extracted: 09/30/2004

Analyzed: 09/30/2004 18:27

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	26.5	27.0	25	106.0	108.0	1.9	65-165	20		
Benzene	23.2	23.4	25	92.8	93.6	0.9	69-129	20		
Toluene	26.9	28.1	25	107.6	112.4	4.4	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	522	506	500	104.4	101.2		72-128			
Toluene-d8	536	538	500	107.2	107.6		80-113			

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/10/01-1C.64**

LCS 2004/10/01-1C.64-052

Extracted: 10/01/2004

Analyzed: 10/01/2004 06:52

LCSD 2004/10/01-1C.64-015

Extracted: 10/01/2004

Analyzed: 10/01/2004 07:15

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	29.2	27.9	25	116.8	111.6	4.6	65-165	20		
Benzene	24.4	26.7	25	97.6	106.8	9.0	69-129	20		
Toluene	29.6	32.0	25	118.4	128.0	7.8	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	484	464	500	96.8	92.8		72-128			
Toluene-d8	524	548	500	104.8	109.6		80-113			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

10/04/2004 16:04

**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 #6419

Received: 09/20/2004 16:30

Site: 6401 Dublin Blvd.

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**Legend and Notes**

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**Sample Comment**

Lab ID: 2004-09-0604 -1

gx-Siloxane peaks were found in the sample, which are not believed to be gasoline related. If they were to be quantified, the concentration would be 220 ug/L

Lab ID: 2004-09-0604 -2

gx-Siloxane peaks were found in the sample, which are not believed to be gasoline related. If they were to be quantified, the concentration would be 280 ug/L

Lab ID: 2004-09-0604 -3

gx-Siloxane peaks were found in the sample, which are not believed to be gasoline related. If they were to be quantified, the concentration would be 82 ug/L

**Analysis Flag**

o

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

**Result Flag**

dp

Sample contains discrete peak in gasoline range.



STL San Francisco

### Sample Receipt Checklist

Submission #: 2004- 09 - 0604

Checklist completed by: (initials) JM Date: 9/21/04

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples Yes \_\_\_ No \_\_\_ Not 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 4 °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: MW 8 - has ~~PM~~ ⑤ air bubbles

### Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_/\_\_\_/04 Client contacted:  Yes  No

Summary of discussion: \_\_\_\_\_

Corrective Action (per PM/Client): \_\_\_\_\_

STL-San Francisco

2004-09-0604

ConocoPhillips Chain Of Custody Record

89007

1220 Quarry Lane  
Pleasanton, CA 94566

(925) 484-1919 (925) 484-1096 fax

ConocoPhillips Site Manager:

INVOICE REMITTANCE ADDRESS:

CONOCOPHILLIPS  
Attn: Dee Hutchinson  
3611 South Harbor, Suite 200  
Santa Ana, CA. 92704

ConocoPhillips Work Order Number

2527 TRLS00

ConocoPhillips Cost Object

DATE: 09-17-04

PAGE: 1 of 1

SAMPLING COMPANY: <b>TRC</b>		Valid Value ID:	CONOCOPHILLIPS SITE NUMBER <b>6419</b>		GLOBAL ID NO.: <b>T0600101443</b>	
ADDRESS: <b>21 Technology Drive, Irvine CA 92618</b>			SITE ADDRESS (Street and City): <b>6401 Dublin Blvd.</b>		CONOCOPHILLIPS SITE MANAGER: <b>Thomas H Kosel</b>	
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Anju Farfan</b>			EDF DELIVERABLE TO (RP or Designee): <b>Peter Thomson, TRC pthomson@trcsolutions.com</b>		PHONE NO.: <b>949-341-7408</b>	
TELEPHONE: <b>949-341-7440</b>	FAX: <b>949-753-0111</b>	E-MAIL: <b>afarfan@trcsolutions.com</b>			E-MAIL: <b>LAB USE ONLY</b>	
SAMPLER NAME(S) (Print): <b>Michael D Kubzoff</b>		CONSULTANT PROJECT NUMBER <b>41050001/FA20</b>		REQUESTED ANALYSES		

TURNAROUND TIME (CALENDAR DAYS):  
 14 DAYS  7 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED   
 Run 8 OXYS by 8260 on 8260 MTBE  
 hit for mw-1 only

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING		MATRIX	NO. OF CONT.	8015m - TPHd Extractable	8260B - TPHg/BTEX/MBE	8260B - TPHg / BTEX / 8 Oxygenates	8260B - TPHg / BTEX / 8 oxygenates + methanol (8015M)	8260B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M / 8021B - TPHg/BTEX/MBE	Lead <input type="checkbox"/> Total <input type="checkbox"/> STL.C <input type="checkbox"/> TCLP	TPPH 8260B	BTEX / MTBE 8260B	Ethanol 8260B	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes	TEMPERATURE ON RECEIPT C°
		DATE	TIME															
	MW-8	09-17-04	1527	Gw	3									X	X	X		4
	MW-9		1533															
	MW-5		1524															
	MW-4		1510															
	MW-3		1457															
	MW-2		1430															
	MW-1		1449															
	MW-7		1445															
	MW-6		1504															

Relinquished by: (Signature) <i>Michael D Kubzoff</i>	Received by: (Signature) <i>Dee Hutchinson</i>	Date: 09-17-04	Time: 1700
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: 09/20/04	Time: 1730
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>Jay B Bullock</i>	Date: 9-20-04	Time: 1630

## **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.