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10:37 am, Apr 30, 2009

Alameda County  
Environmental Health



76 Broadway  
Sacramento, California 95818

April 28, 2009

Barbara Jakub  
Alameda County Health Agency  
1131 Harbor Bay parkway, Suite250  
Alameda, California 94502-577

Re: **Semi Annual Status Report--First Quarter 2009**  
**76 Service Station # 3538 RO # 0251**  
**411 W. MacArthur Blvd.**  
**Oakland, CA**

Dear Ms. Jakub:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are 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 "Terry L. Grayson". The signature is written in a cursive style with a large, sweeping flourish at the end.

Terry L. Grayson  
Site Manager  
Risk Management & Remediation

April 27, 2009

Ms. Barbara Jakub  
Alameda County Health Care Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

**Re: Semi-Annual Status Report - First Quarter 2009**  
Delta Project No. C1Q3538604  
Alameda County LOP Case No. R0251

Dear Ms. Jakub,

On behalf of ConocoPhillips Company (ConocoPhillips), Delta Consultants (Delta) is submitting the subject report and forwarding a copy of TRC's *Semi-Annual Monitoring Report October 2008 through March 2009*, dated April 15, 2009 for the following location:



**Service Station**

**Location**

ConocoPhillips Site No. 3538

411 W. MacArthur Blvd.  
Oakland, California

Please contact the undersigned at (408) 826-1863 if you have any questions.

Sincerely,  
**Delta Consultants**

A handwritten signature in blue ink that reads "Nadine Periat".

Nadine Periat  
Staff Geologist



A handwritten signature in blue ink that reads "Lia Holden".

Lia Holden, PG #8584  
Geologist—Project Manager

Enclosure

cc: Mr. Terry Grayson – ConocoPhillips (electronic copy only)

Mr. Arthur Yu and Mr. Kevin Ma – Property Owners

## **SITE DESCRIPTION**

The subject site is a former Tosco (76) service station located on the southwest corner of Mac Arthur Boulevard and Webster Street in Oakland, California. The site is currently a used car sales lot and is entirely fenced. All petroleum storage and dispensing equipment were removed in September of 1998, during station demolition activities. Six groundwater-monitoring wells are present, four on-site wells and two off-site wells.

## **SITE BACKGROUND AND ACTIVITY**

July 1989 One 10,000-gallon and one 12,000-gallon gasoline underground storage tanks (USTs) were removed and replaced with two new 12,000-gallon USTs. One 550-gallon waste oil UST and the associated piping for all three tanks were also removed. No holes or cracks were observed in the gasoline USTs; however, holes were observed in the waste oil UST. Groundwater was encountered in the former UST pit at a depth of approximately 10.5 feet below ground surface (bgs), which prohibited the collection of soil samples below the former fuel USTs. Confirmation soil samples from the sidewalls contained moderate maximum concentrations of total petroleum hydrocarbons as gasoline (TPH-G), and low maximum concentrations of benzene. These sample areas were subsequently over-excavated. Soil samples from the base of the waste oil UST pit did not contain detections of TPH-G or benzene, toluene, ethylbenzene, and xylenes (BTEX compounds). (Kaprealian Engineering, INC., 1989)

September 1989 Kaprealian Engineering, INC. (KEI) installed four groundwater monitoring wells at the site to depths of approximately 30 feet bgs.

November 1992 Two additional groundwater monitoring wells were installed off-site to a depth of 30 feet bgs. (KEI, 1993)

September 1998 Two 12,000-gallon gasoline USTs and associated product piping and dispensers were removed from the site during station demolition activities. No holes or cracks were observed in the tanks. Confirmation soil samples contained low maximum concentrations of TPH-G and benzene. Methyl butyl ether (MTBE) was not detected.

October 2003 Site environmental consulting responsibilities were transferred to TRC.

March 2006 TRC conducted additional soil and groundwater assessment at the Site. The investigation involved the advancement of three onsite soil borings (SB-3, SB-4, and SB-5) and two offsite soil borings (SB-1 and SB-2) to sufficient depth to obtain representative groundwater samples (approximately 16 feet bgs).

October 2007 Site environmental consulting responsibilities were transferred to Delta.

## **SENSITIVE RECEPTORS**

A sensitive receptor survey has been conducted for the site. According to the California Department of Water Resources (DWR) records, no water supply wells have been located within 2,000 feet of the site. The nearest well identified was a private water well located approximately 2,500 feet east-southeast of the site.

## GROUNDWATER MONITORING AND SAMPLING

Currently, the two onsite monitoring wells MW-2 and MW-3 are monitored semi-annually during the first and third quarters and the remaining four wells are monitored annually during the third quarter. During the first quarter 2009, the groundwater flow direction beneath the site was reported south at a gradient of 0.01 feet per feet (ft/ft). This is consistent with the previous calculated gradient of 0.02 ft/ft south during the third quarter 2008 sampling event.

Dissolved groundwater concentrations are reported as follows.

**TPH-G:** Not reported above the laboratory reporting limit in MW-2 or MW-3 during the current quarter. In the third quarter 2008, TPH-G was detected at a concentration of 56 µg/l in on-site well MW-3. **TPH-G was not detected in well MW-3 during the first quarter 2008 event, and has not been detected in well MW-3, or any site area well, since first quarter 2007**

**Benzene:** Was detected in well MW-2 at a concentration of 3.5 µg/l. **Benzene was not reported above laboratory reporting limits in MW-3.**

**MTBE** MTBE was detected by EPA Method 8021B in well MW-3 at a concentration of 15 µg/l in the current quarter. Historically, MTBE has been detected fairly consistently in on-site wells MW-2 and MW-3. MTBE was detected in well MW-6 during the third quarter 2008, but has only been detected in MW-6 three times since 1996.

## REMEDIATION STATUS

October 1998 A total of 516.44 tons (approximately 380 cubic yards) of soil generated during station demolition was transported from the site to Forward Landfill in Manteca, California for disposal.

Active soil and groundwater remediation is not currently being conducted at the site.

## CONCLUSIONS AND RECOMMENDATIONS

Analyte concentrations in the Site's monitoring wells continue to decline. In Delta's Site Conceptual Model dated November 21, 2008, Delta proposed collecting a grab-groundwater sample no more than 30 feet south of the site to assess the southern extent of the hydrocarbon and fuel oxygenate plume.

**Delta has not yet received agency response to the SCM or the recommendations proposed within the November 21, 2008 SCM; however, Delta will submit a work plan detailing the proposed scope of work. Following submittal of a work plan, Delta will follow up with ACDHS to discuss the proposed field activities.**

The analytical suite for MW-1 currently includes the above plus fuel oxygenates—tert-butanol (TBA); di-isopropyl ether (DIPE); ethyl tertiary butyl ether (ETBE); and tertiary amyl methyl ether (TAME); and ethylene dibromide (EDB), 1,2 dichloroethane (EDC)

and ethanol. Additionally, MW-1 is analyzed annually for halogenated volatile organic compounds (HVOC's).

Typically the EPA public health goals (PHGs) for constituents are more conservative values than the maximum contamination levels (MCLs). With the exception of minor detections 1, 1,2-Trichloro-1,2,2-trifluoroethane (Freon 113), 1,1-Dichloroethene (1,1,-DCE), tetrachloroethene (PCE), and bromodichloromethane, all HVOCs have remained below laboratory reporting limits since the sampling of MW-1 began in 1989. The HVOCs that *have* historically been detected (Freon, 1,1,-DCE, and PCE, and bromodichloromethane), have remained below either MCLs or PHGs since the sampling of MW-1 commenced in 1989. A PHG or MCL has not been established for bromodichloromethane, but it has been detected only during one event (7/16/01) at a concentration of 1.7 ug/l and has not been detected since that date. A comparison of historic analytical detections with PHG and MCLs is provided below.

### HVOC Detections in MW-1

Analyte	Date of Historic Maximum	Historic Maximum (µg/l)	Current Concentrations (Third Quarter 2008)	MCL or PHG (µg/l)
Freon 113	7/29/04	13	5.4	4,000 (PHG)
Tetrachloroethene	9/15/1989	2.7	ND<0.50	5 (MCL)
1,1-Dichloroethene	07/02/02	1.8	ND<0.50	10 (PHG)

**Based on this data, Delta recommends the reduction of analytes in MW-1 to only those analyzed in all other site wells (TPH-G, BTEX compounds and MTBE).**

### RECENT CORRESPONDENCE

During the previous quarter, Delta Submitted the *Semi-Annual Status Report*, dated November 6, 2008 and the *Site Conceptual Model*, dated November 21, 2008.

No correspondence was sent or received during the current quarter.

### FIRST QUARTER 2009 ACTIVITIES

- Monitoring and sampling of the groundwater monitoring well network was conducted by TRC on March 27, 2009.

### **PLANNED ACTIVITIES (Second Quarter 2009)**

- TRC prepared the *Semi-Annual Monitoring Report, October through March 2009, dated April 15, 2009.*
- Delta prepared and submitted the *Quarterly Status Report, First Quarter – 2009.*
- Delta to submit a work plan on or before June 12, 2009 detailing the proposed scope of work initially recommended in *Delta's Site Conceptual Model, dated November 21, 2008*

### **REMARKS**

The descriptions, conclusions, and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, the data from those reports is used "as is" and is assumed to be accurate. Delta does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were conducted. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

**CONSULTANT: Delta Consultants**

## REFERENCES CITED

- Kaprealian Engineering, Inc., *Preliminary Ground Water Investigation, Unocal Service Station 3538, 411 MacArthur Blvd,, Oakland, California*, October, 23, 1989.
- Kaprealian Engineering, Inc., *Continuing Ground Water Investigation, Unocal Service Station 3538, 411 MacArthur Blvd,, Oakland, California*, January 18, 1993.
- Gettler-Ryan Inc., *Well Installation Report, Tosco (76) Service Station No. 0018, 6201 Claremont Avenue, Oakland, California*, December 18, 2000.
- Gettler-Ryan Inc., *Request for Closure, 76 Station 3538, 411 MacArthur Blvd, Oakland, California*, October 30, 2002.
- EPA, List of Drinking Water Contaminants & MCLs, U.S. Environmental Protection Agency, Washington, DC, Retrieved October 14, 2003 from <http://www.epa.gov/safewater/mcl.html#mcls>.
- TRC, *Soil and Groundwater Investigation Report, 76 Station 3538, 411 MacArthur Blvd, Oakland, California*, April 28, 2006.
- Office of Environment Health Hazard Assessment,  
<http://oehha.ca.gov/water/phg/allphgs.html>, January 2, 2009
- TRC, *Semi-Annual Monitoring Report, October 2008 through March 2009, Former 76 Station 3538, 411 West MacArthur Blvd, Oakland, CA*, April 15, 2009.



21 Technology Drive  
Irvine, CA 92618

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www.TRCSolutions.com

DATE: April 15, 2009

TO: ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

ATTN: MR. TERRY GRAYSON

SITE: FORMER 76 STATION 3538  
411 WEST MACARTHUR BLVD.  
OAKLAND, CALIFORNIA

RE: SEMI-ANNUAL MONITORING REPORT  
OCTOBER 2008 THROUGH MARCH 2009

Dear Mr. Grayson:

Please find enclosed our Semi-Annual Monitoring Report for Former 76 Station 3538, located at 411 West MacArthur Blvd, Oakland, California. If you have any questions regarding this report, please call us at (949) 727-9336.

Sincerely,

TRC

A handwritten signature in black ink, appearing to read "Anju Farfan".

Anju Farfan  
Groundwater Program Operations Manager

CC: Ms. Lia Holden, Delta Consultants (2 copies)

Enclosures  
20-0400/3538R11.QMS



**SEMI-ANNUAL MONITORING REPORT  
OCTOBER 2008 THROUGH MARCH 2009**

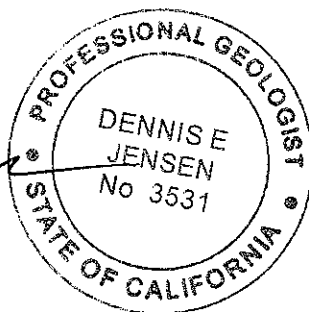
FORMER 76 STATION 3538  
411 West MacArthur Blvd.  
Oakland, California

Prepared For:

Mr. Terry Grayson  
CONOCOPHILLIPS COMPANY  
76 Broadway  
Sacramento, California 95818

By:

*Dennis Jensen*



Senior Project Geologist, Irvine Operations

Date: 4/14/09



## LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	<p>Table Key</p> <p>Contents of Tables</p> <p>Table 1: Current Fluid Levels and Selected Analytical Results</p> <p>Table 2: Historic Fluid Levels and Selected Analytical Results</p> <p>Table 2a: Additional Historic Analytical Results</p> <p>Table 2b: Additional Historic Analytical Results</p> <p>Table 2c: Additional Historic Analytical Results</p> <p>Table 2d: Additional Historic Analytical Results</p>
Figures	<p>Figure 1: Vicinity Map</p> <p>Figure 2: Groundwater Elevation Contour Map</p> <p>Figure 3: Dissolved-Phase TPH-G Concentration Map</p> <p>Figure 4: Dissolved-Phase Benzene Concentration Map</p> <p>Figure 5: Dissolved-Phase MTBE Concentration Map</p>
Graphs	<p>Groundwater Elevations vs. Time</p> <p>Benzene Concentrations vs. Time</p>
Field Activities	<p>General Field Procedures</p> <p>Field Monitoring Data Sheet - 03/27/09</p> <p>Groundwater Sampling Field Notes - 03/27/09</p>
Laboratory Reports	<p>Official Laboratory Reports</p> <p>Quality Control Reports</p> <p>Chain of Custody Records</p>
Statements	<p>Purge Water Disposal</p> <p>Limitations</p>

**Summary of Gauging and Sampling Activities**  
**October 2008 through March 2009**  
**Former 76 Station 3538**  
**411 West MacArthur Blvd.**  
**Oakland, CA**

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Project Coordinator: **Terry Grayson**  
Telephone: **916-558-7666**

Water Sampling Contractor: **TRC**  
Compiled by: **Christina Carrillo**

Date(s) of Gauging/Sampling Event: **3/27/2009**

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**Sample Points**

Groundwater wells: **4 onsite, 2 offsite**      Points gauged: **6**      Points sampled: **2**  
Purging method: **Bailer**  
Purge water disposal: **Veolia/Rodeo Unit 100**  
Other Sample Points: **0**      Type: **--**

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**Liquid Phase Hydrocarbons (LPH)**

Sample Points with LPH: **0**      Maximum thickness (feet): **--**  
LPH removal frequency: **--**      Method: **--**  
Treatment or disposal of water/LPH: **--**

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**Hydrogeologic Parameters**

Depth to groundwater (below TOC):      Minimum: **15.66 feet**      Maximum: **17.43 feet**  
Average groundwater elevation (relative to available local datum): **54.57 feet**  
Average change in groundwater elevation since previous event: **0.49 feet**  
Interpreted groundwater gradient and flow direction:  
    Current event: **0.01 ft/ft, south**  
    Previous event: **0.02 ft/ft, south (9/17/2008)**

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**Selected Laboratory Results**

Sample Points with detected **Benzene**: **1**      Sample Points above MCL (1.0 µg/l): **1**  
    Maximum reported benzene concentration: **3.5 µg/l (MW-2)**

Sample Points with **TPH-G**      **0**  
Sample Points with **MTBE 8021B**      **1**      Maximum: **15 µg/l (MW-3)**

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**Notes:**

MW-1=Sampled Q3 only, MW-4=Sampled Q3 only, MW-5=Sampled Q3 only, MW-6=Sampled Q3 only

# 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
IOC	=	top of casing (surveyed reference elevation)
D	=	duplicate
P	=	no-purge sample

### 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
IPH-G	=	total petroleum hydrocarbons with gasoline distinction
IPH-G (GC/MS)	=	total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B
IPH-D	=	total petroleum hydrocarbons with diesel distinction
TRPH	=	total recoverable petroleum hydrocarbons
IAME	=	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.

### REFERENCE

TRC began groundwater monitoring and sampling for Former 76 Station 3538 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

# Contents of Tables 1 and 2

## Site: Former 76 Station 3538

### Current Event

Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015 (Luft)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
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### Historic Data

Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015 (Luft)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
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Table 2a	Well/ Date	TPH-D	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Total Oil and Grease	Bromo- dichloro- methane	Bromo- form	Bromo- methane
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Table 2b	Well/ Date	Carbon Tetra- chloride	Chloro- benzene	Chloro- ethane	Chloroform	Chloro- methane	Dibromo- chloro- methane	1,2- Dichloro- benzene	1,3- Dichloro- benzene	1,4- Dichloro- benzene	Dichloro- difluoro- methane	1,1-DCA	1,1-DCE
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Table 2c	Well/ Date	cis- 1,2-DCE	trans- 1,2-DCE	1,2- Dichloro- propane	cis-1,3- Dichloro- propene	trans-1,3- Dichloro- propene	Methylene chloride	1,1,2,2- Tetrachloro- ethane	Tetrachloro- ethene (PCE)	Trichloro- trifluoro- ethane	1,1,1- Trichloro- ethane	1,1,2- Trichloro- ethane	Trichloro- ethene (TCE)
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Table 2d	Well/ Date	Trichloro- fluoro- methane	Vinyl chloride
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**Table 1**  
**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**March 27, 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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> 03/27/09	72.12	16.75	0.00	55.37	1.45	--	--	--	--	--	--	--	Sampled Q3 only
<b>MW-2</b> 03/27/09	71.34	17.43	0.00	53.91	0.63	ND<50	3.5	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
<b>MW-3</b> 03/27/09	71.40	17.34	0.00	54.06	0.57	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	15	--	
<b>MW-4</b> 03/27/09	71.54	17.17	0.00	54.37	0.70	--	--	--	--	--	--	--	Sampled Q3 only
<b>MW-5</b> 03/27/09	71.16	17.14	0.00	54.02	0.54	--	--	--	--	--	--	--	Sampled Q3 only
<b>MW-6</b> 03/27/09	71.37	15.66	0.00	55.71	-0.96	--	--	--	--	--	--	--	Sampled Q3 only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
09/15/89	--	--	--	--	--	ND	ND	0.61	ND	ND	--	--	
01/23/90	--	--	--	--	--	ND	1.5	2.3	ND	4.3	--	--	
04/19/90	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/17/90	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/16/90	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/15/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/12/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/15/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/14/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/13/93	72.43	17.70	0.00	54.73	--	--	--	--	--	--	--	--	Sampled Q3 only
07/14/93	72.43	18.49	0.00	53.94	-0.79	ND	2.2	2.1	1.1	6.2	--	--	
10/14/93	72.10	18.32	0.00	53.78	-0.16	--	--	--	--	--	--	--	Sampled Q3 only
01/12/94	72.10	18.18	0.00	53.92	0.14	--	--	--	--	--	--	--	Sampled Q3 only
04/11/94	72.10	17.80	0.00	54.30	0.38	--	--	--	--	--	--	--	Sampled Q3 only
07/07/94	72.10	18.28	0.00	53.82	-0.48	ND	ND	ND	ND	ND	--	--	
10/05/94	72.10	18.55	0.00	53.55	-0.27	--	--	--	--	--	--	--	Sampled Q3 only
01/09/95	72.10	17.90	0.00	54.20	0.65	--	--	--	--	--	--	--	Sampled Q3 only
04/17/95	72.10	17.22	0.00	54.88	0.68	--	--	--	--	--	--	--	Sampled Q3 only
07/19/95	72.10	18.03	0.00	54.07	-0.81	ND	ND	ND	ND	ND	--	--	
10/26/95	72.10	18.67	0.00	53.43	-0.64	--	--	--	--	--	--	--	Sampled Q3 only
01/16/96	72.10	17.20	0.00	54.90	1.47	--	--	--	--	--	--	--	Sampled Q3 only
04/15/96	72.10	17.40	0.00	54.70	-0.20	--	--	--	--	--	--	--	Sampled Q3 only



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
07/11/96	72.10	18.03	0.00	54.07	-0.63	ND	ND	ND	ND	ND	ND	--	
01/17/97	72.10	16.54	0.00	55.56	1.49	--	--	--	--	--	--	--	Sampled Q3 only
07/21/97	72.10	18.16	0.00	53.94	-1.62	ND	ND	ND	ND	ND	ND	--	
01/14/98	72.10	16.05	0.00	56.05	2.11	--	--	--	--	--	--	--	Sampled Q3 only
07/06/98	72.10	16.46	0.00	55.64	-0.41	ND	ND	ND	ND	ND	ND	--	
01/13/99	72.10	17.37	0.00	54.73	-0.91	--	--	--	--	--	--	--	Sampled Q3 only
08/31/99	72.12	17.00	0.00	55.12	0.39	ND	ND	ND	ND	ND	ND	--	
01/21/00	72.12	17.04	0.00	55.08	-0.04	--	--	--	--	--	--	--	Sampled Q3 only
07/10/00	72.12	18.10	0.00	54.02	-1.06	ND	ND	ND	ND	ND	ND	--	
01/04/01	72.12	17.95	0.00	54.17	0.15	--	--	--	--	--	--	--	Sampled Q3 only
07/16/01	72.12	18.03	0.00	54.09	-0.08	ND	ND	ND	ND	ND	ND	--	
01/28/02	72.12	17.31	0.00	54.81	0.72	--	--	--	--	--	--	--	Sampled Q3 only
07/12/02	72.12	18.15	0.00	53.97	-0.84	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
01/14/03	72.12	17.66	0.00	54.46	0.49	--	--	--	--	--	--	--	Sampled Q3 only
07/10/03	72.12	17.86	0.00	54.26	-0.20	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	--	
02/04/04	72.12	17.43	0.00	54.69	0.43	--	--	--	--	--	--	--	Sampled Q3 only
07/29/04	72.12	18.12	0.00	54.00	-0.69	ND<50	ND<0.3	0.38	ND<0.3	ND<0.6	ND<1	ND<0.5	
03/02/05	72.12	16.15	0.00	55.97	1.97	--	--	--	--	--	--	--	Sampled Q3 only
09/30/05	72.12	18.04	0.00	54.08	-1.89	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
03/23/06	72.12	--	--	--	--	--	--	--	--	--	--	--	Inaccessible due to gate; Sampled Q3 only
09/26/06	72.12	17.90	0.00	54.22	--	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
03/15/07	72.12	17.22	0.00	54.90	0.68	--	--	--	--	--	--	--	Sampled Q3 only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
09/27/07	72.12	18.49	0.00	53.63	-1.27	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
03/27/08	72.12	17.57	0.00	54.55	0.92	--	--	--	--	--	--	--	Sampled Q3 only
09/17/08	72.12	18.20	0.00	53.92	-0.63	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
03/27/09	72.12	16.75	0.00	55.37	1.45	--	--	--	--	--	--	--	Sampled Q3 only
<b>MW-2</b>													
09/15/89	--	--	--	--	--	290	ND	12	ND	ND	--	--	
01/23/90	--	--	--	--	--	400	73	36	10	40	--	--	
04/19/90	--	--	--	--	--	3900	550	5.1	91	390	--	--	
07/17/90	--	--	--	--	--	490	76	0.59	11	46	--	--	
10/16/90	--	--	--	--	--	1400	430	2.0	48	240	--	--	
01/15/91	--	--	--	--	--	680	170	0.7	19	81	--	--	
04/12/91	--	--	--	--	--	2200	160	4.3	23	62	--	--	
07/15/91	--	--	--	--	--	2200	770	12	72	370	--	--	
10/15/91	--	--	--	--	--	140	44	0.56	1.5	12	--	--	
01/15/92	--	--	--	--	--	220	37	0.52	1.1	7	--	--	
04/14/92	--	--	--	--	--	150	6.2	ND	ND	1.4	--	--	
07/14/92	--	--	--	--	--	130	3.7	ND	ND	ND	--	--	
10/12/92	--	--	--	--	--	370	3.4	0.56	ND	11	--	--	
01/08/93	--	--	--	--	--	510	ND	ND	ND	ND	--	--	
04/13/93	71.63	17.86	0.00	53.77	--	410	42	7.7	6.4	28	200	--	
07/14/93	71.63	18.38	0.00	53.25	-0.52	110	6.5	ND	ND	1.1	250	--	
10/14/93	71.38	18.20	0.00	53.18	-0.07	230	5.3	ND	ND	2.1	--	--	
01/12/94	71.38	18.08	0.00	53.30	0.12	300	7.8	3.8	1.8	10	--	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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-2 continued</b>													
04/09/94	71.38	17.97	0.00	53.41	0.11	120	10	0.88	1.1	4.9	--	--	
04/11/94	71.38	17.88	0.00	53.50	0.09	--	--	--	--	--	--	--	
07/07/94	71.38	17.81	0.00	53.57	0.07	110	4.4	ND	ND	ND	--	--	
10/05/94	71.38	18.33	0.00	53.05	-0.52	720	20	ND	ND	3.1	--	--	
01/09/95	71.38	17.40	0.00	53.98	0.93	ND	ND	ND	ND	ND	--	--	
04/17/95	71.38	17.50	0.00	53.88	-0.10	93	5.6	0.62	1.7	5.5	--	--	
07/19/95	71.38	18.01	0.00	53.37	-0.51	77	32	0.58	1.7	4.1	--	--	
10/26/95	71.38	18.21	0.00	53.17	-0.20	54	13	ND	ND	0.72	220	--	
01/16/96	71.38	16.58	0.00	54.80	1.63	120	23	ND	ND	0.99	--	--	
04/15/96	71.38	17.61	0.00	53.77	-1.03	340	21	ND	2.2	3.7	45	--	
07/11/96	71.38	17.98	0.00	53.40	-0.37	540	34	ND	4.3	12	150	--	
01/17/97	71.38	17.08	0.00	54.30	0.90	320	63	2.4	9.4	26	260	--	
07/21/97	71.38	18.06	0.00	53.32	-0.98	160	13	ND	1.3	1.6	180	--	
01/14/98	71.38	16.52	0.00	54.86	1.54	66	6.3	ND	ND	0.98	100	--	
07/06/98	71.38	16.87	0.00	54.51	-0.35	ND	2.3	ND	ND	ND	11	--	
01/13/99	71.38	17.88	0.00	53.50	-1.01	53	24	ND	0.52	0.98	120	--	
08/31/99	71.34	18.45	0.00	52.89	-0.61	86	14	ND	0.63	ND	21	--	
01/21/00	71.34	17.73	0.00	53.61	0.72	ND	1.94	ND	ND	ND	10.1	--	
07/10/00	71.34	18.14	0.00	53.20	-0.41	ND	ND	ND	ND	ND	46.6	--	
01/04/01	71.34	18.02	0.00	53.32	0.12	ND	0.925	ND	ND	ND	ND	--	
07/16/01	71.34	18.02	0.00	53.32	0.00	ND	ND	ND	ND	ND	ND	--	
01/28/02	71.34	17.57	0.00	53.77	0.45	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
07/12/02	71.34	18.05	0.00	53.29	-0.48	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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-2 continued</b>													
01/14/03	71.34	17.44	0.00	53.90	0.61	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	--	
07/10/03	71.34	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
02/04/04	71.34	17.22	0.00	54.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
07/29/04	71.34	--	--	--	--	--	--	--	--	--	--	--	Sampled Q3 only
03/02/05	71.34	16.63	0.00	54.71	--	99	26	ND<0.50	3.5	2.8	ND<5.0	--	
09/30/05	71.34	17.94	0.00	53.40	-1.31	ND<50	1.2	ND<0.30	ND<0.30	ND<0.60	1.6	--	
03/23/06	71.34	16.74	0.00	54.60	1.20	ND<50	3.6	ND<0.30	0.35	ND<0.60	2.5	--	
09/26/06	71.34	17.91	0.00	53.43	-1.17	ND<50	1.2	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/15/07	71.34	17.45	0.00	53.89	0.46	110	6.5	ND<0.30	0.70	ND<0.60	1.7	--	
09/27/07	71.34	18.23	0.00	53.11	-0.78	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/27/08	71.34	17.77	0.00	53.57	0.46	ND<50	1.8	ND<0.30	ND<0.30	ND<0.60	1.3	--	
09/17/08	71.34	18.06	0.00	53.28	-0.29	ND<50	1.6	ND<0.30	ND<0.30	ND<0.60	3.1	--	
03/27/09	71.34	17.43	0.00	53.91	0.63	ND<50	3.5	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
<b>MW-3</b>													
09/15/89	--	--	--	--	--	32	ND	ND	ND	ND	--	--	
01/23/90	--	--	--	--	--	450	110	1.2	4.4	11	--	--	
04/19/90	--	--	--	--	--	3100	600	27	54	220	--	--	
07/17/90	--	--	--	--	--	4000	270	48	130	250	--	--	
10/16/90	--	--	--	--	--	740	210	1.4	2.5	82	--	--	
01/15/91	--	--	--	--	--	3200	460	1.5	120	270	--	--	
04/12/91	--	--	--	--	--	880	170	1.1	34	110	--	--	
07/15/91	--	--	--	--	--	9200	1300	230	490	1900	--	--	
10/15/91	--	--	--	--	--	3100	390	34	150	390	--	--	

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**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
01/15/92	--	--	--	--	--	3000	590	14	310	750	--	--	
04/14/92	--	--	--	--	--	14000	660	48	560	2000	--	--	
07/14/92	--	--	--	--	--	21000	890	200	1200	4300	--	--	
10/12/92	--	--	--	--	--	3200	160	10	230	540	--	--	
01/08/93	--	--	--	--	--	1100	48	0.99	0.9	93	--	--	
04/13/93	72.06	17.96	0.00	54.10	--	12000	290	38	760	2300	1400	--	
07/14/93	72.06	18.54	0.00	53.52	-0.58	6300	190	ND	430	1000	860	--	
10/14/93	71.86	18.45	0.00	53.41	-0.11	2500	52	ND	110	250	--	--	
01/12/94	71.86	18.34	0.00	53.52	0.11	3800	78	ND	180	390	--	--	
04/09/94	71.86	18.19	0.00	53.67	0.15	1800	22	ND	140	280	--	--	
04/11/94	71.86	18.12	0.00	53.74	0.07	--	--	--	--	--	--	--	
07/07/94	71.86	18.21	0.00	53.65	-0.09	110	4.5	ND	ND	ND	--	--	
10/05/94	71.86	18.58	0.00	53.28	-0.37	ND	ND	ND	ND	ND	--	--	
01/09/95	71.86	17.69	0.00	54.17	0.89	ND	0.68	ND	ND	ND	--	--	
04/17/95	71.86	17.68	0.00	54.18	0.01	3700	80	10	270	510	--	--	
07/19/95	71.86	18.20	0.00	53.66	-0.52	15000	330	27	990	2400	--	--	
10/26/95	71.86	18.32	0.00	53.54	-0.12	14000	420	180	750	1600	4800	--	
01/16/96	71.86	17.95	0.00	53.91	0.37	920	38	ND	30	57	--	--	
04/15/96	71.86	17.78	0.00	54.08	0.17	9700	240	ND	570	860	3200	--	
07/11/96	71.86	18.19	0.00	53.67	-0.41	13000	69	5.5	430	900	740	--	
01/17/97	71.86	17.23	0.00	54.63	0.96	4400	25	ND	270	580	1600	--	
07/21/97	71.86	18.29	0.00	53.57	-1.06	9000	36	ND	450	800	950	--	
01/14/98	71.86	16.71	0.00	55.15	1.58	7100	40	ND	380	360	930	--	

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**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
07/06/98	71.86	17.03	0.00	54.83	-0.32	6800	39	ND	320	360	370	--	
01/13/99	71.86	18.00	0.00	53.86	-0.97	1800	9.4	ND	58	36	180	--	
08/31/99	71.40	--	0.00	--	--	--	--	--	--	--	--	--	Well obstructed at 0.5 feet.
01/21/00	71.40	17.58	0.00	53.82	--	ND	ND	ND	ND	ND	21.4	--	
07/10/00	71.40	18.05	0.00	53.35	-0.47	ND	ND	ND	ND	ND	162	--	
08/25/00	71.40	17.82	0.00	53.58	0.23	--	--	--	--	--	--	180	
01/04/01	71.40	18.16	0.00	53.24	-0.34	ND	ND	ND	ND	ND	193	--	
07/16/01	71.40	17.98	0.00	53.42	0.18	ND	ND	ND	ND	ND	660	--	
01/28/02	71.40	17.84	0.00	53.56	0.14	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	34	--	
07/12/02	71.40	17.87	0.00	53.53	-0.03	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	11	19	
01/14/03	71.40	17.28	0.00	54.12	0.59	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	12	--	
07/10/03	71.40	17.64	0.00	53.76	-0.36	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	23	--	
02/04/04	71.40	17.05	0.00	54.35	0.59	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	26	--	
07/29/04	71.40	17.82	0.00	53.58	-0.77	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1	--	
03/02/05	71.40	16.47	0.00	54.93	1.35	93	ND<0.50	ND<0.50	ND<0.50	ND<0.50	140	--	
09/30/05	71.40	17.79	0.00	53.61	-1.32	65	ND<0.30	ND<0.30	ND<0.30	ND<0.60	61	--	
03/23/06	71.40	16.61	0.00	54.79	1.18	54	ND<0.30	0.41	ND<0.30	0.98	63	--	
09/26/06	71.40	17.77	0.00	53.63	-1.16	51	ND<0.30	ND<0.30	ND<0.30	ND<0.60	41	--	
03/15/07	71.40	17.27	0.00	54.13	0.50	140	ND<0.30	ND<0.30	ND<0.30	ND<0.60	110	--	
09/27/07	71.40	18.48	0.00	52.92	-1.21	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	20	--	
03/27/08	71.40	17.67	0.00	53.73	0.81	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	19	--	
09/17/08	71.40	17.91	0.00	53.49	-0.24	56	ND<0.30	ND<0.30	ND<0.30	ND<0.60	43	--	
03/27/09	71.40	17.34	0.00	54.06	0.57	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	15	--	

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**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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</b>													
09/15/89	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/23/90	--	--	--	--	--	ND	ND	0.4	ND	ND	--	--	
04/19/90	--	--	--	--	--	ND	ND	0.48	ND	ND	--	--	
07/17/90	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/16/90	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/15/91	--	--	--	--	--	ND	ND	ND	--	ND	--	--	
04/12/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/15/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/14/92	--	--	--	--	--	ND	1.3	2.5	ND	1.0	--	--	
04/13/93	71.98	17.67	0.00	54.31	--	--	--	--	--	--	--	--	Sampled Q3 only
07/14/93	71.98	18.31	0.00	53.67	-0.64	ND	ND	ND	ND	ND	--	--	
10/14/93	71.64	18.08	0.00	53.56	-0.11	--	--	--	--	--	--	--	Sampled Q3 only
01/12/94	71.64	17.97	0.00	53.67	0.11	--	--	--	--	--	--	--	Sampled Q3 only
04/11/94	71.64	17.70	0.00	53.94	0.27	--	--	--	--	--	--	--	Sampled Q3 only
07/07/94	71.64	17.80	0.00	53.84	-0.10	ND	ND	ND	ND	ND	--	--	
10/05/94	71.64	18.28	0.00	53.36	-0.48	--	--	--	--	--	--	--	Sampled Q3 only
01/09/95	71.64	17.38	0.00	54.26	0.90	--	--	--	--	--	--	--	Sampled Q3 only
04/17/95	71.64	17.21	0.00	54.43	0.17	--	--	--	--	--	--	--	Sampled Q3 only
07/19/95	71.64	17.82	0.00	53.82	-0.61	ND	ND	ND	ND	ND	--	--	
10/26/95	71.64	18.17	0.00	53.47	-0.35	--	--	--	--	--	--	--	Sampled Q3 only
01/16/96	71.64	16.45	0.00	55.19	1.72	--	--	--	--	--	--	--	Sampled Q3 only
04/15/96	71.64	17.35	0.00	54.29	-0.90	--	--	--	--	--	--	--	Sampled Q3 only
07/11/96	71.64	17.81	0.00	53.83	-0.46	ND	ND	ND	ND	ND	ND	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
01/17/97	71.64	16.73	0.00	54.91	1.08	--	--	--	--	--	--	--	Sampled Q3 only
07/21/97	71.64	17.91	0.00	53.73	-1.18	ND	ND	ND	ND	ND	ND	--	
01/14/98	71.64	16.18	0.00	55.46	1.73	--	--	--	--	--	--	--	Sampled Q3 only
07/06/98	71.64	16.49	0.00	55.15	-0.31	ND	ND	ND	ND	ND	ND	--	
01/13/99	71.64	17.29	0.00	54.35	-0.80	--	--	--	--	--	--	--	Sampled Q3 only
08/31/99	71.54	--	0.00	--	--	--	--	--	--	--	--	--	Well obstructed at 10.4 feet.
01/21/00	71.54	17.51	0.00	54.03	--	--	--	--	--	--	--	--	Sampled Q3 only
07/10/00	71.54	17.93	0.00	53.61	-0.42	ND	ND	ND	ND	ND	ND	--	
01/04/01	71.54	18.10	0.00	53.44	-0.17	--	--	--	--	--	--	--	Sampled Q3 only
07/16/01	71.54	17.76	0.00	53.78	0.34	ND	ND	ND	ND	ND	ND	--	
01/28/02	71.54	17.20	0.00	54.34	0.56	--	--	--	--	--	--	--	Sampled Q3 only
07/12/02	71.54	17.81	0.00	53.73	-0.61	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
01/14/03	71.54	17.30	0.00	54.24	0.51	--	--	--	--	--	--	--	Sampled Q3 only
07/10/03	71.54	17.58	0.00	53.96	-0.28	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	--	
02/04/04	71.54	17.07	0.00	54.47	0.51	--	--	--	--	--	--	--	Sampled Q3 only
07/29/04	71.54	17.81	0.00	53.73	-0.74	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1	--	
03/02/05	71.54	16.25	0.00	55.29	1.56	--	--	--	--	--	--	--	Sampled Q3 only
09/30/05	71.54	17.74	0.00	53.80	-1.49	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/23/06	71.54	--	--	--	--	--	--	--	--	--	--	--	Inaccessible due to gate; Sampled Q3 only
09/26/06	71.54	17.71	0.00	53.83	--	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/15/07	71.54	17.56	0.00	53.98	0.15	--	--	--	--	--	--	--	Sampled Q3 only
09/27/07	71.54	18.16	0.00	53.38	-0.60	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
03/27/08	71.54	17.58	0.00	53.96	0.58	--	--	--	--	--	--	--	Sampled Q3 only
09/17/08	71.54	17.87	0.00	53.67	-0.29	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/27/09	71.54	17.17	0.00	54.37	0.70	--	--	--	--	--	--	--	Sampled Q3 only
<b>MW-5</b>													
11/30/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/08/93	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/13/93	71.51	17.49	0.00	54.02	--	ND	ND	ND	ND	ND	--	--	
07/14/93	71.51	18.02	0.00	53.49	-0.53	ND	ND	0.57	ND	ND	--	--	
10/14/93	71.23	17.82	0.00	53.41	-0.08	ND	ND	ND	ND	ND	--	--	
01/12/94	71.23	17.74	0.00	53.49	0.08	ND	ND	0.84	ND	1.6	--	--	
04/11/94	71.23	17.56	0.00	53.67	0.18	--	--	--	--	--	--	--	Sampled Q3 only
07/07/94	71.23	17.50	0.00	53.73	0.06	ND	ND	ND	ND	ND	--	--	
10/05/94	71.23	17.98	0.00	53.25	-0.48	--	--	--	--	--	--	--	Sampled Q3 only
01/09/95	71.23	17.13	0.00	54.10	0.85	--	--	--	--	--	--	--	Sampled Q3 only
04/17/95	71.23	17.05	0.00	54.18	0.08	--	--	--	--	--	--	--	Sampled Q3 only
07/19/95	71.23	17.59	0.00	53.64	-0.54	ND	ND	ND	ND	ND	--	--	
10/26/95	71.23	18.10	0.00	53.13	-0.51	--	--	--	--	--	--	--	Sampled Q3 only
01/16/96	71.23	17.11	0.00	54.12	0.99	--	--	--	--	--	--	--	Sampled Q3 only
04/15/96	71.23	17.22	0.00	54.01	-0.11	--	--	--	--	--	--	--	Sampled Q3 only
07/11/96	71.23	17.59	0.00	53.64	-0.37	ND	ND	ND	ND	ND	ND	--	
01/17/97	71.23	16.75	0.00	54.48	0.84	--	--	--	--	--	--	--	Sampled Q3 only
07/21/97	71.23	17.59	0.00	53.64	-0.84	ND	ND	ND	ND	ND	ND	--	
01/14/98	71.23	16.16	0.00	55.07	1.43	--	--	--	--	--	--	--	Sampled Q3 only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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-5 continued</b>													
07/06/98	71.23	16.52	0.00	54.71	-0.36	ND	ND	ND	ND	ND	ND	--	
01/13/99	71.23	17.62	0.00	53.61	-1.10	--	--	--	--	--	--	--	Sampled Q3 only
08/31/99	71.16	17.76	0.00	53.40	-0.21	ND	ND	ND	ND	ND	ND	--	
01/21/00	71.16	16.83	0.00	54.33	0.93	--	--	--	--	--	--	--	Sampled Q3 only
07/10/00	71.16	17.46	0.00	53.70	-0.63	ND	ND	ND	ND	ND	ND	--	
01/04/01	71.16	17.51	0.00	53.65	-0.05	--	--	--	--	--	--	--	Sampled Q3 only
07/16/01	71.16	17.32	0.00	53.84	0.19	ND	ND	ND	ND	ND	ND	--	
01/28/02	71.16	17.12	0.00	54.04	0.20	--	--	--	--	--	--	--	Sampled Q3 only
07/12/02	71.16	17.12	0.00	54.04	0.00	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
01/14/03	71.16	16.67	0.00	54.49	0.45	--	--	--	--	--	--	--	Sampled Q3 only
07/10/03	71.16	17.39	0.00	53.77	-0.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	--	
02/04/04	71.16	16.23	0.00	54.93	1.16	--	--	--	--	--	--	--	Sampled Q3 only
07/29/04	71.16	16.02	0.00	55.14	0.21	ND<50	ND<0.3	0.64	ND<0.3	0.79	ND<1	--	
03/02/05	71.16	16.43	0.00	54.73	-0.41	--	--	--	--	--	--	--	Sampled Q3 only
09/30/05	71.16	17.41	0.00	53.75	-0.98	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/23/06	71.16	16.37	0.00	54.79	1.04	--	--	--	--	--	--	--	Sampled Q3 only
09/26/06	71.16	15.54	0.00	55.62	0.83	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/15/07	71.16	17.20	0.00	53.96	-1.66	--	--	--	--	--	--	--	Sampled Q3 only
09/27/07	71.16	18.01	0.00	53.15	-0.81	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/27/08	71.16	17.57	0.00	53.59	0.44	--	--	--	--	--	--	--	Sampled Q3 only
09/17/08	71.16	17.68	0.00	53.48	-0.11	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/27/09	71.16	17.14	0.00	54.02	0.54	--	--	--	--	--	--	--	Sampled Q3 only

MW-6

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**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
11/30/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/08/93	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/13/93	71.79	11.94	0.00	59.85	--	ND	ND	ND	ND	ND	--	--	
07/14/93	71.79	17.20	0.00	54.59	-5.26	ND	0.99	2.4	ND	1.9	--	--	
10/14/93	71.44	17.21	0.00	54.23	-0.36	ND	ND	0.64	ND	ND	--	--	
01/12/94	71.44	17.44	0.00	54.00	-0.23	ND	ND	1.2	ND	2.9	--	--	
04/11/94	71.44	13.66	0.00	57.78	3.78	--	--	--	--	--	--	--	Sampled Q3 only
07/07/94	71.44	14.05	0.00	57.39	-0.39	ND	ND	ND	ND	ND	--	--	
10/05/94	71.44	14.16	0.00	57.28	-0.11	--	--	--	--	--	--	--	Sampled Q3 only
01/09/95	71.44	13.73	0.00	57.71	0.43	--	--	--	--	--	--	--	Sampled Q3 only
04/17/95	71.44	11.30	0.00	60.14	2.43	--	--	--	--	--	--	--	Sampled Q3 only
07/19/95	71.44	12.32	0.00	59.12	-1.02	ND	ND	ND	ND	ND	--	--	
10/26/95	71.44	17.88	0.00	53.56	-5.56	--	--	--	--	--	--	--	Sampled Q3 only
01/16/96	71.44	16.38	0.00	55.06	1.50	--	--	--	--	--	--	--	Sampled Q3 only
04/15/96	71.44	14.00	0.00	57.44	2.38	--	--	--	--	--	--	--	Sampled Q3 only
07/11/96	71.44	13.58	0.00	57.86	0.42	ND	ND	ND	ND	ND	ND	--	
01/17/97	71.44	15.42	0.00	56.02	-1.84	--	--	--	--	--	--	--	Sampled Q3 only
07/21/97	71.44	13.78	0.00	57.66	1.64	ND	ND	ND	ND	ND	ND	--	
01/14/98	71.44	13.65	0.00	57.79	0.13	--	--	--	--	--	--	--	Sampled Q3 only
07/06/98	71.44	13.90	0.00	57.54	-0.25	ND	ND	ND	ND	ND	ND	--	
01/13/99	71.44	14.93	0.00	56.51	-1.03	--	--	--	--	--	--	--	Sampled Q3 only
08/31/99	71.37	15.81	0.00	55.56	-0.95	ND	ND	ND	ND	ND	ND	--	
01/21/00	71.37	16.13	0.00	55.24	-0.32	--	--	--	--	--	--	--	Sampled Q3 only

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**September 1989 Through March 2009**  
**Former 76 Station 3538**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (Luft) (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>													
07/10/00	71.37	16.95	0.00	54.42	-0.82	ND	ND	ND	ND	ND	ND	--	
01/04/01	71.37	17.09	0.00	54.28	-0.14	--	--	--	--	--	--	--	Sampled Q3 only
07/16/01	71.37	16.83	0.00	54.54	0.26	ND	ND	ND	ND	ND	ND	--	
01/28/02	71.37	14.58	0.00	56.79	2.25	--	--	--	--	--	--	--	Sampled Q3 only
07/12/02	71.37	16.76	0.00	54.61	-2.18	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
01/14/03	71.37	16.25	0.00	55.12	0.51	--	--	--	--	--	--	--	Sampled Q3 only
07/10/03	71.37	12.97	0.00	58.40	3.28	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	--	
02/04/04	71.37	16.20	0.00	55.17	-3.23	--	--	--	--	--	--	--	Sampled Q3 only
07/29/04	71.37	14.98	0.00	56.39	1.22	ND<50	ND<0.3	ND<0.3	ND<0.3	ND<0.6	1.3	--	
03/02/05	71.37	14.51	0.00	56.86	0.47	--	--	--	--	--	--	--	Sampled Q3 only
09/30/05	71.37	14.45	0.00	56.92	0.06	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	1.7	--	
03/23/06	71.37	16.55	0.00	54.82	-2.10	--	--	--	--	--	--	--	Sampled Q3 only
09/26/06	71.37	17.58	0.00	53.79	-1.03	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/15/07	71.37	13.72	0.00	57.65	3.86	--	--	--	--	--	--	--	Sampled Q3 only
09/27/07	71.37	14.18	0.00	57.19	-0.46	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	--	
03/27/08	71.37	14.83	0.00	56.54	-0.65	--	--	--	--	--	--	--	Sampled Q3 only
09/17/08	71.37	14.70	0.00	56.67	0.13	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	2.8	--	
03/27/09	71.37	15.66	0.00	55.71	-0.96	--	--	--	--	--	--	--	Sampled Q3 only

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**Former 76 Station 3538**

Date Sampled	TPH-D (µg/l)	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Total Oil and Grease (mg/l)	Bromo- dichloro- methane (µg/l)	Bromo- form (µg/l)	Bromo- methane (µg/l)
<b>MW-1</b>												
09/15/89	ND	--	--	--	--	--	--	--	ND	--	--	--
01/23/90	ND	--	--	--	--	--	--	--	1.5	--	--	--
04/19/90	ND	--	--	--	--	--	--	--	ND	--	--	--
07/17/90	ND	--	--	--	--	--	--	--	ND	--	--	--
10/16/90	ND	--	--	--	--	--	--	--	ND	--	--	--
01/15/91	ND	--	--	--	--	--	--	--	ND	--	--	--
04/12/91	ND	--	--	--	--	--	--	--	ND	--	--	--
07/15/91	ND	--	--	--	--	--	--	--	ND	--	--	--
07/16/01	--	--	--	--	--	--	--	--	--	1.7	--	--
07/29/04	--	--	--	--	ND<0.5	--	--	--	--	ND<0.5	ND<0.5	ND<1
09/30/05	--	--	--	--	ND<0.50	--	--	--	--	ND<0.50	ND<0.50	ND<1.0
09/26/06	--	--	--	--	ND<0.50	--	--	--	--	ND<0.50	ND<0.50	ND<1.0
09/27/07	--	--	--	--	ND<0.50	--	--	--	--	ND<0.50	ND<0.50	ND<1.0
09/17/08	--	--	--	--	ND<0.50	--	--	--	--	ND<0.50	ND<0.50	ND<1.0
<b>MW-3</b>												
08/25/00	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
07/12/02	--	ND<20	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--

**Table 2 b**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**Former 76 Station 3538**

Date Sampled	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)
<b>MW-1</b>												
07/11/96	--	--	--	0.96	--	--	--	--	--	--	--	--
07/21/97	--	--	--	1.0	--	--	--	--	--	--	--	--
07/16/01	--	--	--	45	--	--	--	--	--	--	--	--
07/12/02	--	--	--	--	--	--	--	--	--	--	--	1.8
07/10/03	--	--	--	--	--	--	--	--	--	--	--	0.89
07/29/04	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.2
09/30/05	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.52
09/26/06	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.60
09/27/07	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/17/08	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

**Table 2 c**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**Former 76 Station 3538**

Date Sampled	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloropropane (µg/l)	cis-1,3-Dichloropropene (µg/l)	trans-1,3-Dichloropropene (µg/l)	Methylene chloride (µg/l)	1,1,2,2-Tetrachloroethane (µg/l)	Tetrachloroethene (PCE) (µg/l)	Trichlorotrifluoroethane (µg/l)	1,1,1-Trichloroethane (µg/l)	1,1,2-Trichloroethane (µg/l)	Trichloroethene (TCE) (µg/l)
<b>MW-1</b>												
09/15/89	--	--	--	--	--	--	--	2.7	--	--	--	--
01/23/90	--	--	--	--	--	--	--	2.1	--	--	--	--
04/19/90	--	--	--	--	--	--	--	2.2	--	--	--	--
07/17/90	--	--	--	--	--	--	--	1.7	--	--	--	--
10/16/90	--	--	--	--	--	--	--	2.0	--	--	--	--
01/15/91	--	--	--	--	--	--	--	2.1	--	--	--	--
04/12/91	--	--	--	--	--	--	--	2.0	--	--	--	--
07/15/91	--	--	--	--	--	--	--	1.8	--	--	--	--
07/14/92	--	--	--	--	--	--	--	1.4	--	--	--	--
07/14/93	--	--	--	--	--	--	--	0.95	--	--	--	--
07/07/94	--	--	--	--	--	--	--	0.83	--	--	--	--
07/19/95	--	--	--	--	--	--	--	0.52	--	--	--	--
07/11/96	--	--	--	--	--	--	--	0.73	--	--	--	--
07/21/97	--	--	--	--	--	--	--	0.70	--	--	--	--
08/31/99	--	--	--	--	--	--	--	ND	--	--	--	--
07/16/01	--	--	--	--	--	--	--	ND	--	--	--	--
07/12/02	--	--	--	--	--	--	--	ND<0.60	--	--	--	--
07/10/03	--	--	--	--	--	--	--	ND<0.50	--	--	--	--
07/29/04	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1	ND<0.5	ND<0.5	13	ND<0.5	ND<0.5	ND<0.5
09/30/05	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	9.1	ND<0.50	ND<0.50	ND<0.50
09/26/06	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	7.0	ND<0.50	ND<0.50	ND<0.50
09/27/07	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	4.3	ND<0.50	ND<0.50	ND<0.50
09/17/08	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	5.4	ND<0.50	ND<0.50	ND<0.50

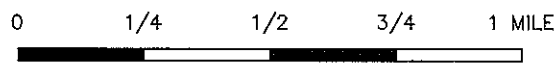
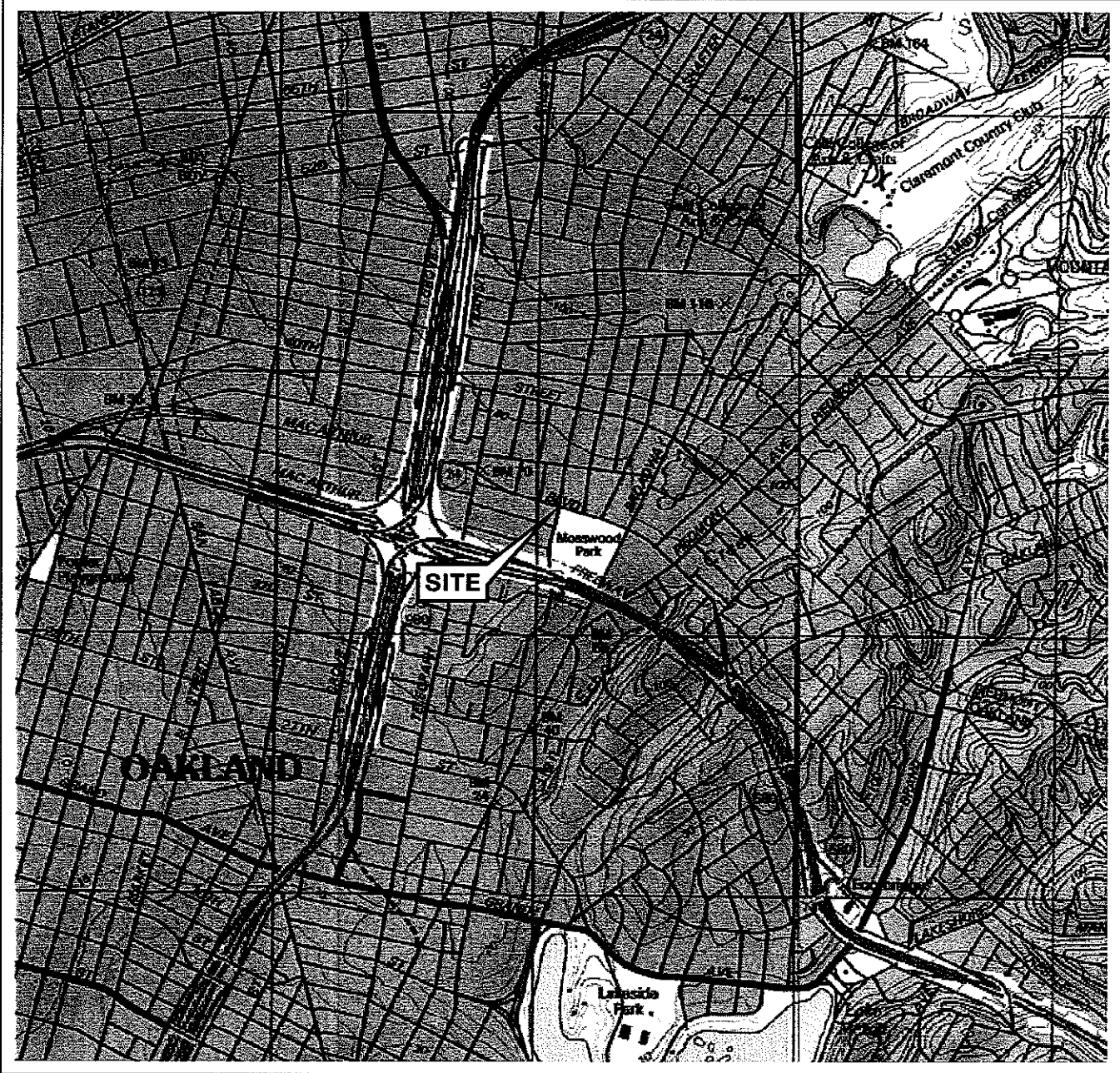
**Table 2 d**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**Former 76 Station 3538**

Date Sampled	Trichloro- fluoro- methane (µg/l)	Vinyl chloride (µg/l)
<b>MW-1</b>		
07/29/04	ND<0.5	ND<0.5
09/30/05	ND<0.50	ND<0.50
09/26/06	ND<0.50	ND<0.50
09/27/07	ND<0.50	ND<0.50
09/17/08	ND<0.50	ND<0.50



# FIGURES

PS-1:1 L:\QMS V I C I N I T Y M A P S\3538vm.dwg Jan 20, 2009 - 10:59am akers



SCALE 1:24,000



**SOURCE:**

United States Geological Survey  
7.5 Minute Topographic Map:  
Oakland East & Oakland West  
Quadrangle




**FACILITY:**

FORMER 76 STATION 3538  
411 WEST MacARTHUR BOULEVARD  
OAKLAND, CALIFORNIA


**VICINITY MAP**

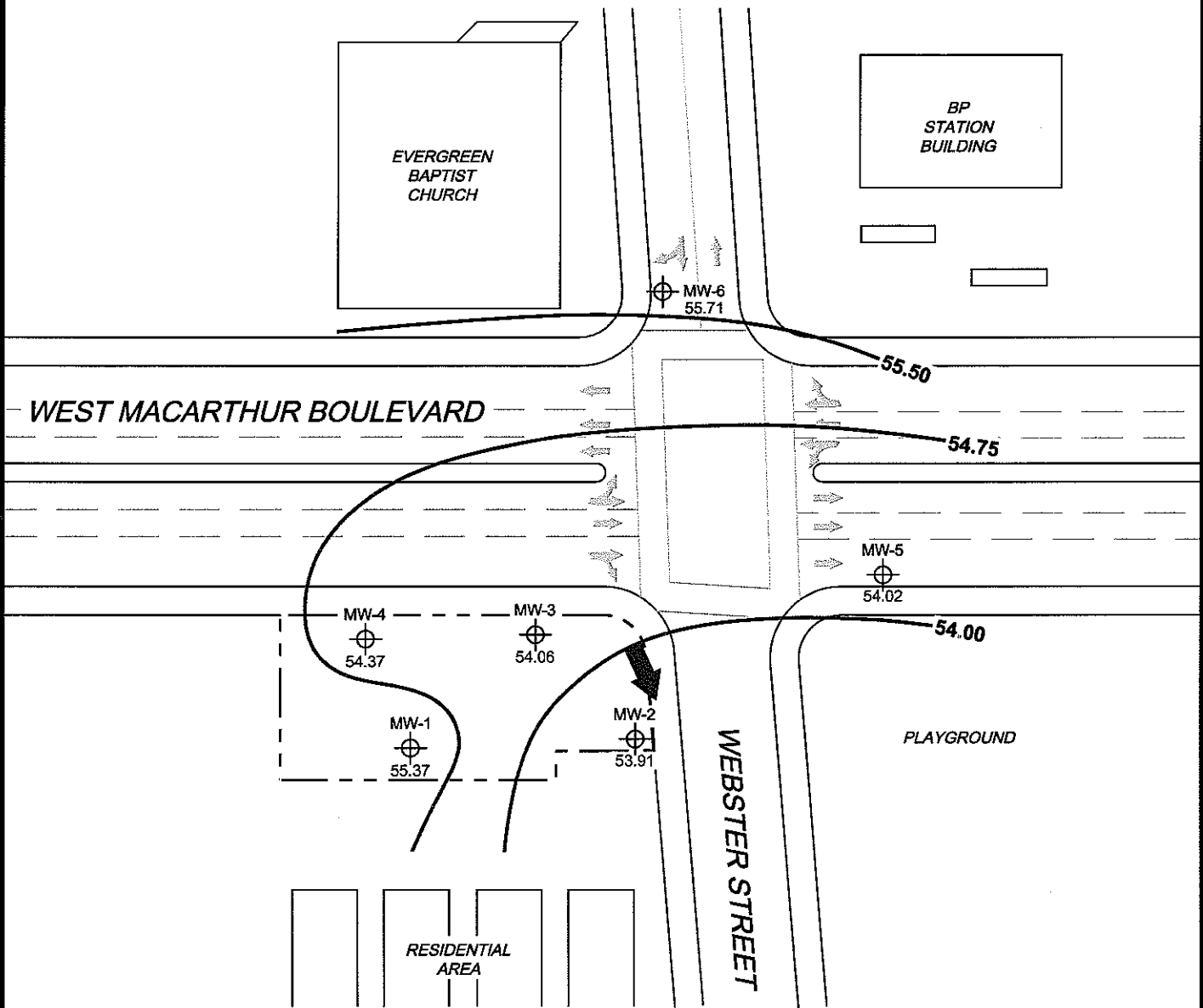
**FIGURE 1**

**LEGEND**

MW-6  Monitoring Well with Groundwater Elevation (feet)

55.50  Groundwater Elevation Contour

 General Direction of Groundwater Flow



**NOTES:**

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

SCALE (FEET)



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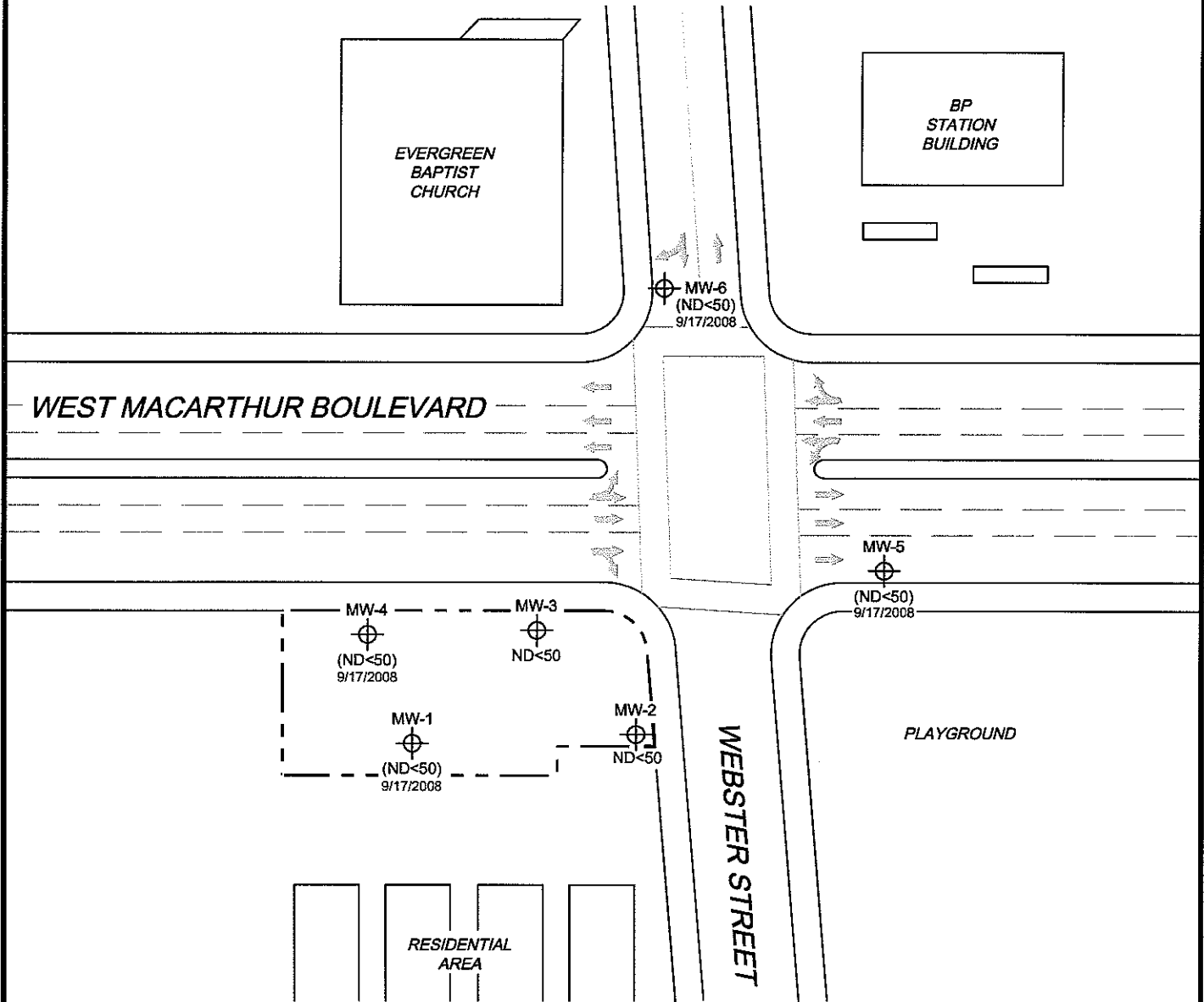
PROJECT: 165521  
 FACILITY:  
 FORMER 76 STATION 3538  
 411 WEST MACARTHUR BLVD.  
 OAKLAND, CALIFORNIA

**GROUNDWATER ELEVATION  
 CONTOUR MAP**  
 March 27, 2009

**FIGURE 2**

**LEGEND**

MW-6  Monitoring Well with Dissolved-Phase TPH-G Concentration ( $\mu\text{g/l}$ )



**NOTES:**

TPH-G = total petroleum hydrocarbons as gasoline.  $\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report. ( ) = representative historical value. Results obtained using EPA Method 8015M.

SCALE (FEET)



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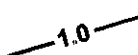
PROJECT: 165521  
 FACILITY:  
 FORMER 76 STATION 3538  
 411 WEST MACARTHUR BLVD.  
 OAKLAND, CALIFORNIA

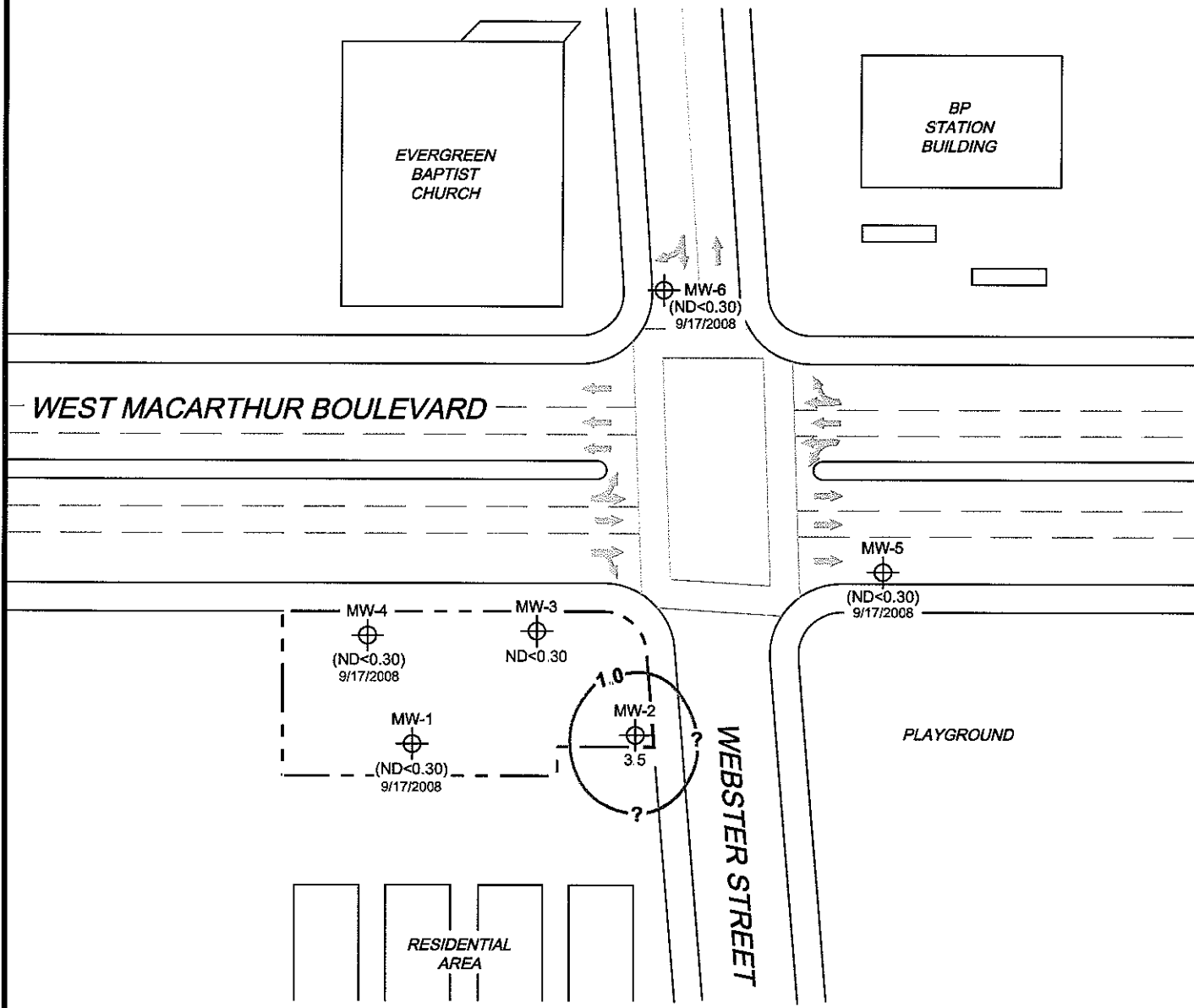
**DISSOLVED-PHASE TPH-G  
 CONCENTRATION MAP  
 March 27, 2009**

**FIGURE 3**

**LEGEND**

MW-6  Monitoring Well with Dissolved-Phase Benzene Concentration ( $\mu\text{g/l}$ )

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



**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.  
 ( ) = representative historical value.

SCALE (FEET)



MS=1:1 3538-003 L:\Graphics\ICMS NORTH-SOUTH\3000\3538-QMS-(NEW).dwg Apr 11, 2009 - 1:05pm bschmidt




PROJECT: 165521

FACILITY:  
 FORMER 76 STATION 3538  
 411 WEST MACARTHUR BLVD.  
 OAKLAND, CALIFORNIA

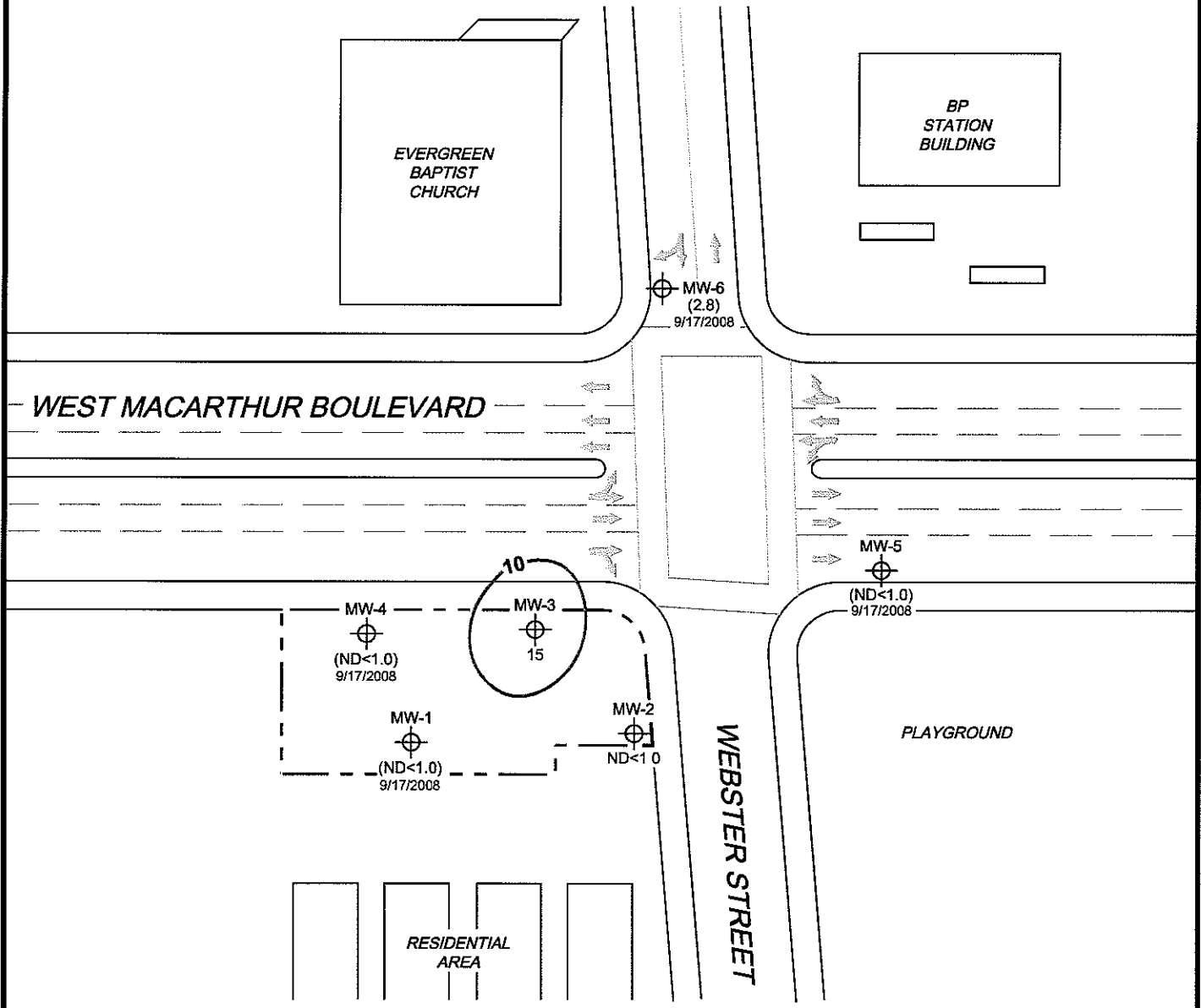
**DISSOLVED-PHASE BENZENE  
 CONCENTRATION MAP**  
 March 27, 2009

**FIGURE 4**

**LEGEND**

MW-6  Monitoring Well with Dissolved-Phase MTBE Concentration ( $\mu\text{g/l}$ )

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



**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. ( ) = representative historical value. Results obtained using EPA Method 8021B.

SCALE (FEET)



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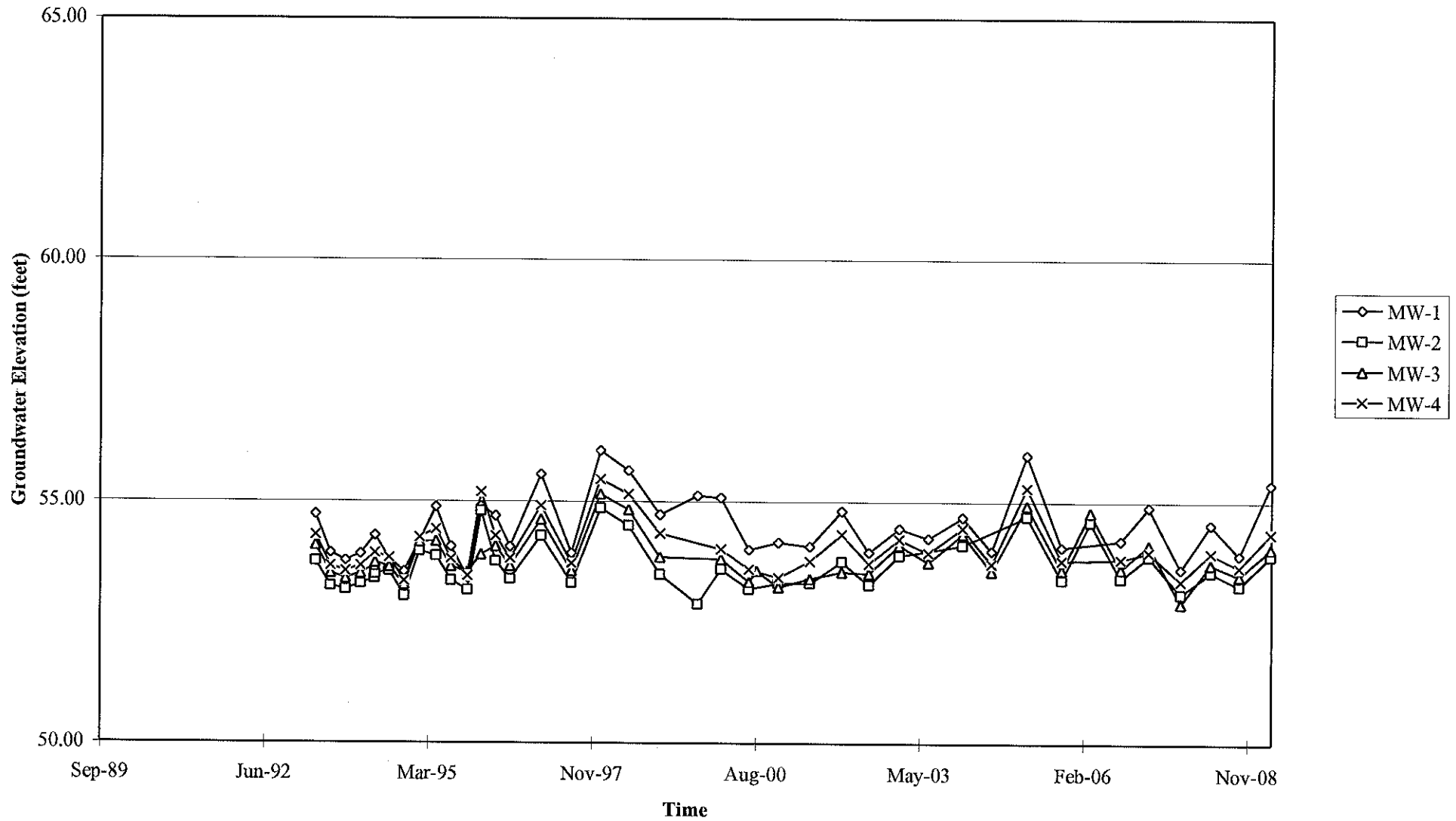
PROJECT: 165521  
 FACILITY:  
 FORMER 76 STATION 3538  
 411 WEST MACARTHUR BLVD.  
 OAKLAND, CALIFORNIA

**DISSOLVED-PHASE MTBE  
 CONCENTRATION MAP  
 March 27, 2009**

**FIGURE 5**

# GRAPHS

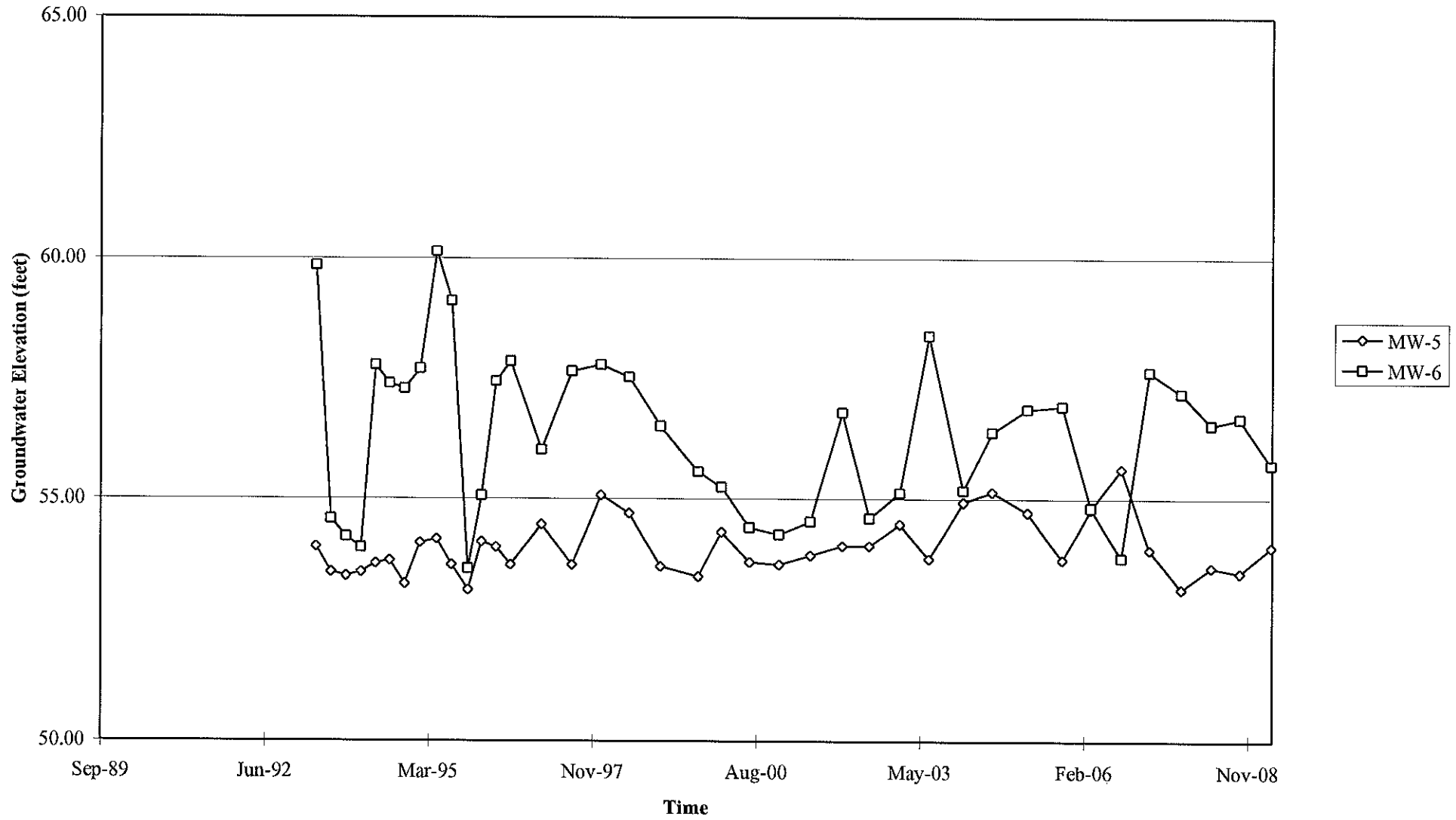
Groundwater Elevations vs. Time  
Former 76 Station 3538



Elevations may have been corrected for apparent changes due to resurvey

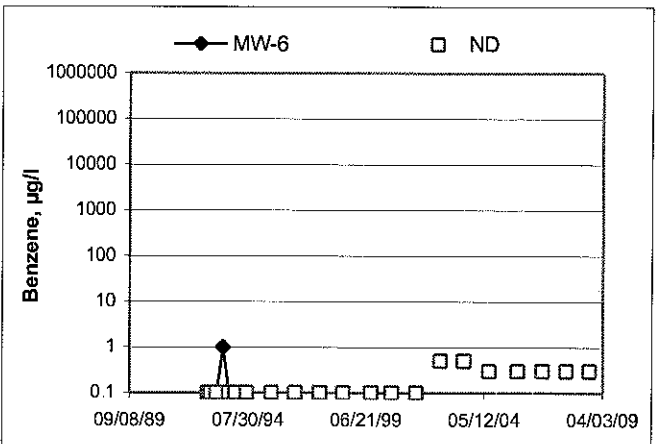
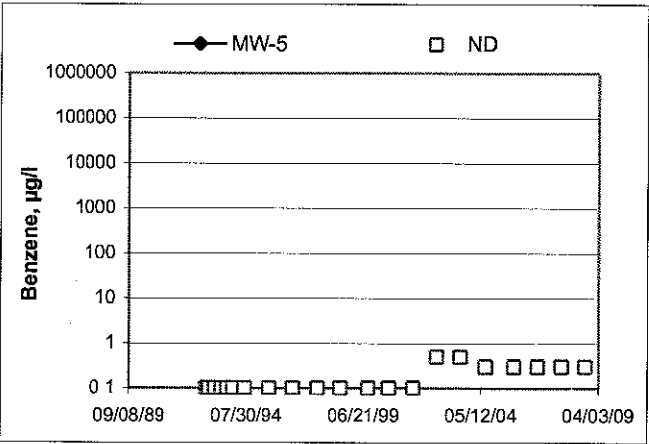
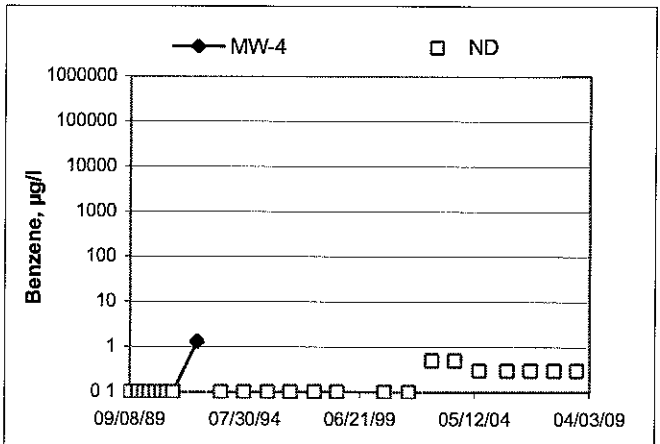
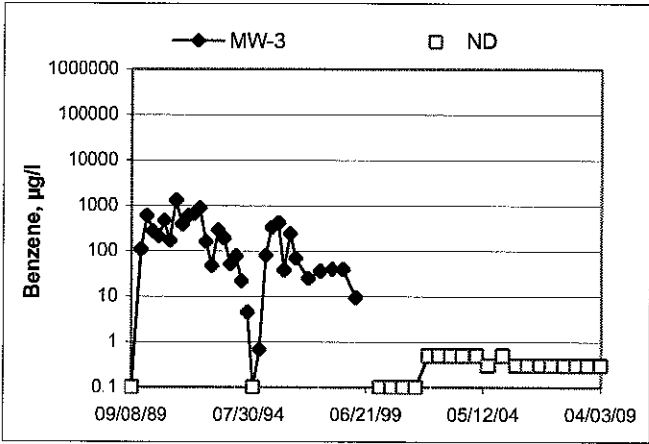
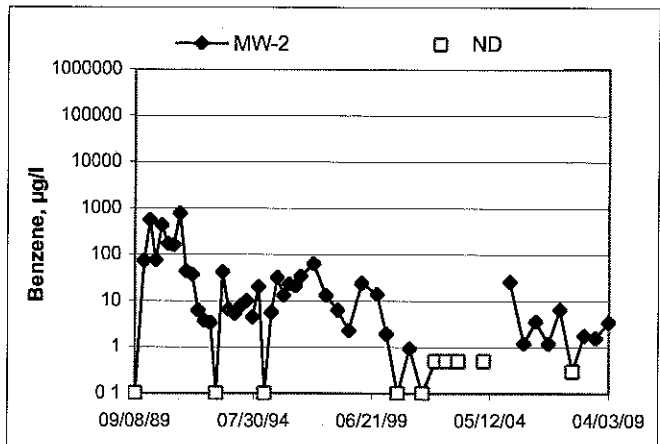
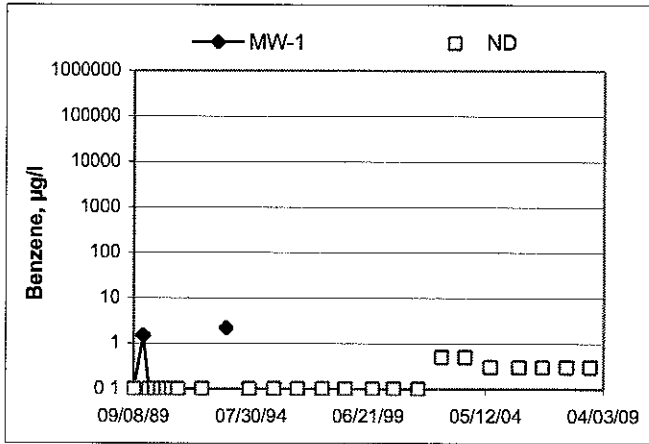


Groundwater Elevations vs. Time  
Former 76 Station 3538



Elevations may have been corrected for apparent changes due to resurvey

**Benzene Concentrations vs Time**  
Former 76 Station 3538



# GENERAL FIELD PROCEDURES

## **Groundwater Monitoring and Sampling Assignments**

For each site, IRC 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 IRC'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. IRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurements 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, sample time, and the sampler's 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 is specified on the TSR. In general, wells are gauged beginning with the least affected well and ending with the well that has the 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 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 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: Ricky H      Job #/Task #: 165521 / FARO      Date: 03/27/09  
 Site # 3538      Project Manager A. 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-4	X	0915	24.68	17.17	—	—	N/S	2" monitor only
mw-1	X	0918	23.97	16.75	—	—	N/S	2"
mw-5	X	0927	30.09	17.14	—	—	N/S	2" ↓
mw-6	X	0936	30.10	15.66	—	—	N/S	2" ↓
mw-3	X	0941	27.14	17.34	—	—	1045	2"
mw-2	X	0955	24.42	17.43	—	—	1040	2"

FIELD DATA COMPLETE  QA/QC  COC  WELL BOX CONDITION SHEETS   
 MANIFEST  DRUM INVENTORY  TRAFFIC CONTROL



# GROUNDWATER SAMPLING FIELD NOTES

Technician: Ricky H.

Site: 3538

Project No.: 165521

Date: 03/27/09

Well No. mw. 3

Purge Method: H.B

Depth to Water (feet): 17.34

Depth to Product (feet): —

Total Depth (feet): 27.14

LPH & Water Recovered (gallons): —

Water Column (feet): 8<sup>ft</sup> 9.80

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 19.30

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F/C)	pH	D O (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
1028			2	753.8	20.3	7.40			
			4	797.7	19.9	6.79			
	1037		6	808.6	19.7	6.68			
Static at Time Sampled			Total Gallons Purged			Sample Time			
17.34			6			1045			
<b>Comments:</b>									

Well No. mw. 3

Purge Method: H, B

Depth to Water (feet): 17.43<sup>est</sup> 17.43

Depth to Product (feet): —

Total Depth (feet): 24.43<sup>est</sup> 24.42

LPH & Water Recovered (gallons): —

Water Column (feet): 6.99

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 18.93

1 Well Volume (gallons): 2"

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F/C)	pH	D O (mg/L)	ORP	Turbidity
<b>Pre-Purge</b>									
1014			2	793.3	20.2	7.15			
			4	788.6	19.3	6.78			
	1025		6	786.0	19.2	6.32			
Static at Time Sampled			Total Gallons Purged			Sample Time			
13 <sup>est</sup> 17.43			6			1046			
<b>Comments:</b>									





**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949



Date of Report: 04/07/2009

Anju Farfan

TRC

21 Technology Drive  
Irvine, CA 92618

RE. 3538

BC Work Order: 0904121

Invoice ID: B059944

Enclosed are the results of analyses for samples received by the laboratory on 3/30/2009. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers  
Client Service Rep

Authorized Signature

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*  
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Certifications: California - ELAP Certification Number 1186; Nevada Administrative Code - NAC-445A



TRC  
21 Technology Drive  
Irvine, CA 92618

Project: 3538  
Project Number: 4511010869  
Project Manager: Anju Farfan

Reported: 04/07/2009 13:30

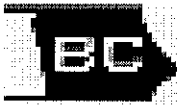
### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			Receive Date:	Sampling Date:	Sample Depth:	Sample Matrix:	Delivery Work Order:	Global ID:	Location ID (FieldPoint):	Matrix:	Sample QC Type (SACode):	Cooler ID:
0904121-01	COC Number:	---		03/30/2009 22:15	03/27/2009 10:45	---	Water		T0600101472	MW-3	W	CS	
	Project Number:	3538											
	Sampling Location:	---											
	Sampling Point:	MW-3											
	Sampled By:	TRCI											
0904121-02	COC Number:	---		03/30/2009 22:15	03/27/2009 10:00	---	Water		T0600101472	MW-2	W	CS	
	Project Number:	3538											
	Sampling Location:	---											
	Sampling Point:	MW-2											
	Sampled By:	TRCI											

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Certifications: California - ELAP Certification Number 1186; Nevada Administrative Code - NAC-445A





TRC  
21 Technology Drive  
Irvine, CA 92618

Project: 3538  
Project Number: 4511010869  
Project Manager: Anju Fartan

Reported: 04/07/2009 13:30

### Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 0904121-01		Client Sample Name: 3538, MW-3, 3/27/2009 10:45:00AM											
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.30		EPA-8021	04/02/09	04/07/09 02:08	JJH	GC-V4	i	BSD0149	ND	
Toluene	ND	ug/L	0.30		EPA-8021	04/02/09	04/07/09 02:08	JJH	GC-V4	1	BSD0149	ND	
Ethylbenzene	ND	ug/L	0.30		EPA-8021	04/02/09	04/07/09 02:08	JJH	GC-V4	1	BSD0149	ND	
<b>Methyl t-butyl ether</b>	<b>15</b>	<b>ug/L</b>	<b>1.0</b>		<b>EPA-8021</b>	<b>04/02/09</b>	<b>04/07/09 02:08</b>	<b>JJH</b>	<b>GC-V4</b>	<b>1</b>	<b>BSD0149</b>	<b>ND</b>	
Total Xylenes	ND	ug/L	0.60		EPA-8021	04/02/09	04/07/09 02:08	JJH	GC-V4	1	BSD0149	ND	
Gasoline Range Organics (C4 - C12)	ND	ug/L	50		Luft	04/02/09	04/07/09 02:08	JJH	GC-V4	1	BSD0149	ND	
a,a,a-Trifluorotoluene (PID Surrogate)	92.0	%	70 - 130 (LCL - UCL)		EPA-8021	04/02/09	04/07/09 02:08	JJH	GC-V4	1	BSD0149		
a,a,a-Trifluorotoluene (FID Surrogate)	93.4	%	70 - 130 (LCL - UCL)		Luft	04/02/09	04/07/09 02:08	JJH	GC-V4	1	BSD0149		

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 Certifications: California - ELAP Certification Number 1186; Nevada Administrative Code - NAC-445A



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Environmental Testing Laboratory Since 1949

TRC  
21 Technology Drive  
Irvine, CA 92618

Project: 3538  
Project Number: 4511010869  
Project Manager: Anju Fartan

Reported: 04/07/2009 13:30

## Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 0904121-02		Client Sample Name: 3538, MW-2, 3/27/2009 10:00:00AM											
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	3.5	ug/L	0.30		EPA-8021	04/02/09	04/07/09 02:32	JJH	GC-V4	1	BSD0149	ND	
Toluene	ND	ug/L	0.30		EPA-8021	04/02/09	04/07/09 02:32	JJH	GC-V4	1	BSD0149	ND	
Ethylbenzene	ND	ug/L	0.30		EPA-8021	04/02/09	04/07/09 02:32	JJH	GC-V4	i	BSD0149	ND	
Methyl t-butyl ether	ND	ug/L	1.0		EPA-8021	04/02/09	04/07/09 02:32	JJH	GC-V4	i	BSD0149	ND	
Total Xylenes	ND	ug/L	0.60		EPA-8021	04/02/09	04/07/09 02:32	JJH	GC-V4	i	BSD0149	ND	
Gasoline Range Organics (C4 - C12)	ND	ug/L	50		Luft	04/02/09	04/07/09 02:32	JJH	GC-V4	i	BSD0149	ND	
a,a,a-Trifluorotoluene (PID Surrogate)	84.2	%	70 - 130 (LCL - UCL)		EPA-8021	04/02/09	04/07/09 02:32	JJH	GC-V4	1	BSD0149		
a,a,a-Trifluorotoluene (FID Surrogate)	74.1	%	70 - 130 (LCL - UCL)		Luft	04/02/09	04/07/09 02:32	JJH	GC-V4	1	BSD0149		

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TRC  
21 Technology Drive  
Irvine, CA 92618

Project: 3538  
Project Number: 4511010869  
Project Manager: Anju Farfan

Reported: 04/07/2009 13:30

## Purgeable Aromatics and Total Petroleum Hydrocarbons

### Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery Lab Quals
Benzene	BSD0149	Matrix Spike	0903406-53	0	37.008	40.000	ug/L		92.5		70 - 130
		Matrix Spike Duplicate	0903406-53	0	37.042	40.000	ug/L	0.1	92.6	20	70 - 130
Toluene	BSD0149	Matrix Spike	0903406-53	0	36.536	40.000	ug/L		91.3		70 - 130
		Matrix Spike Duplicate	0903406-53	0	36.708	40.000	ug/L	0.5	91.8	20	70 - 130
Ethylbenzene	BSD0149	Matrix Spike	0903406-53	0	34.993	40.000	ug/L		87.5		70 - 130
		Matrix Spike Duplicate	0903406-53	0	35.245	40.000	ug/L	0.7	88.1	20	70 - 130
Methyl t-butyl ether	BSD0149	Matrix Spike	0903406-53	0	38.583	40.000	ug/L		96.5		70 - 130
		Matrix Spike Duplicate	0903406-53	0	38.904	40.000	ug/L	0.8	97.3	20	70 - 130
Total Xylenes	BSD0149	Matrix Spike	0903406-53	0	106.44	120.00	ug/L		88.7		70 - 130
		Matrix Spike Duplicate	0903406-53	0	107.51	120.00	ug/L	1.0	89.6	20	70 - 130
Gasoline Range Organics (C4 - C12)	BSD0149	Matrix Spike	0903406-53	0	863.14	1000.0	ug/L		86.3		70 - 130
		Matrix Spike Duplicate	0903406-53	0	867.40	1000.0	ug/L	0.5	86.7	20	70 - 130
a,a,a-Trifluorotoluene (PID Surrogate)	BSD0149	Matrix Spike	0903406-53	ND	35.483	40.000	ug/L		88.7		70 - 130
		Matrix Spike Duplicate	0903406-53	ND	35.326	40.000	ug/L		88.3		70 - 130
a,a,a-Trifluorotoluene (FID Surrogate)	BSD0149	Matrix Spike	0903406-53	ND	35.617	40.000	ug/L		89.0		70 - 130
		Matrix Spike Duplicate	0903406-53	ND	35.902	40.000	ug/L		89.8		70 - 130

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## Purgeable Aromatics and Total Petroleum Hydrocarbons

### Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Benzene	BSD0149	BSD0149-BS1	LCS	36.944	40.000	0.30	ug/L	92.4		85 - 115		
Toluene	BSD0149	BSD0149-BS1	LCS	36.580	40.000	0.30	ug/L	91.4		85 - 115		
Ethylbenzene	BSD0149	BSD0149-BS1	LCS	34.595	40.000	0.30	ug/L	86.5		85 - 115		
Methyl t-butyl ether	BSD0149	BSD0149-BS1	LCS	39.000	40.000	1.0	ug/L	97.5		85 - 115		
Total Xylenes	BSD0149	BSD0149-BS1	LCS	107.02	120.00	0.60	ug/L	89.2		85 - 115		
Gasoline Range Organics (C4 - C12)	BSD0149	BSD0149-BS1	LCS	885.14	1000.0	50	ug/L	88.5		85 - 115		
a,a,a-Trifluorotoluene (PID Surrogate)	BSD0149	BSD0149-BS1	LCS	35.484	40.000		ug/L	88.7		70 - 130		
a,a,a-Trifluorotoluene (FID Surrogate)	BSD0149	BSD0149-BS1	LCS	36.090	40.000		ug/L	90.2		70 - 130		

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Reported: 04/07/2009 13:30

## Purgeable Aromatics and Total Petroleum Hydrocarbons

### Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Benzene	BSD0149	BSD0149-BLK1	ND	ug/L	0.30		
Toluene	BSD0149	BSD0149-BLK1	ND	ug/L	0.30		
Ethylbenzene	BSD0149	BSD0149-BLK1	ND	ug/L	0.30		
Methyl t-butyl ether	BSD0149	BSD0149-BLK1	ND	ug/L	1.0		
Total Xylenes	BSD0149	BSD0149-BLK1	ND	ug/L	0.60		
Gasoline Range Organics (C4 - C12)	BSD0149	BSD0149-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (PID Surrogate)	BSD0149	BSD0149-BLK1	71.7	%	70 - 130 (LCL - UCL)		
a,a,a-Trifluorotoluene (FID Surrogate)	BSD0149	BSD0149-BLK1	73.5	%	70 - 130 (LCL - UCL)		

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**BC Laboratories, Inc.**

Environmental Testing Laboratory Since 1949



TRC  
21 Technology Drive  
Irvine, CA 92618

Project: 3538  
Project Number: 4511010869  
Project Manager: Anju Farfan

Reported: 04/07/2009 13:30

**Notes And Definitions**

MDL Method Detection Limit  
ND Analyte Not Detected at or above the reporting limit  
PQL Practical Quantitation Limit  
RPD Relative Percent Difference

Submission #: 09104121

SHIPPING INFORMATION  
 Federal Express  UPS  Hand Delivery   
 BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER  
 Ice Chest  None   
 Box  Other  (Specify) \_\_\_\_\_

Refrigerant: Ice  Blue Ice  None  Other  Comments:

Custody Seals Ice Chest  Containers  None  Comments:

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  
 YES  NO

Emissivity: 0.98 Container: VOA Thermometer ID: T1103

Date/Time 3:30-09

Temperature: A 0.9 c/c 0.7 °C

Analyst Init JLV

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
OT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
PT NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PT PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A	3	A	3						
OT EPA 413.1/413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
OT EPA 508/608/8080										
OT EPA 515.1/8150										
OT EPA 525										
OT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
OT EPA 548										
OT EPA 549										
OT EPA 632										
OT EPA 8015M										
OT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments:

Sample Numbering Completed By: ARMB Date/Time: 3/31/09-850

A = Actual / C = Corrected

**BC LABORATORIES, INC.**

4100 Atlas Court Bakersfield, CA 93308  
 (661) 327-4911 FAX (661) 327-1918

**CHAIN OF CUSTODY**

**Analysis Requested**

09104121

Bill to: Conoco Phillips/ TRC		Consultant Firm: TRC		MATRIX (GW) Ground-water (S) Soil (WW) Waste-water (SL) Sludge	BTEX/MTBE by 8021B TPH GAS by 8015M TPH DIESEL by 8015 8260 full list w/ oxygenates BTEX/MTBE/OXYS BY 8260B ETHANOL by 8260B TPH -G by GC/MS	Turnaround Time Requested
Address: 411 West MacArthur Blvd		21 Technology Drive Irvine, CA 92618-2302 Attn: Anju Farfan				
City: Oakland		4-digit site#: 3538				
State: CA Zip:		Workorder #: 61178-4511010869				
Conoco Phillips Mgr: Terry Grayson		Project #: 165521				
		Sampler Name: Ricky H.				

Lab#	Sample Description	Field Point Name	Date & Time Sampled							
-1		MW-3	03/27/09 1045	GW	X	X				STD
-2		MW-2	↓ 1000	↓	X	X				↓

CHK BY [Signature] DISTRIBUTION [Signature]  
 SUB OUT [Signature]

Comments:  GLOBAL ID: 70600101472	Relinquished by: (Signature) [Signature]	Received by: Refriser [Signature]	Date & Time 03/27/09 1200
	Relinquished by: (Signature) [Signature]	Received by: [Signature]	Date & Time 3/30/09 1330
	Relinquished by: (Signature) Ross Wilcox 3/30/09	Received by: R. Ruy [Signature]	Date & Time 3.30.09 1921

R. Ruy 3.30.09 2215 [Signature] 3-30-09 2215



## **STATEMENTS**

### **Purge Water Disposal**

Non-hazardous groundwater produced during purging and sampling of monitoring wells was accumulated at TRC's groundwater monitoring facility at Concord, California, for transportation by a licensed carrier, 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 containing a significant amount of liquid-phase hydrocarbons was accumulated separately in drums for transportation and disposal by others.

### **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.