



RECEIVED

10:59 am, Nov 03, 2008

Alameda County  
Environmental Health

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818  
phone 916-558-7600  
fax 916-558-7639

July 30, 2007

Ms. Donna Drogos  
Supervising Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502

RE: Quarterly Status Report - Second Quarter 2007  
76 Service Station #1871  
96 MacArthur Boulevard, Oakland, California  
Alameda County

Dear Ms. Drogos,

I declare under the penalty of perjury that to the best of my knowledge the information and / or recommendations in the attached report is / are true and correct.

Please feel free to contact me if you have any questions or require additional information.

Respectfully,

Bill Borgh  
Site Manager – Risk Management and Remediation

Attachment



1590 Solano Way  
#A  
Concord, CA 94520

925.688.1200 PHONE  
925.688.0388 FAX

www.TRCSolutions.com

July 30, 2007

TRC Project No. 126015

Ms. Donna Drogos  
Supervising Hazardous Materials Specialist  
Alameda County Health Care Services  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

**RE: Quarterly Status Report - Second Quarter 2007  
76 Service Station #1871, 96 MacArthur Boulevard, Oakland,  
California  
Alameda County**

Dear Ms. Drogos:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the Second Quarter 2007 Status Report for the subject site. The site is an operating service station located on the north corner of the intersection of MacArthur Boulevard and Harrison Street in Oakland, California.

#### **PREVIOUS ASSESSMENTS**

May 1992: Roux Associates (Roux) performed a dispenser and product piping modification project.

October 1992: Roux installed three 4-inch diameter groundwater monitoring wells onsite.

January 1993: Quarterly groundwater sampling and monitoring began.

August 1994: A 280-gallon single-wall steel waste oil underground storage tank (UST) was replaced with a 550-gallon double-wall fiberglass UST. Conformation sampling was performed.

February 1996: The Alameda County Health Care Service Agency (ACHCSA) approved Unocal's request to reduce the groundwater monitoring and sampling frequency from quarterly to semiannually (KEI, 1996).

March 1996: Two monitoring wells were installed at the site.

May 1998: John's Excavating of Santa Rosa, California removed all underground and aboveground equipment and facilities. Facilities included two 12,000-gallon double-wall steel gasoline USTs, one 550-gallon double-wall steel waste oil UST, two hydraulic lifts, two dispenser islands and related single-wall product piping, and one service station building.

Gettler-Ryan Inc. (GR) personnel performed soil and groundwater sampling activities in conjunction with the station demolition. A total of 1,252.78 tons of soil were removed from the site during demolition activities and transported to Forward Landfill for disposal.

September 1998: Two wells that were damaged during site demolition activities were drilled out and the boreholes backfilled with neat cement to grade. In addition, one soil boring was advanced onsite to a total depth of 16.5 feet below ground surface (bgs). Groundwater was encountered at approximately 10.5 feet bgs. Soil and groundwater samples were collected for development of a Risk Based Corrective Action (RBCA) evaluation for the site.

February 1999: GR performed a RBCA evaluation. The RBCA evaluation concluded that, since the site was scheduled for construction of a fuel dispensing facility covered with concrete and asphalt and no groundwater receptors were located within a 1/4 mile radius of the site, the potential threat to public health and environment was not of significant concern.

June 1999: GR installed three offsite monitoring wells, and advanced nine soil borings on and near the site. Depth-discrete soil and groundwater samples were collected.

April 2002: An ozone injection system was installed and activated at the site.

September 2003: Operations and maintenance responsibilities for the remediation system were transferred to SECOR International Inc. (SECOR).

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

January 2006: Operations and maintenance responsibilities for the remediation system were transferred to Environ Strategy Consultants, Inc. International Inc. (Environ Strategy).

### **SENSITIVE RECEPTORS**

No potential receptors for impacted groundwater were identified within a 1/4 mile radius of the site during the RBCA evaluation. No other sensitive receptor surveys have been conducted for the site.

### **MONITORING AND SAMPLING**

One onsite and six offsite wells are currently monitored quarterly. Six wells were gauged and sampled this quarter. The groundwater flow this quarter was towards the southwest at a calculated hydraulic gradient of 0.05 feet per foot. The groundwater flow direction this quarter is consistent with historical trends as shown in the attached rose diagram of historical groundwater flow directions.

### **CHARACTERIZATION STATUS**

Total petroleum hydrocarbons as gasoline (TPH-g) were detected in three of the six wells sampled at a maximum concentration of 6,300 micrograms per liter ( $\mu\text{g}/\text{l}$ ) in onsite well MW-1. Benzene was detected in one of six wells sampled at a concentration of 16  $\mu\text{g}/\text{l}$  in onsite well MW-1. Methyl tertiary butyl ether (MTBE) was detected in five of the six wells sampled at a maximum concentration of 410  $\mu\text{g}/\text{l}$  in offsite well MW-9.



Hydrocarbon impacts are not fully delineated offsite. Groundwater samples from downgradient monitoring wells MW-9 and MW-10 contained MTBE at concentrations of 410 µg/l and 5.6 µg/l, respectively. Groundwater from downgradient well MW-11 did not contain benzene, MTBE, or TPH-g at concentrations above laboratory reporting limits.

### REMEDIATION STATUS

April 2002: GR installed an ozone sparging system utilizing 10 ozone sparge wells completed to maximum depths of 25 to 30 feet bgs. The system was activated on April 8, 2002. Since then approximately 118 pounds of ozone have been injected.

### RECENT CORRESPONDENCE

No correspondence this quarter.

### CURRENT QUARTER ACTIVITIES

June 29, 2007: 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.

April through June 2007: Environ Strategy Consultants Inc. (ESCI) performed operations and maintenance activities on the ozone sparging system throughout the quarter. System downtime occurred during the quarter due to a tripped ozone sensor. During the second quarter the system operated for a total of 661 hours (30% runtime) and injected approximately 5.95 pounds of ozone. Since system startup on April 8, 2002, the system has operated for a total of 13,059 hours and injected approximately 118 pounds of ozone. No waste was generated this quarter.


### CONCLUSIONS AND RECOMMENDATIONS

TRC recommends continuing quarterly monitoring and sampling to assess plume stability and concentration trends and continuing operation of the ozone sparging system to reduce hydrocarbon mass in the subsurface. TRC will work with the ozone system operations and maintenance contractor to expedite installation of an available KVA retrofit kit in order to improve overall ozone system performance.

TRC is in the process of preparing a Site Conceptual Model, per Alameda County Health Care Services (ACHCS) guidelines, to summarize site conditions and to determine if data gaps exist. The SCM will be submitted to the ACHCS during the third quarter 2007.

If you have any questions regarding this report, please call me at (925) 688-2488.

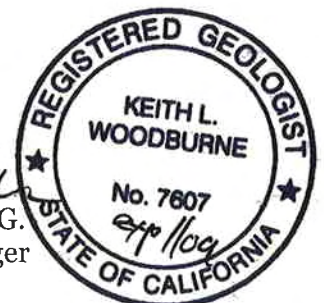
Sincerely,



Ted Moise  
Senior Project Manager



Keith Woodburne, P.G.  
Senior Project Manager

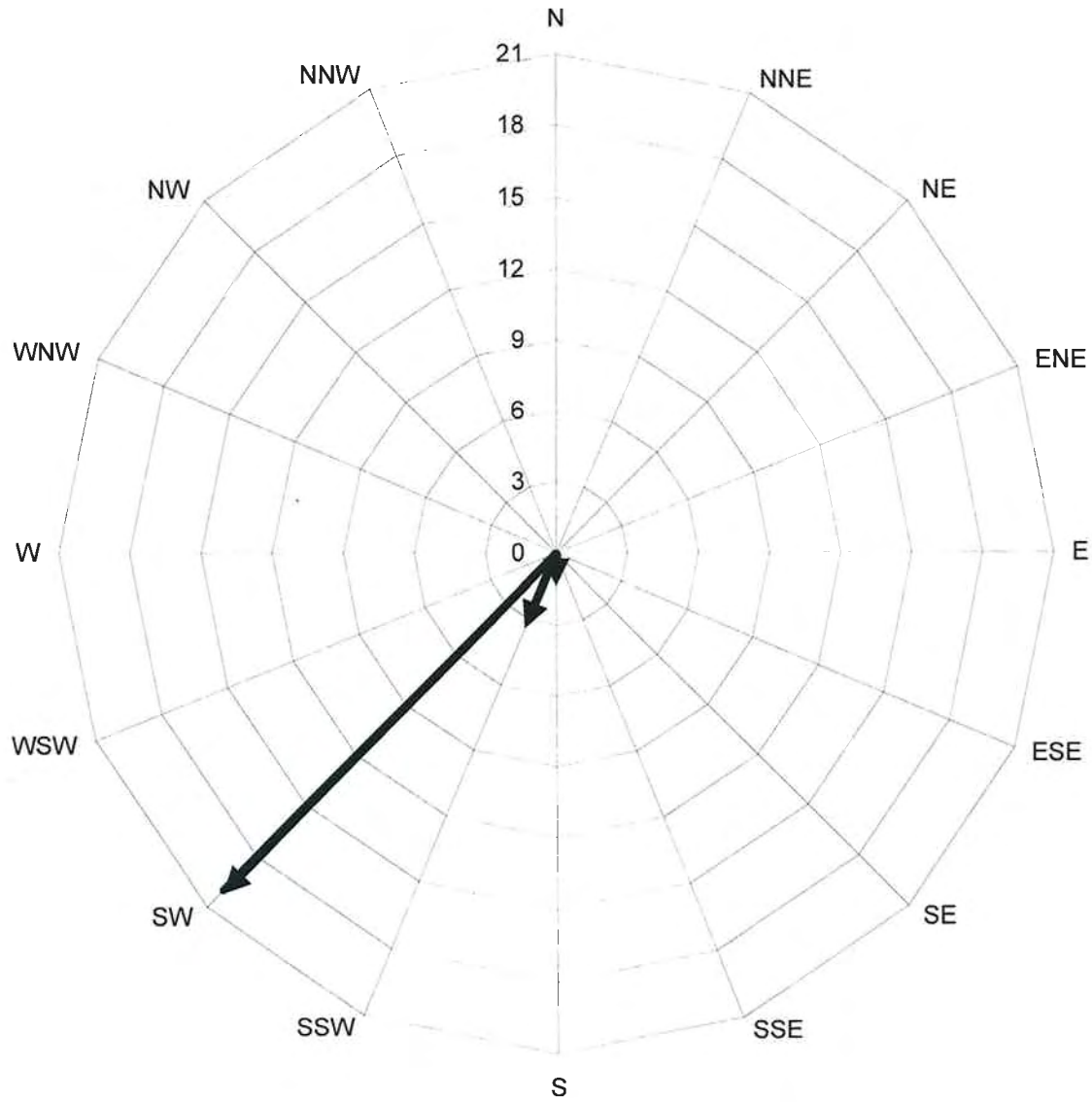


Attachments:

Historical Groundwater Flow Directions – January 2001 through June 2007  
Quarterly Monitoring Report, April through June 2007 (TRC, July 16, 2007)  
Second Quarter 2007, Ozone Injection System O&M Report (ESCI, July 13, 2007)

cc: William Borgh, ConocoPhillips (via electronic upload, without attachments)

**Historical Groundwater Flow Directions  
for Tosco (76) Service Station No. 1871  
January 2001 through June 2007**



July 13, 2007

30 Hughes, Suite 209  
Irvine, California 92618  
tel 949.581.3222  
fax 949.581.3207

Mr. Keith Woodburne, R.G.  
Senior Project Geologist  
TRC Solutions, Inc.  
1590 Solano Way, Suite A  
Concord, CA 94520

Project No. 328-A

**Second Quarter 2007**  
**Ozone Injection System O&M Report**  
**76 Service Station No. 1871**  
96 MacArthur Boulevard  
Oakland, California

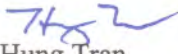
Dear Mr. Woodburne:

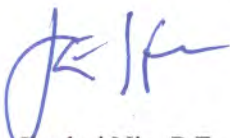
Environ Strategy Consultants, Inc. is pleased to submit this ozone injection system operation and maintenance (O&M) report for 76 Service Station No. 1871, located at 96 MacArthur Boulevard, Oakland, California. An ozone injection system was started on June 23, 2003 to remediate hydrocarbon-impacted groundwater.

Type of Remediation System:	Ozone Injection System
Operation Data During: Reporting Period: Apr. 1, 2007 – Jun. 30, 2007	Operated 91 days during the period Hours of Operation: 661
System Operation Data Since Startup: June 23, 2003	Total Hours of Operation: 13,059
Note: System down time occurred throughout the second quarter due to tripped ozone sensor.	

Environ Strategy appreciates the opportunity to be of service. If you have any questions or require additional information regarding this report, please do not hesitate to call us at (949) 581-3222.

Respectfully submitted,

  
Hung Tran  
Staff Engineer

  
Jinghui Niu, P.E.  
Principal Engineer



**Second Quarter 2007 O&M Report**

**76 Service Station No. 1871**

July 13, 2007

Page 2

---

Attachments: Figure - Site Plan

Table 1 - Ozone Injection - System Operation Data

Table 2 - Ozone Injection - Groundwater Monitoring Data

Graph 1 - MW-1 TPHg, Benzene, and MtBE Groundwater Concentrations

Graph 2 - MW-7 TPHg, Benzene, and MtBE Groundwater Concentrations

Appendix A – Field Notes

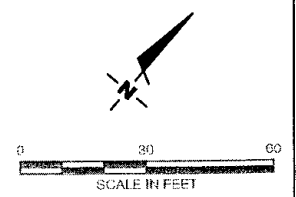
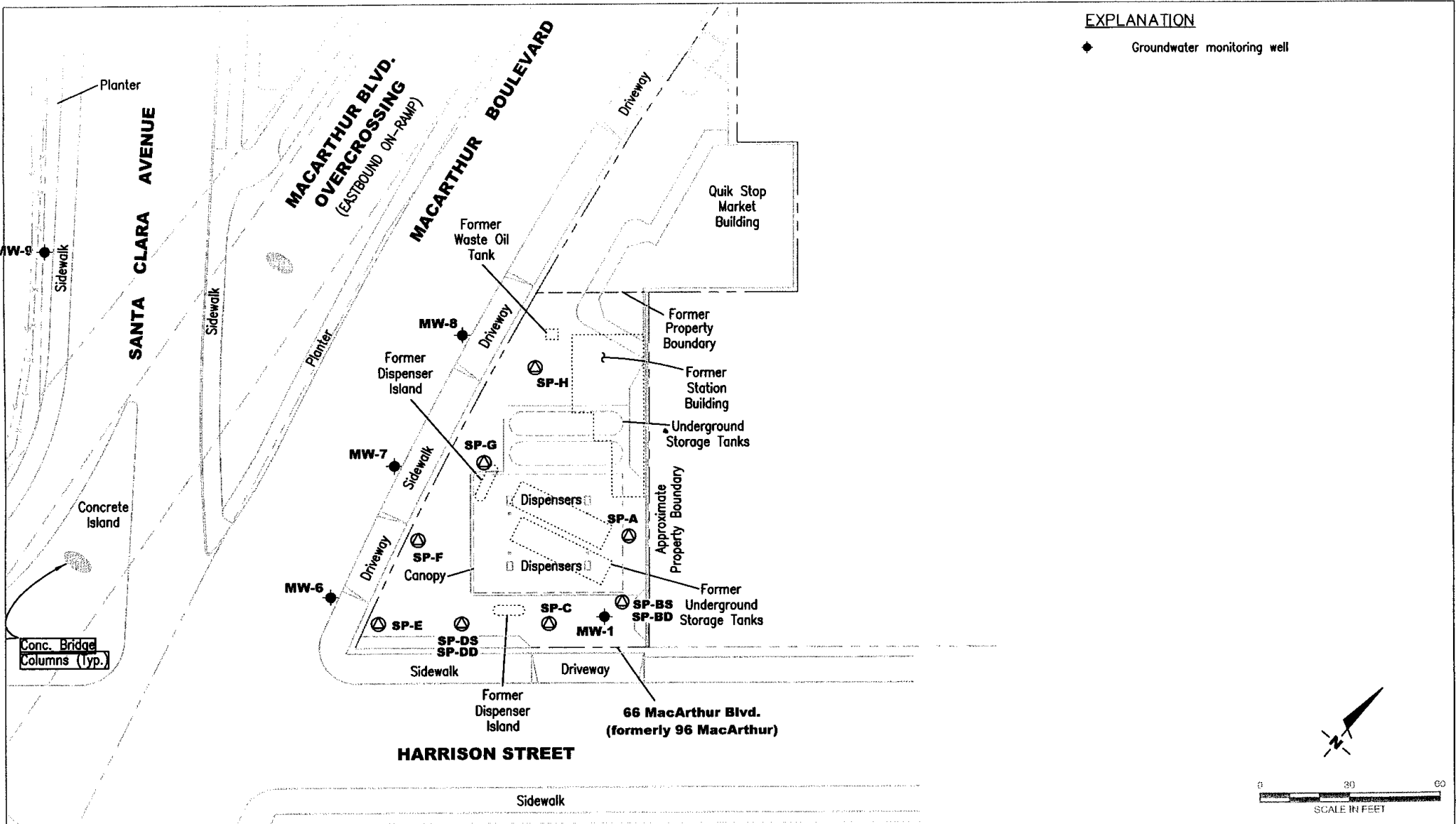
cc: Bill Borgh, ConocoPhillips Company (electronic copy)




**Figure**

**EXPLANATION**

◆ Groundwater monitoring well



Source: Caltrans As-Built Plans and Right of Way Maps confirmed by field observations

DRAWN BY: MD CHECKED: AD APPROVED: RB DATE: 3/22/04 PR JOB NO: 77CP-00004.01 CAD FILE: SITEPLAN	PREPARED BY: environ strategy consultants, inc. 	PREPARED FOR: CONOCOPHILLIPS 76 STATION #1871 96 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA	FIGURE 1  SITE PLAN
--	--	--	---------------------------

## **Tables**

**Table 1**  
**Ozone Injection - System Operation Data**  
76 Service Station No. 1871  
96 MacArthur Blvd., Oakland, California  
Page 1 of 3

Date	Notes	OZONE SPARGE SYSTEM						OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10	
		System Status (On/Off)		Hourmeter Reading	Period Online Factor	Cumulative Online Factor	Ozone Injected (lbs)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)
		Arrival	Departure															
6/23/03		On	On	8807.26	--	0.95	--	20	18	19	20	21	23	20	26	14	26	
7/16/03		Off	On	8850.46	0.09	0.91	0.39	27	18	31	40	28	29	31	38	24	25	
8/30/03		On	On	9180.61	0.35	0.86	2.97	17	15	17	19	19	19	20	26	19	26	
9/18/03		On	On	9327.43	0.37	0.84	1.32	13.5	14.7	17.0	16.3	16.0	19.7	16.8	19.8	15.7	20	
10/16/03		On	On	--	--	0.84	--	27.0	19.5	40.8	39.0	40.8	38.5	34.2	46.4	24.2	39.8	
11/17/03		On	On	9696.55	0.29	0.81	--	11.0	20.0	17.0	18.0	17.5	17.0	16.0	21.0	51.0	22.0	
12/5/03		On	On	9804.98	0.29	0.80	0.98	33.0	21.0	44.0	40.0	43.0	39.0	33.5	44.0	26.0	33.0	
1/16/04		On	On	10471.28	0.76	0.79	6.00	12.5	11.0	18.5	16.5	17.5	17.0	16.0	20.0	16.0	20.0	
2/3/04		On	On	10727.69	0.68	0.79	2.31	12.3	11.5	18.2	16.5	18.2	17.3	16.0	19.0	16.0	18.2	
3/24/04		On	On	11424.95	0.66	0.78	6.28	31.0	18.3	37.5	26.0	34.0	33.2	32.3	41.5	23.0	31.0	
4/14/04		On	On	11676.10	0.57	0.77	2.26	32.0	19.0	38.7	26.0	37.7	37.1	32.8	41.8	23.8	29.5	
4/15/04	a	On	On	11685.29	0.44	0.77	0.08	--	--	--	--	--	--	--	--	--	--	
4/16/04	a	On	On	11693.80	0.41	0.77	0.08	--	--	--	--	--	--	--	--	--	--	
4/19/04	a	On	On	11742.90	0.78	0.77	0.44	--	--	--	--	--	--	--	--	--	--	
4/23/04	a	On	On	11773.10	0.36	0.77	0.27	--	--	--	--	--	--	--	--	--	--	
5/4/04		Off	On	11837.70	0.28	0.76	0.58	32.2	20.5	39.4	36.2	38.1	32.0	33.5	60.0	25.8	33.1	
5/11/04		On	On	11950.51	0.77	0.76	1.02	32.5	20.0	38.5	29.8	38.8	39.5	34.8	60.0	23.5	35.9	
6/14/04	b,c	On	On	12464.64	0.72	0.76	4.63	20.0	21.0	38.8	27.2	37.0	38.2	35.2	60.0	24.0	32.1	
7/29/04	d	On	On	844.62	0.99	0.77	7.60	22	15	--	26	35	34	35	--	25	33	
8/12/04	e	On	On	1075.97	0.98	0.78	2.08	--	--	--	--	--	--	--	--	--	--	
9/10/04		On	On	1490.23	0.85	0.78	3.73	32	32	33	33	21	24	30	20	26	30	
10/5/04		On	On	1868.83	0.90	0.78	3.41	31	32	33	31	22	23	31	21	26	28	
11/5/04		On	On	2360.90	0.93	0.79	4.43	22	26	12	18	12	22	30	32	26	22	
12/2/04	f	Off	Off	2802.02	0.97	0.79	3.97	--	--	--	--	--	--	--	--	--	--	
1/13/05		Off	On	2802.07	0.00	0.76	0.00	23	27	15	20	15	23	31	34	28	25	
2/25/05	g	Off	Off	2802.42	0.00	0.73	0.00	--	--	--	--	--	--	--	--	--	--	
3/8/05	h,i	Off	Off	2802.42	0.00	0.72	0.00	--	--	--	--	--	--	--	--	--	--	
4/5/05	i	Off	Off	2802.42	0.00	0.70	0.00	--	--	--	--	--	--	--	--	--	--	
5/4/05	j	Off	On	2802.49	0.00	0.69	0.00	14	11	16	12	20	27	25	29	25	31	
6/2/05	k	On	On	3407.97	1.00	0.69	5.45	35	25	Off	40	41	36	35	34	27	25	
7/7/05	k,l,m	On	On	4067.42	1.29	0.71	5.94	31	23	Off	30	Off	26	32	28	25	Off	
8/26/05	n	On	On	4665.98	0.81	0.72	5.39	13	13	Off	14	Off	13	12	12	13	Off	
9/23/05	o	On	On	4947.97	0.69	0.71	2.54	16	15	Off	Off	Off	16	16	16	16	Off	
10/23/05	p	On	On	5264.28	0.72	0.71	2.85	16	16	Off	Off	Off	16	16	16	16	Off	
11/11/05	q,r	On	Off	0.90	--	0.71	--	--	--	--	--	--	--	--	--	--	--	
11/15/05	s	Off	On	0.90	0.00	0.71	0.00	35	16	16	22	23	18	23	23	23	24	
12/6/05	t	Off	On	2.49	0.00	0.70	0.01	22	20	19	24	24	22	26	23	24	25	
1/4/06	u	Off	On	6	0.01	0.69	0.03	20	20	18	17	23	20	25	19	22	20	
1/18/06	u	Off	On	203	0.67	0.69	1.77	22	19	19	20	19	18	21	22	22	23	
2/1/06	v	Off	On	316	0.38	0.68	1.02	20	20	18	22	22	18	23	23	22	25	
2/15/06	v	Off	On	344	0.10	0.68	0.25	20	19	18	17	19	20	23	19	22	20	
3/1/06	v	Off	On	417	0.25	0.67	0.66	21	20	19	19	21	17	24	23	21	21	
3/16/06	u	Off	On	501	0.27	0.67	0.76	20	19	18	17	19	20	23	20	22	20	
3/29/06	u	Off	On	560	0.22	0.67	0.53	20	20	19	19	20	21	25	21	22	21	
4/16/06	u	Off	On	624	0.17	0.66	0.58	20	19	18	17	19	20	23	20	23	21	

**Table 1**  
**Ozone Injection - System Operation Data**  
76 Service Station No. 1871  
96 MacArthur Blvd., Oakland, California  
Page 2 of 3

Date	Notes	OZONE SPARGE SYSTEM						OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10	
		System Status (On/Off)		Hourmeter Reading	Period Online Factor	Cumulative Online Factor	Ozone Injected (lbs)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	
		Arrival	Departure															
4/25/06	u	Off	On	718	0.50	0.66	0.85	20	20	19	18	20	22	24	21	22	20	
5/9/06	u	Off	On	776	0.20	0.65	0.52	20	19	19	17	19	21	22	20	22	20	
5/23/06	u	Off	On	834	0.20	0.65	0.52	19	20	18	18	20	20	23	20	23	21	
6/6/06	u	Off	On	1042	0.71	0.65	1.87	20	19	18	17	19	20	23	20	22	20	
6/20/06	w	Off	On	1206	0.56	0.65	1.48	19	20	18	18	19	20	25	21	23	21	
7/7/06	x	Off	Off	1313	0.30	0.65	0.96	--	--	--	--	--	--	--	--	--	--	
7/28/06	y	Off	On	1313	0.00	0.64	0.00	19	17	16	19	24	17	22	19	21	23	
8/15/06	u	Off	On	1616	0.80	0.64	2.73	19	17	17	16	19	19	23	19	21	21	
8/29/06	u	Off	On	1801	0.63	0.64	1.67	19	19	17	17	21	18	21	19	22	23	
9/12/06	u	Off	On	2022	0.75	0.64	1.99	23	19	17	16	19	19	25	19	22	21	
9/22/06	u	Off	On	2204	0.87	0.64	1.64	21	21	19	20	23	21	26	23	25	27	
10/4/06	u	Off	On	2313	0.43	0.64	0.98	18	18	17	18	18	18	25	23	22	21	
10/18/06	u	Off	On	2401	0.30	0.64	0.79	20	19	17	16	18	19	20	20	21	27	
10/31/06	w	Off	On	2516	0.42	0.63	1.04	22	20	19	20	19	19	23	21	25	23	
11/14/06	u	Off	On	2636	0.41	0.63	1.08	18	18	17	17	18	18	22	24	22	24	
11/28/06	u	Off	On	2744	0.37	0.63	0.97	20	20	19	20	22	21	25	25	22	23	
12/14/06	u	Off	On	2801	0.17	0.63	0.51	19	19	18	18	19	19	22	22	23	22	
12/26/06	u	Off	On	2906	0.42	0.62	0.95	20	20	19	20	21	20	25	25	20	24	
1/15/07	u	Off	On	2983	0.18	0.62	0.69	19	20	18	18	19	19	22	23	22	22	
1/29/07	v	Off	On	3076	0.32	0.62	0.84	20	20	19	20	20	20	24	21	23	24	
2/6/07	u	Off	On	3156	0.48	0.62	0.72	19	20	18	17	19	19	21	24	21	23	
2/21/07	u	Off	On	3303	0.47	0.62	1.32	20	21	20	20	18	21	23	21	25	23	
3/5/07	u	Off	On	3378	0.30	0.61	0.68	19	20	18	18	18	20	21	23	22	22	
3/19/07	u	Off	On	3476	0.33	0.61	0.88	20	21	20	19	18	21	23	24	23	24	
4/4/07	u	Off	On	3515	0.12	0.61	0.35	19	20	18	17	18	19	21	21	21	22	
4/18/07	u	Off	On	3606	0.31	0.60	0.82	21	21	20	20	18	21	24	24	24	23	
5/10/07	u	Off	On	3676	0.15	0.60	0.63	19	20	19	17	18	19	20	23	20	21	
5/25/07	u	Off	On	3758	0.26	0.60	0.74	22	21	20	19	19	21	22	22	22	23	
6/4/07	u	Off	On	3801	0.18	0.59	0.39	18	20	18	18	17	19	19	20	21	20	
6/18/07		On	On	4137	1.00	0.60	3.02	20	20	19	19	19	20	22	22	20	22	
Sparge time per cycle (min)								7	7	7	7	7	7	7	7	7	7	7
Number of Cycles per Day								18	18	18	18	18	18	18	18	18	18	18
<b>Reporting Period: Second Quarter 2007 (4/01/07 to 6/30/07)</b>																		
Total Hours Operational: 13,059																		
Total Pounds Ozone Injected: 118																		
Period Hours Operational: 661																		
Period Percent Operational: 30%																		
Period Pounds Ozone Injected: 5.95																		

**Table 1**  
**Ozone Injection - System Operation Data**  
76 Service Station No. 1871  
96 MacArthur Blvd., Oakland, California  
Page 3 of 3

**Definitions:**

psi	Pounds per square inch
--	Data not available
NA	Not applicable
lbs	Pounds

**Notes:**

- System cycles through program 18 times per day, for 53% utilization
- a Troubleshooting time counter
  - b Hourmeter replaced
  - c Solenoid 8 has high pressure, taken offline
  - d Solenoid 3 leaking, taken off line
  - e Pressures not properly recorded
  - f Ozone generator hose ruptured on effluent side to solenoid manifold. No Readings.
  - g System down due to bad GFI
  - h New GFI was installed.
  - i Fan in compressor broken and tubing from compressor to manifold needs to be replaced. System left off until repairs made.
  - j Installed new motor fan and manifold fittings, restarted system.
  - k OZ-3 turned off due to high pressure of over 60 psi.
  - l OZ-5 too brittle. Left off until lines are replaced.
  - m OZ-10 turned off due to leak in secondary containment
  - n Hourmeter reading not correct, will check next visit
  - o Hourmeter not working properly.
  - p Pressure gauge stuck at 16 psi.
  - q New hourmeter, panel fan, and GFCI installed
  - r Fuse blown in ozone generator, system left off
  - s Replaced tubing to all wells and replaced ozone generator circuit board and pressure gauge
  - t System down due to tripped GFI; foam on door may have been pressing reset button. Foam removed.
  - u Ozone sensor tripped; system restarted.
  - v Rainbird meter malfunction.
  - w System down time due to tripped GFI; system restarted.
  - x System off due to bad compressor.
  - y Compressor repaired; system restarted.

**Table 2**  
**Ozone Injection - Groundwater Monitoring Data**  
76 Service Station No. 1871  
96 MacArthur Blvd., Oakland, California  
Page 1 of 1

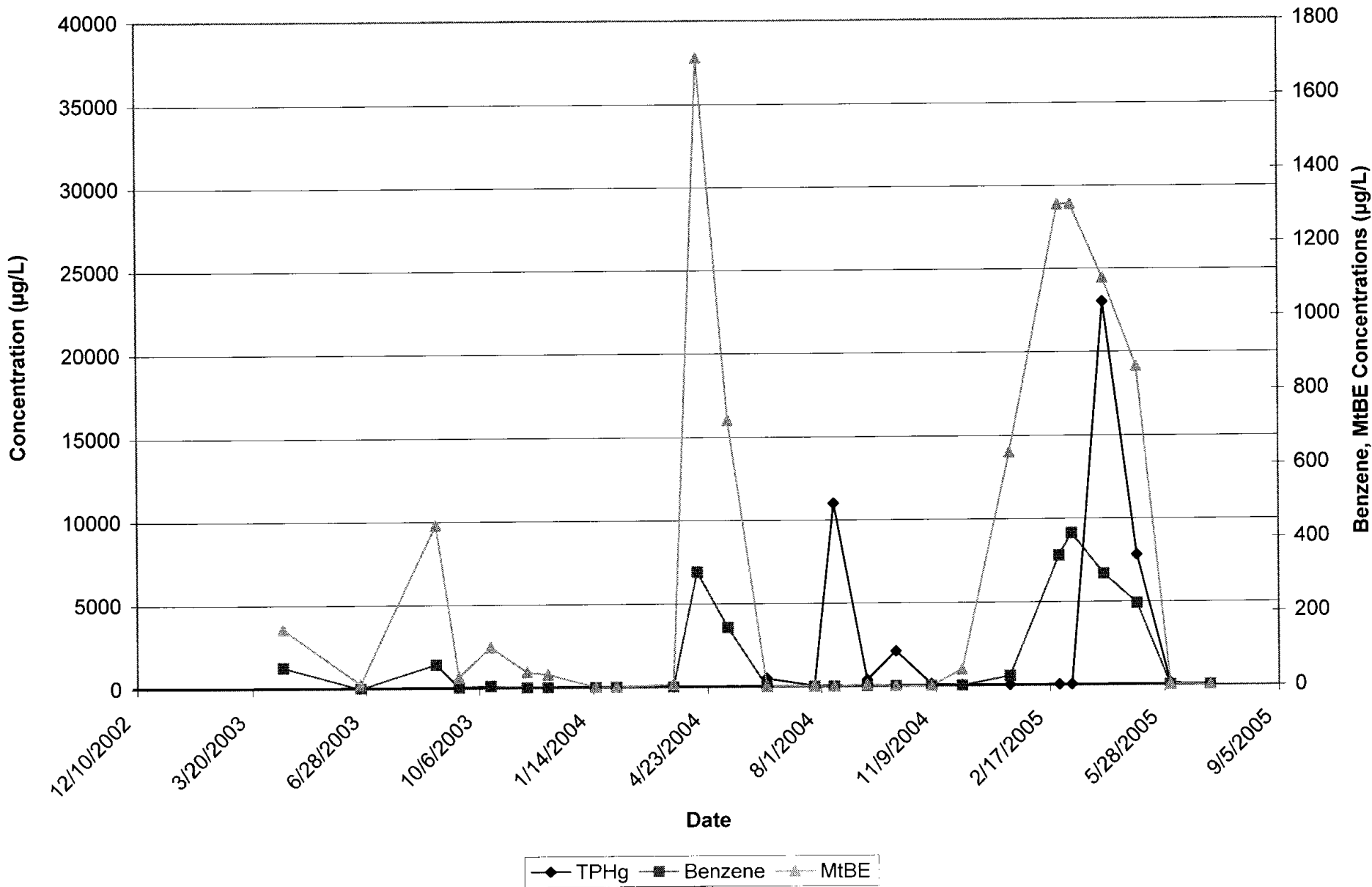
Date	Notes	Monitoring Well: MW-1								Monitoring Well: MW-7							
		ORP (mV)	DO (mg/l)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (total) (µg/L)	MtBE (µg/L)	ORP (mV)	DO (mg/l)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (total) (µg/L)	MtBE (µg/L)
4/16/2003	a	NM	NM	510	57	0.62	29	61	160	NM	NM	<25,000	<250	<250	<250	<500	37,000
6/23/2003	a	NM	NM	75	<0.50	<0.50	<0.50	5.3	12	NM	NM	20,000	260	<0.50	<0.50	<1.0	20,000
8/29/2003	a	NM	NM	11,000	64	<10	330	1,400	440	NM	NM	<10,000	<100	<100	<100	<200	24,000
9/18/2003		NM	NM	390	2.3	<0.50	3.6	31	30	NM	NM	--	--	--	--	--	--
10/16/2003		NM	NM	2,100	6.0	<0.50	24.0	120	110	NM	NM	--	--	--	--	--	--
11/17/2003		NM	NM	130	0.51	<0.50	2.1	7.9	43	NM	NM	16,000	<130	<130	<130	<250	17,000
12/5/2003		NM	NM	<50	<0.50	<0.50	<0.50	<1.0	36	NM	NM	12,000	<100	<100	<100	<200	19,000
1/16/2004	b	NM	NM	<50	<0.50	<0.50	<0.50	<1.0	<2.0	NM	NM	17,000	160	270	<130	<250	19,000
2/3/2004		238	NM	<50	<0.50	<0.50	<0.50	<1.0	<2.0	72	NM	10,000	<25	<25	<25	<50	15,000
3/24/2004	b	169	NM	55	<0.50	<0.50	0.80	2.9	7.8	56	NM	13,000	<100	<100	<100	<200	15,000
4/14/2004	b	0.4	NM	23,000	310	10	590	2400	1700	42	NM	9,000	<50	<50	<50	<100	11,000
5/11/2004	c	NM	NM	7,800	160	<10	170	700	720	-3	NM	8,300	<50	<50	<50	<100	11,000
6/14/2004		20	5.25	110	<0.50	<0.50	1.0	6.4	3.4	35	1.45	<5,000	<50	<50	<50	<100	6,500
7/26/2004		NM	NM	<50	<0.50	<0.50	<0.50	<1.0	3.2	NM	NM	<5,000	<50	<50	<50	<100	3,100
8/12/2004		171	0.07	<50	<0.50	<0.50	<0.50	<1.0	0.80	117	0.06	2,100	<10	<10	<10	<20	2,700
9/10/2004		180	0.08	<50	<0.50	<0.50	<0.50	<1.0	5.7	122	0.07	3,100	<13	<13	<13	<25	4,400
10/5/2004		175	0.09	<50	<0.50	<0.50	<0.50	<1.0	<0.50	117	0.08	<50	<0.50	<0.50	<0.50	<1.0	7.1
11/5/2004	d	117	0.05	<50	<0.50	<0.50	<0.50	<1.0	0.89	210	0.06	50	<0.50	<0.50	<0.50	<1.0	1.1
12/2/2004		109	0.03	83	0.83	<0.50	<0.50	1.2	44	214	0.03	180	1.6	<0.50	66	4.5	51
1/13/2005		105	0.04	1,100	26	1.2	2.10	70	630	201	0.05	1,000	25	1	1.9	68	460
2/25/2005	c,f	--	2.67	24,000	350	10	820	2,200	1,300	21	2.05	680	<2.0	<2.0	2.3	58	2,500
3/8/2005	g	-35	4.43	23,000	410	<10	1,100	2,300	1,300	NR	NR	--	--	--	--	--	--
4/5/2005		-30	4.56	34,000	300	<10	910	2,000	1,100	135	6.53	<5,000	<50	<50	<50	<1.00	19,000
5/4/2005		-59	2.40	26,000	220	7.4	790	2,100	860	-24	1.13	<2,000	<0.50	<0.50	<0.50	<1.0	7,100
6/2/2005		-20	7.34	<50	<0.50	<0.50	<0.50	<1.0	3.5	-12	1.01	3500	<0.50	<0.50	<0.50	<1.0	4,000
7/7/2005	i,j	142	7.42	<50	<0.50	<0.50	<0.50	<1.0	0.61	154	1.40	5000	<0.50	<0.50	<0.50	<1.0	8,900
9/23/2005		16	7.77	<50	<0.50	<0.50	<0.50	<1.0	<0.50	56	1.39	<500	<5.0	<5.0	<5.0	<10	1,900
10/23/2005		154	7.13	<50	<0.50	<0.50	<0.50	<1.0	0.56	191	1.59	<250	<2.5	<2.5	<2.5	<5	680
11/1/2005	k	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Definitions:	Notes:
TPHg = Total petroleum hydrocarbons as gasoline	-- Data not available
MtBE = Methyl tert-butyl ether	NM Not Measured
µg/L = Micrograms per liter	a Sampled by Gettler-Ryan, Inc.
	b Hydrocarbon in gasoline range does not match laboratory gasoline standard.
ORP = Oxidation Reduction Potential	c ORP reading under the range
DO = Dissolved Oxygen	d Quantity of unknown hydrocarbon(s) in sample based on gasoline.
mV = Millivolts	e Data not available at time of reporting
mg/l = Milligrams per liter	f MW-7 Estimated value of MtBE; concentration exceeded the calibration of analysis
	g Car parked on MW-7.
	h Data not available at time of reporting
	i Siloxane peaks were found in the sample which are not believed to be gasoline related. If they were to be quantified as gasoline, the concentration would be 58 ug/L. (MW-1).
	j The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern. (MW-1)
	k Sampling discontinued at the request of ConocoPhillips

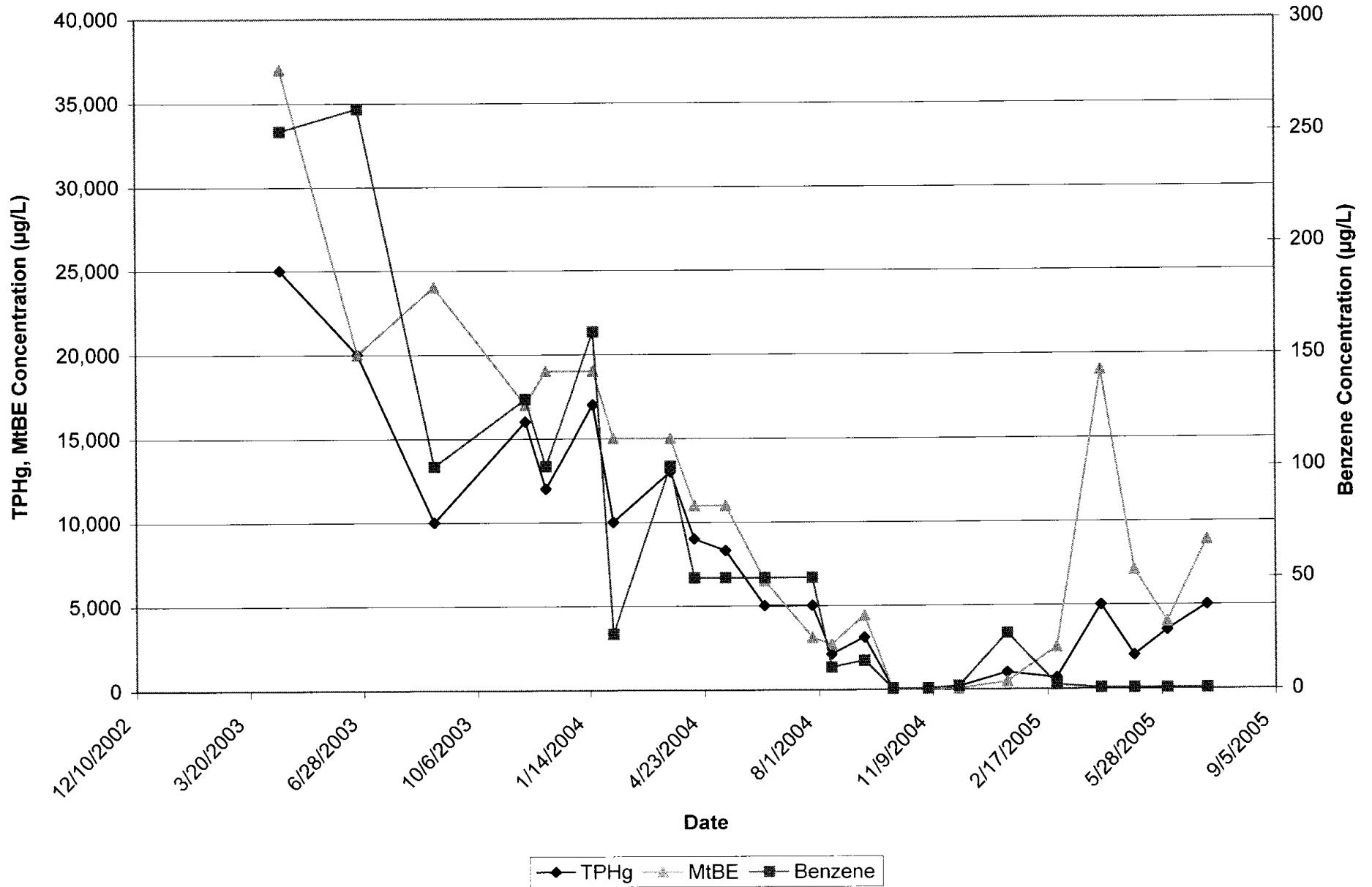
## **Graphs**



**Graph 1**  
**MW-1 TPHg, Benzene, and MtBE Groundwater Concentrations**  
 76 Service Station No. 1871  
 96 MacArthur Blvd., Oakland, California



**Graph 2**  
**MW-7 TPHg, Benzene, and MtBE Groundwater Concentrations**  
 76 Service Station No. 1871  
 96 MacArthur Blvd., Oakland, California



**Appendix A**  
**Field Notes**

ConocoPhillips Ozone Injection System Data

Station No. T 1871

City: Oakland

Date	Notes/ Date Sampled	Status ON/OFF	Cycles/ Day	Hour Meter	Well ID: <u>OZ-1</u>				Well ID: <u>OZ-2</u>				Well ID: <u>OZ-3</u>			
					Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)
4 Apr 07	O <sub>3</sub> Sensor	off/on	18	3515	19		7		20		7		18		7	
18 Apr 07	O <sub>3</sub> Sensor	off/on	18	3606	21		7		21		7		20		7	
10 May 07	O <sub>3</sub> Sensor	off/on	18	3676	19		7		20		7		19		7	
25 May 07	O <sub>3</sub> Sensor	off/on	18	3758	22		7		21		7		20		7	
4 June 07	O <sub>3</sub> Sensor	off/on	20	3801	18		7		20		7		18		7	
18 June 07		on/on	20	4137	20		7		20		7		19		7	

Date	Well ID: <u>OZ-4</u>				Well ID: <u>OZ-5</u>				Well ID: <u>OZ-6</u>				Well ID: <u>OZ-7</u>			
	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)
4 Apr 07	17		7		18		7		19		7		21		7	
18 Apr 07	20		7		18		7		21		7		24		7	
10 May 07	17		7		18		7		19		7		20		7	
25 May 07	19		7		19		7		21		7		22		7	
4 June 07	18		7		17		7		19		7		19		7	
18 June 07	19		7		19		7		20		7		22		7	

Date	Well ID: <u>OZ-8</u>				Well ID: <u>OZ-9</u>				Well ID: <u>OZ-10</u>				Well ID:			
	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)	Pressure (psi)	Temp. (°F)	Run Time (min)	Flowrate (acfm)
4 Apr 07	21		7		21		7		22		7					
18 Apr 07	24		7		24		7		23		7					
10 May 07	23		7		20		7		21		7					
25 May 07	22		7		22		7		23		7					
4 June 07	20		7		21		7		20		7					
18 June 07	22		7		20		7		22		7					

Ozone Injection System Maintenance and Inspection Log

Date	Check Hose Fittings Valves	Measure Blower Running Amperage	Check Electrical Fittings and Controller Operation	Adjust Controller Program	Particle Filter Inspect/ Replace	Check Flow Pressure Assembly	Check Well Head Connect	Test all Safety Override Systems
18 Apr 07	OK	—	OK	—	OK	OK	OK	OK
25 May 07	OK	—	OK	—	OK	OK	OK	OK
18 June 07	OK	—	OK	OK	OK	OK	OK	OK

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



21 Technology Drive  
Irvine, CA 92618

949.727.9336 PHONE  
949.727.7399 FAX

[www.TRCSolutions.com](http://www.TRCSolutions.com)

DATE: July 16, 2007

TO: ConocoPhillips Company  
76 Broadway  
Sacramento, California 95818

ATTN: MR. BILL BORGH

SITE: 76 STATION 1871  
96 MACARTHUR BOULEVARD  
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT  
APRIL THROUGH JUNE 2007

Dear Mr. Borgh:

Please find enclosed our Quarterly Monitoring Report for 76 Station, located at 96 MacArthur Boulevard, 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: Mr. Keith Woodburne, TRC (3 copies)

Enclosures  
20-0400/1871R15.QMS

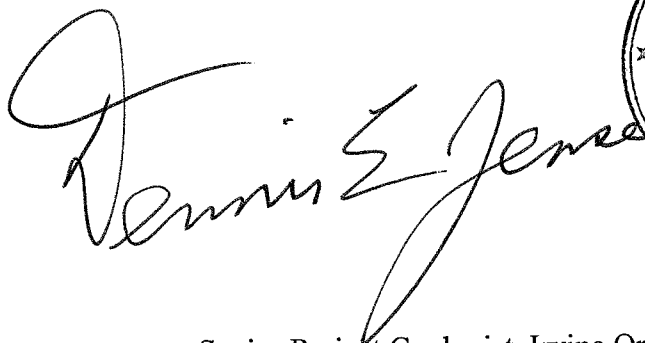
**QUARTERLY MONITORING REPORT  
APRIL THROUGH JUNE 2007**

76 STATION 1871  
96 MacArthur Boulevard  
Oakland, California

Prepared For:

Mr. Bill Borgh  
CONOCOPHILLIPS COMPANY  
76 Broadway  
Sacramento, California 95818

By:



Senior Project Geologist, Irvine Operations  
July 16, 2007



## LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Contents of Tables Table 1: Current Fluid Levels and Selected Analytical Results Table 1a: Additional Current Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 2a: Additional Historic Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPH-G (GC/MS) 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 Field Monitoring Data Sheet - 06/29/07 Groundwater Sampling Field Notes - 06/29/07
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

**Summary of Gauging and Sampling Activities**  
**April 2007 through June 2007**  
**76 Station 1871**  
**96 MacArthur Boulevard**  
**Oakland, CA**

Project Coordinator: **Bill Borgh**  
Telephone: **916-558-7612**

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

Date(s) of Gauging/Sampling Event: **06/29/07**

---

**Sample Points**

Groundwater wells: **1** onsite, **6** offsite      Wells gauged: **6**      Wells sampled: **6**  
Purging method: **Diaphragm pump**  
Purge water disposal: **Onyx/Rodeo Unit 100**  
Other Sample Points: **0**      Type: **n/a**

---

**Liquid Phase Hydrocarbons (LPH)**

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

---

**Hydrogeologic Parameters**

Depth to groundwater (below TOC):      Minimum: **6.78 feet**      Maximum: **15.58 feet**  
Average groundwater elevation (relative to available local datum): **68.98 feet**  
Average change in groundwater elevation since previous event: **-0.62 feet**  
Interpreted groundwater gradient and flow direction:  
    Current event: **0.05 ft/ft, southwest**  
    Previous event: **0.05 ft/ft, southwest to south (03/23/07)**

---

**Selected Laboratory Results**

Wells with detected **Benzene**: **1**      Wells above MCL (1.0 µg/l): **1**  
    Maximum reported benzene concentration: **16 µg/l (MW-1)**  
Wells with **TPH-G by GC/MS** **3**      Maximum: **6,300 µg/l (MW-1)**  
Wells with **MTBE 8260B** **5**      Maximum: **410 µg/l (MW-9)**

---

**Notes:**

MW-7=Car parked over well,



# 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-G (GC/MS)	=	total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B
TPH-D	=	total petroleum hydrocarbons with diesel distinction
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 re-survey.

### REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 1871 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

# Contents of Tables 1 and 2

## Site: 76 Station 1871

### Current Event

Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
---------	---------------	-------------------	------------------	-------------------------------	------------------------	------------------	------------------	---------	---------	-------------------	------------------	-----------------	-----------------	----------

Table 1a	Well/ Date	Ethanol (8260B)	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
----------	---------------	--------------------	-----------------------------------	----------------------------------	------------------	-------------------

### Historic Data

Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
---------	---------------	-------------------	------------------	-------------------------------	------------------------	------------------	------------------	---------	---------	-------------------	------------------	-----------------	-----------------	----------

Table 2a	Well/ Date	TPH-D	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	pH	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
----------	---------------	-------	-----	--------------------	---------------------------------	------------------	------	------	------	----	-----------------------------------	----------------------------------	------------------	-------------------

**Table 1**  
**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**June 29, 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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: 9.5-24.5)</b>													
06/29/07	86.99	13.47	0.00	73.52	-0.22	--	6300	16	ND<2.5	300	650	--	50	
<b>MW-6</b>	<b>(Screen Interval in feet: 5.0-25.0)</b>													
06/29/07	79.67	9.02	0.00	70.65	-0.63	--	180	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	290	
<b>MW-7</b>	<b>(Screen Interval in feet: 5.0-25.0)</b>													
06/29/07	80.67	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
<b>MW-8</b>	<b>(Screen Interval in feet: 5.0-25.0)</b>													
06/29/07	81.71	9.10	0.00	72.61	-0.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	17	
<b>MW-9</b>	<b>(Screen Interval in feet: DNA)</b>													
06/29/07	82.07	14.89	0.00	67.18	-0.37	--	210	ND<0.50	ND<0.50	ND<0.50	0.52	--	410	
<b>MW-10</b>	<b>(Screen Interval in feet: DNA)</b>													
06/29/07	74.98	6.78	0.00	68.20	-0.30	--	ND<50	ND<0.50	ND<0.50	0.76	1.6	--	5.6	
<b>MW-11</b>	<b>(Screen Interval in feet: DNA)</b>													
06/29/07	77.31	15.58	0.00	61.73	-1.80	--	ND<50	ND<0.50	ND<0.50	ND<0.50	0.62	--	ND<0.50	

**Table 1 a**  
**ADDITIONAL CURRENT ANALYTICAL RESULTS**  
**76 Station 1871**

Date Sampled	Ethanol (8260B)  (µg/l)	Post-purge Dissolved Oxygen  (mg/l)	Pre-purge Dissolved Oxygen  (mg/l)	Pre-purge ORP  (mV)	Post-purge ORP  (mV)
<b>MW-1</b> 06/29/07	ND<1200	6.64	7.11	-131	-65
<b>MW-6</b> 06/29/07	ND<250	8.49	6.78	171	84
<b>MW-8</b> 06/29/07	ND<250	5.35	5.29	98	92
<b>MW-9</b> 06/29/07	ND<250	6.87	6.25	23	22
<b>MW-10</b> 06/29/07	ND<250	9.12	6.27	165	172
<b>MW-11</b> 06/29/07	ND<250	7.87	7.80	242	223

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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 (Screen Interval in feet: 9.5-24.5)</b>														
11/03/92	--	--	--	--	--	260000	--	2300	4600	3700	17000	--	--	
01/25/93	81.18	--	0.00	--	--	120000	--	2100	4600	4900	22000	--	--	
04/29/93	81.18	13.71	0.00	67.47	--	100000	--	850	2000	4300	19000	--	--	
07/16/93	81.18	14.51	0.00	66.67	-0.80	29000	--	590	560	980	4200	--	--	
10/19/93	81.18	15.20	0.00	65.98	-0.69	67000	--	1400	2600	2900	5000	--	--	
01/20/94	81.18	15.17	0.00	66.01	0.03	92000	--	1200	3000	3400	17000	--	--	
04/13/94	81.18	14.44	0.00	66.74	0.73	51000	--	1000	2600	3200	15000	--	--	
07/13/94	81.18	14.88	0.00	66.30	-0.44	35000	--	550	150	1400	5700	--	--	
10/10/94	81.18	15.55	0.00	65.63	-0.67	52000	--	1000	810	3300	12000	--	--	
01/10/95	81.18	12.44	0.00	68.74	3.11	810	--	16	18	59	250	--	--	
04/17/95	81.18	12.68	0.00	68.50	-0.24	48000	--	880	530	2500	11000	--	--	
07/24/95	81.18	13.97	0.00	67.21	-1.29	48000	--	1500	420	2700	9700	--	--	
10/23/95	81.18	14.85	0.00	66.33	-0.88	47000	--	780	210	2100	11000	270	--	
01/18/96	81.18	14.21	0.00	66.97	0.64	30000	--	1500	500	3500	13000	2400	--	
04/18/96	86.24	13.40	0.00	72.84	5.87	66000	--	2700	2200	3100	13000	57000	--	
07/24/96	86.24	14.15	0.00	72.09	-0.75	5600	--	2100	ND	160	160	24000	--	
10/24/96	86.24	14.85	0.00	71.39	-0.70	110000	--	7500	8000	3300	14000	58000	--	
01/28/97	86.24	11.25	0.00	74.99	3.60	94000	--	7700	19000	3100	15000	120000	--	
07/29/97	86.24	14.67	0.00	71.57	-3.42	ND	--	ND	ND	ND	ND	70000	--	
01/14/98	86.24	12.27	0.00	73.97	2.40	85000	--	6100	10000	3000	17000	110000	--	
07/01/98	86.24	14.32	0.00	71.92	-2.05	110000	--	8700	12000	2700	15000	110000	--	
06/18/99	86.24	13.93	0.00	72.31	0.39	49000	--	6900	6500	380	12000	72000	47000	
01/21/00	86.24	15.05	0.00	71.19	-1.12	63700	--	5520	2000	2640	13100	57100	--	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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>														
07/10/00	86.24	13.97	0.00	72.27	1.08	67800	--	9910	4120	3330	16100	67400	54000	
01/04/01	86.24	14.92	0.00	71.32	-0.95	63900	--	6270	784	2670	12900	--	38100	
07/16/01	86.24	14.32	0.00	71.92	0.60	66000	--	7100	330	2300	9800	36000	41000	
01/31/02	86.99	13.54	0.00	73.45	1.53	42000	--	5800	1800	2000	8200	26000	26000	
04/11/02	86.99	13.64	0.00	73.35	-0.10	58000	--	2900	1200	1800	10000	19000	--	
07/11/02	86.99	13.96	0.00	73.03	-0.32	--	5900	330	ND<10	230	600	--	3400	
10/15/02	86.99	14.71	0.00	72.28	-0.75	--	470	16	ND<2.5	14	16	--	390	
01/14/03	86.99	12.77	0.00	74.22	1.94	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	49	
04/16/03	86.99	13.18	0.00	73.81	-0.41	--	510	57	0.62	29	61	--	160	
07/16/03	86.99	14.26	0.00	72.73	-1.08	--	27000	260	23	730	3200	--	1200	
10/02/03	86.99	14.95	0.00	72.04	-0.69	--	45000	1400	32	2900	7600	--	3200	
01/07/04	86.99	12.30	0.00	74.69	2.65	--	34000	690	41	1600	5200	--	2600	
04/02/04	86.99	13.18	0.00	73.81	-0.88	--	350	1.8	ND<0.50	6.2	30	--	19	
07/29/04	86.99	14.61	0.00	72.38	-1.43	--	41000	550	ND<20	2000	6100	--	1200	
11/24/04	86.99	14.98	0.00	72.01	-0.37	--	55000	910	28	3100	11000	--	1600	
01/24/05	86.99	12.98	0.00	74.01	2.00	--	24000	240	ND<20	1100	3600	--	1800	
06/23/05	86.99	13.39	0.00	73.60	-0.41	--	24000	140	ND<25	1100	2900	--	600	
09/28/05	86.99	14.63	0.00	72.36	-1.24	--	8200	22	0.97	290	660	--	320	
12/20/05	86.99	11.42	0.00	75.57	3.21	--	10000	17	29	180	840	--	2400	
03/10/06	86.99	10.98	0.00	76.01	0.44	--	10000	35	ND<5.0	470	1300	--	960	
06/23/06	86.99	11.85	0.00	75.14	-0.87	--	11000	110	ND<5.0	610	1600	--	780	
09/27/06	86.99	14.11	0.00	72.88	-2.26	--	8500	22	ND<10	270	740	--	460	
12/22/06	86.99	13.66	0.00	73.33	0.45	--	7300	35	ND<5.0	370	850	--	210	
03/23/07	86.99	13.25	0.00	73.74	0.41	--	8800	28	ND<2.5	440	910	--	170	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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>														
06/29/07	86.99	13.47	0.00	73.52	-0.22	--	6300	16	ND<2.5	300	650	--	50	
<b>MW-2 (Screen Interval in feet: DNA)</b>														
11/03/92	76.61	--	--	--	--	140	--	2.2	ND	ND	2.0	--	--	
01/25/93	76.61	--	--	--	--	2100	--	56	1.1	90	140	--	--	
04/29/93	76.61	9.73	0.00	66.88	--	1500	--	290	ND	33	11	--	--	
07/16/93	76.61	10.17	0.00	66.44	-0.44	510	--	17	0.60	3.2	2.5	--	--	
10/19/93	76.61	11.18	0.00	65.43	-1.01	670	--	24	1.1	7.7	23	--	--	
01/20/94	76.61	11.12	0.00	65.49	0.06	820	--	97	ND	12	ND	--	--	
04/13/94	76.61	10.12	0.00	66.49	1.00	550	--	71	ND	5.1	1.3	--	--	
07/13/94	76.61	10.86	0.00	65.75	-0.74	2000	--	490	ND	17	13	--	--	
10/10/94	76.61	11.48	0.00	65.13	-0.62	2300	--	340	ND	25	ND	--	--	
01/10/95	76.61	8.71	0.00	67.90	2.77	850	--	3.8	ND	8.5	1.3	--	--	
04/17/95	76.61	8.90	0.00	67.71	-0.19	1300	--	4.7	ND	8.3	1.2	--	--	
07/24/95	76.61	9.94	0.00	66.67	-1.04	960	--	20	ND	4.2	6.2	--	--	
10/23/95	76.61	10.70	0.00	65.91	-0.76	ND	--	ND	ND	ND	ND	19	--	
01/18/96	76.61	10.11	0.00	66.50	0.59	900	--	300	86	7.6	18	4300	--	
04/18/96	81.66	9.27	0.00	72.39	5.89	18000	--	3600	680	890	4100	19000	--	
07/24/96	81.66	10.02	0.00	71.64	-0.75	100000	--	13000	21000	2700	16000	120000	--	
10/24/96	81.66	10.78	0.00	70.88	-0.76	800	--	110	17	11	20	20000	--	
01/28/97	81.66	7.70	0.00	73.96	3.08	45000	--	2400	2900	2000	7600	29000	--	
07/29/97	81.66	10.28	0.00	71.38	-2.58	ND	--	1.2	0.72	0.63	0.62	17000	--	
01/14/98	81.66	8.63	0.00	73.03	1.65	14000	--	1000	150	790	3300	23000	--	
07/01/98	81.66	9.53	0.00	72.13	-0.90	2700	--	100	ND	180	78	7100	--	
06/18/99	--	--	--	--	--	--	--	--	--	--	--	--	--	Well was destroyed



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-3 (Screen Interval in feet: DNA)</b>														
11/03/92	77.48	--	--	--	--	2100	--	120	15	38	200	--	--	
01/25/93	77.48	--	--	--	--	2300	--	80	1	55	52	--	--	
04/29/93	77.48	11.37	0.00	66.11	--	4500	--	1700	ND	200	140	--	--	
07/16/93	77.48	12.09	0.00	65.39	-0.72	4000	--	1100	28	52	70	--	--	
10/19/93	77.48	12.69	0.00	64.79	-0.60	3800	--	42	ND	50	56	--	--	
01/20/94	77.48	12.65	0.00	64.83	0.04	4200	--	11	ND	21	15	--	--	
04/13/94	77.48	12.02	0.00	65.46	0.63	4200	--	210	ND	36	53	--	--	
07/13/94	77.48	12.46	0.00	65.02	-0.44	1800	--	16	16	ND	21	--	--	
10/10/94	77.48	12.98	0.00	64.50	-0.52	4300	--	11	ND	12	ND	--	--	
01/10/95	77.48	10.42	0.00	67.06	2.56	310	--	4.6	ND	3.5	2.1	--	--	
04/17/95	77.48	10.42	0.00	67.06	0.00	7800	--	ND	4.6	300	450	--	--	
07/24/95	77.48	11.76	0.00	65.72	-1.34	3200	--	170	ND	22	16	--	--	
10/23/95	77.48	12.50	0.00	64.98	-0.74	3900	--	55	ND	19	11	4500	--	
01/18/96	77.48	11.79	0.00	65.69	0.71	2200	--	270	33	26	18	5500	--	
04/18/96	82.55	11.30	0.00	71.25	5.56	6000	--	1800	ND	100	230	48000	--	
07/24/96	82.55	12.17	0.00	70.38	-0.87	ND	--	2500	ND	ND	ND	71000	--	
10/24/96	82.55	12.65	0.00	69.90	-0.48	3800	--	660	ND	15	ND	65000	--	
01/28/97	82.55	9.50	0.00	73.05	3.15	4400	--	250	13	87	47	54000	--	
07/29/97	82.55	11.99	0.00	70.56	-2.49	ND	--	3500	ND	220	ND	75000	--	
01/14/98	82.55	10.30	0.00	72.25	1.69	ND	--	430	ND	100	380	37000	--	
07/01/98	82.55	11.70	0.00	70.85	-1.40	ND	--	430	ND	ND	ND	45000	--	
06/18/99	--	--	--	--	--	--	--	--	--	--	--	--	--	Well was destroyed
<b>MW-4 (Screen Interval in feet: DNA)</b>														

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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>														
04/18/96	82.04	9.83	0.00	72.21	--	ND	--	630	ND	ND	ND	18000	--	
07/24/96	82.04	10.47	0.00	71.57	-0.64	ND	--	ND	ND	ND	5.2	3900	--	
10/24/96	82.04	11.14	0.00	70.90	-0.67	ND	--	ND	ND	ND	ND	6300	--	
01/28/97	82.04	7.94	0.00	74.10	3.20	1200	--	490	ND	17	6.8	16000	--	
07/29/97	82.04	10.86	0.00	71.18	-2.92	50	--	1.5	0.61	0.73	0.78	15000	--	
01/14/98	82.04	8.73	0.00	73.31	2.13	ND	--	ND	ND	ND	ND	5200	--	
07/01/98	82.04	10.51	0.00	71.53	-1.78	ND	--	ND	ND	ND	ND	640	--	
06/18/99	82.04	--	--	--	--	--	--	--	--	--	--	--	--	Well was destroyed
<b>MW-5 (Screen Interval in feet: DNA)</b>														
04/18/96	81.80	9.65	0.00	72.15	--	31000	--	5500	1400	1700	8100	66000	--	
07/24/96	81.80	10.80	0.00	71.00	-1.15	32000	--	6400	ND	1600	6100	120000	--	
10/24/96	81.80	11.40	0.00	70.40	-0.60	17000	--	6900	ND	970	130	84000	--	
01/28/97	81.80	7.76	0.00	74.04	3.64	19000	--	6100	62	82	310	160000	--	
07/29/97	81.80	11.58	0.00	70.22	-3.82	ND	--	ND	ND	ND	ND	71000	--	
01/14/98	81.80	9.08	0.00	72.72	2.50	ND	--	3600	ND	ND	ND	80000	--	
07/01/98	81.80	11.25	0.00	70.55	-2.17	6400	--	2100	21	120	330	61000	--	
06/18/99	81.80	--	--	--	--	--	--	--	--	--	--	--	--	Well was destroyed
<b>MW-6 (Screen Interval in feet: 5.0-25.0)</b>														
06/18/99	78.91	9.30	0.00	69.61	--	2100	--	21	29	ND	47	97000	71000	
01/21/00	78.91	9.37	0.00	69.54	-0.07	1880	--	143	31.2	106	196	41200	48800	
07/10/00	78.91	8.94	0.00	69.97	0.43	5710	--	869	209	301	1430	22200	19500	
01/04/01	78.91	9.21	0.00	69.70	-0.27	ND	--	ND	ND	ND	ND	--	9510	
07/16/01	78.91	9.42	0.00	69.49	-0.21	4800	--	200	21	150	440	29000	34000	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-6 continued</b>														
01/31/02	78.91	8.50	0.00	70.41	0.92	12000	--	250	92	500	1500	26000	31000	
04/11/02	79.67	9.08	0.00	70.59	0.18	3600	--	42	32	39	280	120000	--	
07/11/02	79.67	9.70	0.00	69.97	-0.62	--	12000	ND<100	ND<100	ND<100	ND<200	--	15000	
10/15/02	79.67	9.96	0.00	69.71	-0.26	--	1300	ND<10	ND<10	ND<10	ND<20	--	3200	
01/14/03	79.67	8.31	0.00	71.36	1.65	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	120	
04/16/03	79.67	8.21	0.00	71.46	0.10	--	270	ND<0.50	ND<0.50	ND<0.50	1.3	--	15	
07/16/03	79.67	9.43	0.00	70.24	-1.22	--	290	39	0.60	ND<0.50	15	--	150	
10/02/03	79.67	9.92	0.00	69.75	-0.49	--	200	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	220	
01/07/04	79.67	8.08	0.00	71.59	1.84	--	140	2.4	ND<1.0	8.6	13	--	86	
04/02/04	79.67	8.63	0.00	71.04	-0.55	--	3200	ND<20	ND<20	ND<20	ND<40	--	5900	
07/29/04	79.67	9.75	0.00	69.92	-1.12	--	170	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	160	
11/24/04	79.67	9.59	0.00	70.08	0.16	--	80	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	45	
01/24/05	79.67	8.33	0.00	71.34	1.26	--	100	1.1	ND<0.50	0.60	1.1	--	40	
06/23/05	79.67	8.33	0.00	71.34	0.00	--	230	0.52	ND<0.50	3.6	9.6	--	200	
09/28/05	79.67	9.56	0.00	70.11	-1.23	--	500	ND<0.50	ND<0.50	ND<0.50	1.2	--	980	
12/20/05	79.67	7.82	0.00	71.85	1.74	--	640	0.79	ND<0.50	0.68	2.3	--	2400	
03/10/06	79.67	6.83	0.00	72.84	0.99	--	970	1.2	ND<0.50	1.3	5.0	--	3600	
06/23/06	79.67	8.13	0.00	71.54	-1.30	--	1700	ND<12	ND<12	ND<12	ND<25	--	1100	
09/27/06	79.67	9.44	0.00	70.23	-1.31	--	ND<1200	ND<12	ND<12	ND<12	ND<12	--	620	
12/22/06	79.67	8.60	0.00	71.07	0.84	--	9100	ND<10	ND<10	ND<10	ND<10	--	600	
03/23/07	79.67	8.39	0.00	71.28	0.21	--	330	ND<0.50	ND<0.50	0.82	ND<0.50	--	680	
06/29/07	79.67	9.02	0.00	70.65	-0.63	--	180	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	290	
<b>MW-7 (Screen Interval in feet: 5.0-25.0)</b>														
06/18/99	79.92	8.70	0.00	71.22	--	ND	--	ND	ND	ND	ND	16000	13000	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-7 continued</b>														
01/21/00	79.92	9.30	0.00	70.62	-0.60	ND	--	ND	ND	ND	ND	12300	18200	
07/10/00	79.92	8.72	0.00	71.20	0.58	ND	--	ND	ND	ND	ND	16900	13800	
01/04/01	79.92	9.17	0.00	70.75	-0.45	ND	--	ND	ND	ND	0.719	--	37.3	
07/16/01	79.92	9.02	0.00	70.90	0.15	ND	--	ND	ND	ND	ND	7200	4700	
01/31/02	79.92	7.91	0.00	72.01	1.11	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8900	9900	
04/11/02	80.67	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
07/11/02	80.67	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
10/15/02	80.67	9.81	0.00	70.86	--	--	ND<5000	ND<50	ND<50	ND<50	ND<100	--	12000	
01/14/03	80.67	7.89	0.00	72.78	1.92	--	ND<25000	ND<250	ND<250	ND<250	ND<500	--	33000	
04/16/03	80.67	8.04	0.00	72.63	-0.15	--	ND<25000	ND<250	ND<250	ND<250	ND<500	--	37000	
07/16/03	80.67	9.19	0.00	71.48	-1.15	--	25000	ND<250	ND<250	ND<250	ND<500	--	38000	
10/02/03	80.67	9.89	0.00	70.78	-0.70	--	17000	ND<100	ND<100	ND<100	ND<200	--	22000	
01/07/04	80.67	7.27	0.00	73.40	2.62	--	ND<20000	ND<200	460	ND<200	540	--	19000	
04/02/04	80.67	8.09	0.00	72.58	-0.82	--	3400	ND<20	ND<20	ND<20	ND<40	--	5100	
07/29/04	80.67	9.40	0.00	71.27	-1.31	--	7400	ND<50	ND<50	ND<50	ND<100	--	11000	
11/24/04	80.67	9.65	0.00	71.02	-0.25	--	6200	ND<50	ND<50	ND<50	ND<100	--	6800	
01/24/05	80.67	7.92	0.00	72.75	1.73	--	ND<5000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	13000	
06/23/05	80.67	8.56	0.00	72.11	-0.64	--	8700	ND<25	ND<25	ND<25	ND<50	--	12000	
09/28/05	80.67	9.37	0.00	71.30	-0.81	--	1200	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5700	
12/20/05	80.67	6.31	0.00	74.36	3.06	--	1100	0.90	ND<0.50	24	37	--	8200	
03/10/06	80.67	5.84	0.00	74.83	0.47	--	1200	24	ND<0.50	3.6	ND<1.0	--	4700	
06/23/06	80.67	6.83	0.00	73.84	-0.99	--	1800	21	ND<12	ND<12	ND<25	--	1500	
09/27/06	80.67	8.95	0.00	71.72	-2.12	--	ND<1200	ND<12	ND<12	ND<12	ND<12	--	350	
12/22/06	80.67	8.35	0.00	72.32	0.60	--	24000	ND<50	ND<50	ND<50	ND<50	--	190	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-7 continued</b>														
03/23/07	80.67	8.01	0.00	72.66	0.34	--	85	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	92	
06/29/07	80.67	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
<b>MW-8 (Screen Interval in feet: 5.0-25.0)</b>														
06/18/99	80.96	9.10	0.00	71.86	--	ND	--	ND	ND	ND	ND	290	160	
01/21/00	80.96	10.00	0.00	70.96	-0.90	ND	--	ND	ND	ND	1.09	224	221	
07/10/00	80.96	7.94	0.00	73.02	2.06	ND	--	ND	ND	ND	ND	234	223	
01/04/01	80.96	9.76	0.00	71.20	-1.82	3790	--	141	8.92	128	375	--	34200	
07/16/01	80.96	9.15	0.00	71.81	0.61	ND	--	ND	ND	ND	ND	66	70	
01/31/02	80.96	7.99	0.00	72.97	1.16	5900	--	86	ND<10	630	390	670	700	
04/11/02	81.71	9.00	0.00	72.71	-0.26	250	--	2.0	ND<0.50	38	2.2	410	--	
07/11/02	81.71	9.60	0.00	72.11	-0.60	--	110	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	120	
10/15/02	81.71	10.60	0.00	71.11	-1.00	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	21	
01/14/03	81.71	8.63	0.00	73.08	1.97	--	ND<250	2.6	ND<2.5	18	ND<5.0	--	430	
04/16/03	81.71	8.98	0.00	72.73	-0.35	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	18	
07/16/03	81.71	9.63	0.00	72.08	-0.65	--	110	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	140	
10/02/03	81.71	10.41	0.00	71.30	-0.78	--	75	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	78	
01/07/04	81.71	8.21	0.00	73.50	2.20	--	ND<5000	ND<50	ND<50	ND<50	340	--	3700	
04/02/04	81.71	8.51	0.00	73.20	-0.30	--	3000	ND<20	ND<20	ND<20	ND<40	--	5200	
07/29/04	81.71	9.78	0.00	71.93	-1.27	--	3200	ND<25	ND<25	ND<25	ND<50	--	5500	
11/24/04	81.71	10.19	0.00	71.52	-0.41	--	2100	ND<10	ND<10	ND<10	ND<20	--	2400	
01/24/05	81.71	8.49	0.00	73.22	1.70	--	ND<2500	4.0	0.52	ND<0.50	29	--	1800	
06/23/05	81.71	8.34	0.00	73.37	0.15	--	490	ND<0.50	ND<0.50	1.5	ND<1.0	--	980	
09/28/05	81.71	9.61	0.00	72.10	-1.27	--	270	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	520	
12/20/05	81.71	7.35	0.00	74.36	2.26	--	2700	ND<0.50	ND<0.50	78	82	--	86	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-8 continued</b>														
03/10/06	81.71	6.63	0.00	75.08	0.72	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	51	
06/23/06	81.71	6.56	0.00	75.15	0.07	--	3600	ND<0.50	ND<0.50	100	57	--	ND<0.50	
09/27/06	81.71	9.64	0.00	72.07	-3.08	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	18	
12/22/06	81.71	9.42	0.00	72.29	0.22	--	ND<50	ND<0.50	ND<0.50	ND<0.50	0.50	--	16	
03/23/07	81.71	8.68	0.00	73.03	0.74	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	12	
06/29/07	81.71	9.10	0.00	72.61	-0.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	17	
<b>MW-9 (Screen Interval in feet: DNA)</b>														
01/31/02	82.07	14.72	0.00	67.35	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	680	910	
04/11/02	82.07	14.85	0.00	67.22	-0.13	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	620	--	
07/11/02	82.07	15.39	0.00	66.68	-0.54	--	580	ND<5.0	ND<5.0	ND<5.0	ND<10	--	580	
10/15/02	82.07	16.16	0.00	65.91	-0.77	--	570	ND<5.0	ND<5.0	ND<5.0	ND<10	--	1400	
01/14/03	82.07	14.75	0.00	67.32	1.41	--	ND<200	ND<2.0	ND<2.0	ND<2.0	ND<4.0	--	220	
04/16/03	82.07	14.51	0.00	67.56	0.24	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	860	
07/16/03	82.07	15.54	0.00	66.53	-1.03	--	ND<2500	ND<25	ND<25	ND<25	ND<50	--	1300	
10/02/03	82.07	16.28	0.00	65.79	-0.74	--	820	ND<5.0	ND<5.0	ND<5.0	ND<10	--	990	
01/07/04	82.07	14.65	0.00	67.42	1.63	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1200	
04/02/04	82.07	15.08	0.00	66.99	-0.43	--	510	ND<5.0	ND<5.0	ND<5.0	ND<10	--	850	
07/29/04	82.07	15.81	0.00	66.26	-0.73	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1300	
11/24/04	82.07	16.25	0.00	65.82	-0.44	--	1100	ND<5.0	ND<5.0	ND<5.0	ND<10	--	1300	
01/24/05	82.07	14.96	0.00	67.11	1.29	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2300	
06/23/05	82.07	14.40	0.00	67.67	0.56	--	1500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	2000	
09/28/05	82.07	15.67	0.00	66.40	-1.27	--	ND<2500	ND<25	ND<25	ND<25	ND<50	--	2400	
12/20/05	82.07	14.61	0.00	67.46	1.06	--	560	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2800	
03/10/06	82.07	13.39	0.00	68.68	1.22	--	1100	ND<5.0	ND<5.0	ND<5.0	ND<10	--	2100	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-9 continued</b>														
06/23/06	82.07	13.68	0.00	68.39	-0.29	--	1700	ND<12	ND<12	ND<12	ND<25	--	1700	
09/27/06	82.07	14.83	0.00	67.24	-1.15	--	ND<1200	ND<12	ND<12	ND<12	ND<12	--	1400	
12/22/06	82.07	14.75	0.00	67.32	0.08	--	680	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1100	
03/23/07	82.07	14.52	0.00	67.55	0.23	--	240	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	660	
06/29/07	82.07	14.89	0.00	67.18	-0.37	--	210	ND<0.50	ND<0.50	ND<0.50	0.52	--	410	
<b>MW-10 (Screen Interval in feet: DNA)</b>														
01/31/02	74.98	8.02	0.00	66.96	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	1.2	
04/11/02	74.98	7.60	0.00	67.38	0.42	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
07/11/02	74.98	8.91	0.00	66.07	-1.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.1	
10/15/02	74.98	11.49	0.00	63.49	-2.58	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
01/14/03	74.98	8.47	0.00	66.51	3.02	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
04/16/03	74.98	7.92	0.00	67.06	0.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
07/16/03	74.98	7.03	0.00	67.95	0.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/02/03	74.98	7.63	0.00	67.35	-0.60	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
01/07/04	74.98	6.22	0.00	68.76	1.41	--	54	ND<0.50	ND<0.50	1.3	4.5	--	ND<2.0	
04/02/04	74.98	7.49	0.00	67.49	-1.27	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.0	
07/29/04	74.98	7.41	0.00	67.57	0.08	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/24/04	74.98	7.55	0.00	67.43	-0.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.5	
01/24/05	74.98	6.40	0.00	68.58	1.15	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.71	
06/23/05	74.98	6.46	0.00	68.52	-0.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/28/05	74.98	7.52	0.00	67.46	-1.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/20/05	74.98	6.04	0.00	68.94	1.48	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.57	
03/10/06	74.98	5.86	0.00	69.12	0.18	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/23/06	74.98	6.42	0.00	68.56	-0.56	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.50	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-10 continued</b>														
09/27/06	74.98	6.92	0.00	68.06	-0.50	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	48	
12/22/06	74.98	5.90	0.00	69.08	1.02	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	8.5	
03/23/07	74.98	6.48	0.00	68.50	-0.58	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.54	
06/29/07	74.98	6.78	0.00	68.20	-0.30	--	ND<50	ND<0.50	ND<0.50	0.76	1.6	--	5.6	
<b>MW-11 (Screen Interval in feet: DNA)</b>														
01/31/02	77.31	11.71	0.00	65.60	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	
04/11/02	77.31	11.95	0.00	65.36	-0.24	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
07/11/02	77.31	12.79	0.00	64.52	-0.84	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
10/15/02	77.31	13.67	0.00	63.64	-0.88	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
01/14/03	77.31	13.31	0.00	64.00	0.36	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
04/16/03	77.31	14.08	0.00	63.23	-0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
07/16/03	77.31	12.98	0.00	64.33	1.10	--	65	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/02/03	77.31	12.96	0.00	64.35	0.02	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
01/07/04	77.31	16.20	0.00	61.11	-3.24	--	63	ND<0.50	ND<0.50	0.68	2.2	--	ND<2.0	
04/02/04	77.31	18.01	0.00	59.30	-1.81	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
07/29/04	77.31	14.39	0.00	62.92	3.62	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/24/04	77.31	16.72	0.00	60.59	-2.33	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
01/24/05	77.31	17.44	0.00	59.87	-0.72	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/23/05	77.31	12.37	0.00	64.94	5.07	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/28/05	77.31	16.78	0.00	60.53	-4.41	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/20/05	77.31	17.06	0.00	60.25	-0.28	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/10/06	77.31	16.20	0.00	61.11	0.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/23/06	77.31	12.65	0.00	64.66	3.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/27/06	77.31	14.78	0.00	62.53	-2.13	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**November 1992 Through June 2007**  
**76 Station 1871**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-11 continued</b>														
12/22/06	77.31	13.48	0.00	63.83	1.30	--	55	ND<0.50	ND<0.50	2.1	5.4	--	ND<0.50	
03/23/07	77.31	13.78	0.00	63.53	-0.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
06/29/07	77.31	15.58	0.00	61.73	-1.80	--	ND<50	ND<0.50	ND<0.50	ND<0.50	0.62	--	ND<0.50	

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 1871**

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)	pH (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
<b>MW-1</b>													
06/18/99	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--	--
07/16/01	--	ND	ND	ND	--	ND	ND	ND	--	--	--	--	--
01/14/03	--	ND<100	ND<500	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--
07/16/03	--	--	ND<10000	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<25000	--	--	--	--	--	--	25.1	45.7	80.1	21.0
01/07/04	--	--	ND<20000	--	--	--	--	--	--	12.12	12.31	142	24
04/02/04	--	--	ND<50	--	--	--	--	--	--	11.33	13.42	36	34
07/29/04	--	--	ND<2000	--	--	--	--	--	--	5.37	5.51	-2	-4
11/24/04	--	--	ND<2000	--	--	--	--	--	6.58	3.08	4.73	-43	-39
01/24/05	--	--	ND<2000	--	--	--	--	--	--	14.3	17.0	100	96
06/23/05	--	--	ND<50000	--	--	--	--	--	--	--	4.79	-103	--
09/28/05	--	--	ND<1000	--	--	--	--	--	--	3.45	4.73	-91	-94
12/20/05	--	--	ND<250	--	--	--	--	--	--	4.16	2.76	-210	-328
03/10/06	--	--	ND<2500	--	--	--	--	--	--	1.45	1.64	-511	-615
06/23/06	--	--	ND<2500	--	--	--	--	--	--	--	4.31	-030	--
09/27/06	--	--	ND<5000	--	--	--	--	--	--	4.50	4.72	-32	-25
12/22/06	--	--	ND<2500	--	--	--	--	--	--	6.80	2.35	-121	-72
03/23/07	--	--	ND<1200	--	--	--	--	--	--	3.22	3.45	-135	-141
06/29/07	--	--	ND<1200	--	--	--	--	--	--	6.64	7.11	-131	-65
<b>MW-4</b>													
04/18/96	110	--	--	--	--	--	--	--	--	--	--	--	--
07/24/96	ND	--	--	--	--	--	--	--	--	--	--	--	--
10/24/96	ND	--	--	--	--	--	--	--	--	--	--	--	--
01/28/97	210	--	--	--	--	--	--	--	--	--	--	--	--
07/29/97	ND	--	--	--	--	--	--	--	--	--	--	--	--
01/14/98	ND	--	--	--	--	--	--	--	--	--	--	--	--

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 1871**

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)	pH (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
<b>MW-4 continued</b>													
07/01/98	ND	--	--	--	--	--	--	--	--	--	--	--	--
<b>MW-6</b>													
06/18/99	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
07/16/01	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
07/11/02	--	ND<1000	ND<5000	ND<100	ND<100	ND<200	ND<100	ND<100	--	--	--	--	--
01/14/03	--	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--
07/16/03	--	--	ND<500	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<1000	--	--	--	--	--	--	15.5	26.2	139	175
01/07/04	--	--	ND<1000	--	--	--	--	--	--	12.63	14.29	-12	24
04/02/04	--	--	ND<2000	--	--	--	--	--	--	12.63	12.72	9	23
07/29/04	--	--	ND<100	--	--	--	--	--	--	4.74	4.79	-19	-8
11/24/04	--	--	ND<50	--	--	--	--	--	6.99	2.81	5.54	-29	-12
01/24/05	--	--	ND<50	--	--	--	--	--	--	14.5	15.3	72	70
06/23/05	--	--	ND<1000	--	--	--	--	--	--	1.86	1.73	70	71
09/28/05	--	--	ND<1000	--	--	--	--	--	--	2.63	2.57	-74	-80
12/20/05	--	--	ND<250	--	--	--	--	--	--	1.52	2.30	-280	-217
03/10/06	--	--	ND<250	--	--	--	--	--	--	5.25	0.80	173	224
06/23/06	--	--	ND<6200	--	--	--	--	--	--	--	3.39	-105	--
09/27/06	--	--	ND<6200	--	--	--	--	--	--	2.54	3.01	-109	-104
12/22/06	--	--	ND<5000	--	--	--	--	--	--	1.22	4.03	-46	-67
03/23/07	--	--	ND<250	--	--	--	--	--	--	3.64	3.62	-101	-92
06/29/07	--	--	ND<250	--	--	--	--	--	--	8.49	6.78	171	84
<b>MW-7</b>													
06/18/99	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
07/16/01	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
01/14/03	--	ND<50000	ND<250000	ND<1000	ND<1000	ND<1000	ND<1000	ND<1000	--	--	--	--	--

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 1871**

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)	pH (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
<b>MW-7 continued</b>													
07/16/03	--	--	ND<250000	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<100000	--	--	--	--	--	--	24.3	28.2	109	153
01/07/04	--	--	ND<200000	--	--	--	--	--	--	10.79	10.85	23	5
04/02/04	--	--	ND<2000	--	--	--	--	--	--	12.41	11.32	24	10
07/29/04	--	--	ND<5000	--	--	--	--	--	--	4.10	3.96	17	18
11/24/04	--	--	ND<5000	--	--	--	--	--	6.60	1.99	3.29	-43	-24
01/24/05	--	--	ND<5000	--	--	--	--	--	--	17.2	14.5	71	48
06/23/05	--	--	ND<50000	--	--	--	--	--	--	2.84	2.18	-37	-32
09/28/05	--	--	ND<1000	--	--	--	--	--	--	3.45	3.63	-81	-85
12/20/05	--	--	ND<250	--	--	--	--	--	--	2.04	2.03	-263	-256
03/10/06	--	--	ND<250	--	--	--	--	--	--	1.28	0.95	164	-179
06/23/06	--	--	ND<6200	--	--	--	--	--	--	--	3.95	-119	--
09/27/06	--	--	ND<6200	--	--	--	--	--	--	3.16	3.98	-107	-95
12/22/06	--	--	ND<25000	--	--	--	--	--	--	2.25	2.03	-86	-101
03/23/07	--	--	ND<250	--	--	--	--	--	--	3.38	3.75	-49	-47
<b>MW-8</b>													
06/18/99	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
07/16/01	--	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
01/14/03	--	ND<500	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--
07/16/03	--	--	ND<500	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<500	--	--	--	--	--	--	23.6	28.5	188	197
01/07/04	--	--	ND<50000	--	--	--	--	--	--	9.94	13.13	-15	21
04/02/04	--	--	ND<2000	--	--	--	--	--	--	13.37	12.82	-10	16
07/29/04	--	--	ND<2500	--	--	--	--	--	--	3.68	3.73	18	30
11/24/04	--	--	ND<1000	--	--	--	--	--	6.67	3.97	2.71	-36	-20
01/24/05	--	--	ND<2500	--	--	--	--	--	--	41.6	41.2	56	60

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 1871**

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)	pH (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
<b>MW-8 continued</b>													
06/23/05	--	--	ND<1000	--	--	--	--	--	--	2.05	2.13	58	56
09/28/05	--	--	ND<1000	--	--	--	--	--	--	2.12	1.98	-40	-26
12/20/05	--	--	ND<250	--	--	--	--	--	--	2.02	3.72	-402	-326
03/10/06	--	--	ND<250	--	--	--	--	--	--	1.51	0.99	-182	-181
06/23/06	--	--	ND<250	--	--	--	--	--	--	--	2.81	-135	--
09/27/06	--	--	ND<250	--	--	--	--	--	--	4.87	4.91	-155	-139
12/22/06	--	--	ND<250	--	--	--	--	--	--	1.80	2.40	16	12
03/23/07	--	--	ND<250	--	--	--	--	--	--	3.52	3.90	25	22
06/29/07	--	--	ND<250	--	--	--	--	--	--	5.35	5.29	98	92
<b>MW-9</b>													
01/31/02	--	ND<140	ND<3600	ND<7.1	ND<7.1	ND<7.1	ND<7.1	ND<7.1	--	--	--	--	--
01/14/03	--	ND<400	ND<2000	ND<8.0	ND<8.0	ND<8.0	ND<8.0	ND<8.0	--	--	--	--	--
07/16/03	--	--	ND<25000	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<5000	--	--	--	--	--	--	29.5	28.4	201	203
01/07/04	--	--	ND<10000	--	--	--	--	--	--	10.45	12.00	9	27
04/02/04	--	--	ND<500	--	--	--	--	--	--	16.37	13.21	12	32
07/29/04	--	--	ND<1000	--	--	--	--	--	--	--	--	--	--
11/24/04	--	--	ND<500	--	--	--	--	--	6.47	3.24	1.71	-68	-67
01/24/05	--	--	ND<1000	--	--	--	--	--	--	26.0	22.5	-45	-45
06/23/05	--	--	ND<10000	--	--	--	--	--	--	1.50	1.44	-136	-144
09/28/05	--	--	ND<50000	--	--	--	--	--	--	2.51	1.67	-94	-119
12/20/05	--	--	ND<250	--	--	--	--	--	--	5.05	4.67	-102	-42
03/10/06	--	--	ND<2500	--	--	--	--	--	--	2.82	2.13	160	161
06/23/06	--	--	ND<6200	--	--	--	--	--	--	--	0.84	-65	--
09/27/06	--	--	ND<6200	--	--	--	--	--	--	0.68	0.75	-61	-43
12/22/06	--	--	ND<250	--	--	--	--	--	--	9.00	4.89	-44	-70

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 1871**

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)	pH (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
<b>MW-9 continued</b>													
03/23/07	--	--	ND<250	--	--	--	--	--	--	6.85	5.33	-114	-82
06/29/07	--	--	ND<250	--	--	--	--	--	--	6.87	6.25	23	22
<b>MW-10</b>													
01/31/02	--	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
01/14/03	--	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--
07/16/03	--	--	ND<500	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<500	--	--	--	--	--	--	24.8	25.7	192	213
01/07/04	--	--	ND<500	--	--	--	--	--	--	10.04	11.62	35	59
04/02/04	--	--	ND<50	--	--	--	--	--	--	11.91	12.02	42	45
07/29/04	--	--	ND<50	--	--	--	--	--	--	4.81	4.83	83	102
11/24/04	--	--	ND<50	--	--	--	--	--	6.89	2.59	3.07	-39	-29
01/24/05	--	--	ND<50	--	--	--	--	--	--	27.5	25.5	87	84
06/23/05	--	--	ND<1000	--	--	--	--	--	--	7.83	176	40	44
09/28/05	--	--	ND<1000	--	--	--	--	--	--	6.95	2.37	-66	-64
12/20/05	--	--	ND<250	--	--	--	--	--	--	3.85	3.45	59	58
03/10/06	--	--	ND<250	--	--	--	--	--	--	2.52	4.48	87	83
06/23/06	--	--	ND<250	--	--	--	--	--	--	--	1.49	-68	--
09/27/06	--	--	ND<250	--	--	--	--	--	--	1.79	1.55	-85	-65
12/22/06	--	--	ND<250	--	--	--	--	--	--	3.20	3.00	107	85
03/23/07	--	--	ND<250	--	--	--	--	--	--	5.09	5.01	-60	--
06/29/07	--	--	ND<250	--	--	--	--	--	--	9.12	6.27	165	172
<b>MW-11</b>													
01/31/02	--	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
01/14/03	--	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--
07/16/03	--	--	ND<500	--	--	--	--	--	--	--	--	--	--
10/02/03	--	--	ND<500	--	--	--	--	--	--	33.7	23.2	202	255

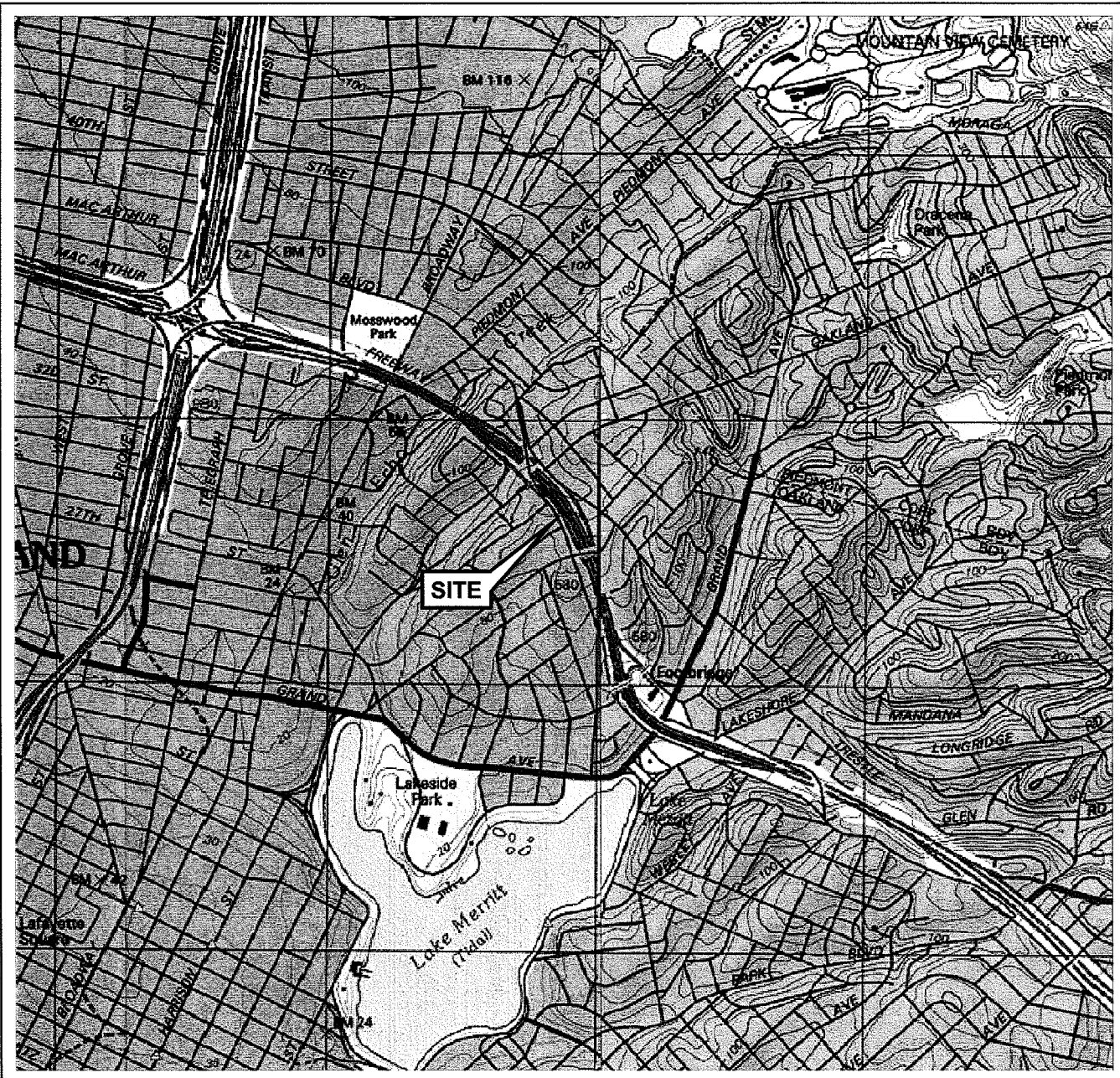
**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 1871**

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)	pH (pH)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
<b>MW-11 continued</b>													
01/07/04	--	--	ND<500	--	--	--	--	--	--	11.69	13.82	99	103
04/02/04	--	--	ND<50	--	--	--	--	--	--	11.94	14.08	-1	108
07/29/04	--	--	ND<50	--	--	--	--	--	--	--	--	--	--
11/24/04	--	--	ND<50	--	--	--	--	--	6.75	3.85	4.32	82	143
01/24/05	--	--	ND<50	--	--	--	--	--	--	30.01	32.6	79	83
06/23/05	--	--	ND<1000	--	--	--	--	--	--	2.17	2.16	76	82
09/28/05	--	--	ND<1000	--	--	--	--	--	--	4.97	4.59	-4	-1
12/20/05	--	--	ND<250	--	--	--	--	--	--	5.16	4.77	35	070
03/10/06	--	--	ND<250	--	--	--	--	--	--	5.11	9.99	68	97
06/23/06	--	--	ND<250	--	--	--	--	--	--	--	7.74	-26	--
09/27/06	--	--	ND<250	--	--	--	--	--	--	5.72	5.98	32	40
12/22/06	--	--	ND<250	--	--	--	--	--	--	3.81	4.35	46	44
03/23/07	--	--	ND<250	--	--	--	--	--	--	5.47	5.85	38	34
06/29/07	--	--	ND<250	--	--	--	--	--	--	7.87	7.80	242	223

# FIGURES

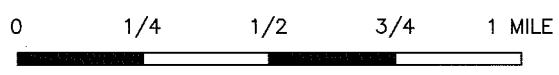


PS-1: L:\QMS VICINITY MAP S1871vm.dwg Jul 12, 2007 - 3:06pm bschmidt



SOURCE:

United States Geological Survey  
7.5 Minute Topographic Map:  
Oakland Quadrangle



SCALE 1:24,000



QUADRANGLE  
LOCATION



PROJECT: 125703

FACILITY:





76 STATION 1871  
96 MacARTHUR BOULEVARD  
OAKLAND, CALIFORNIA

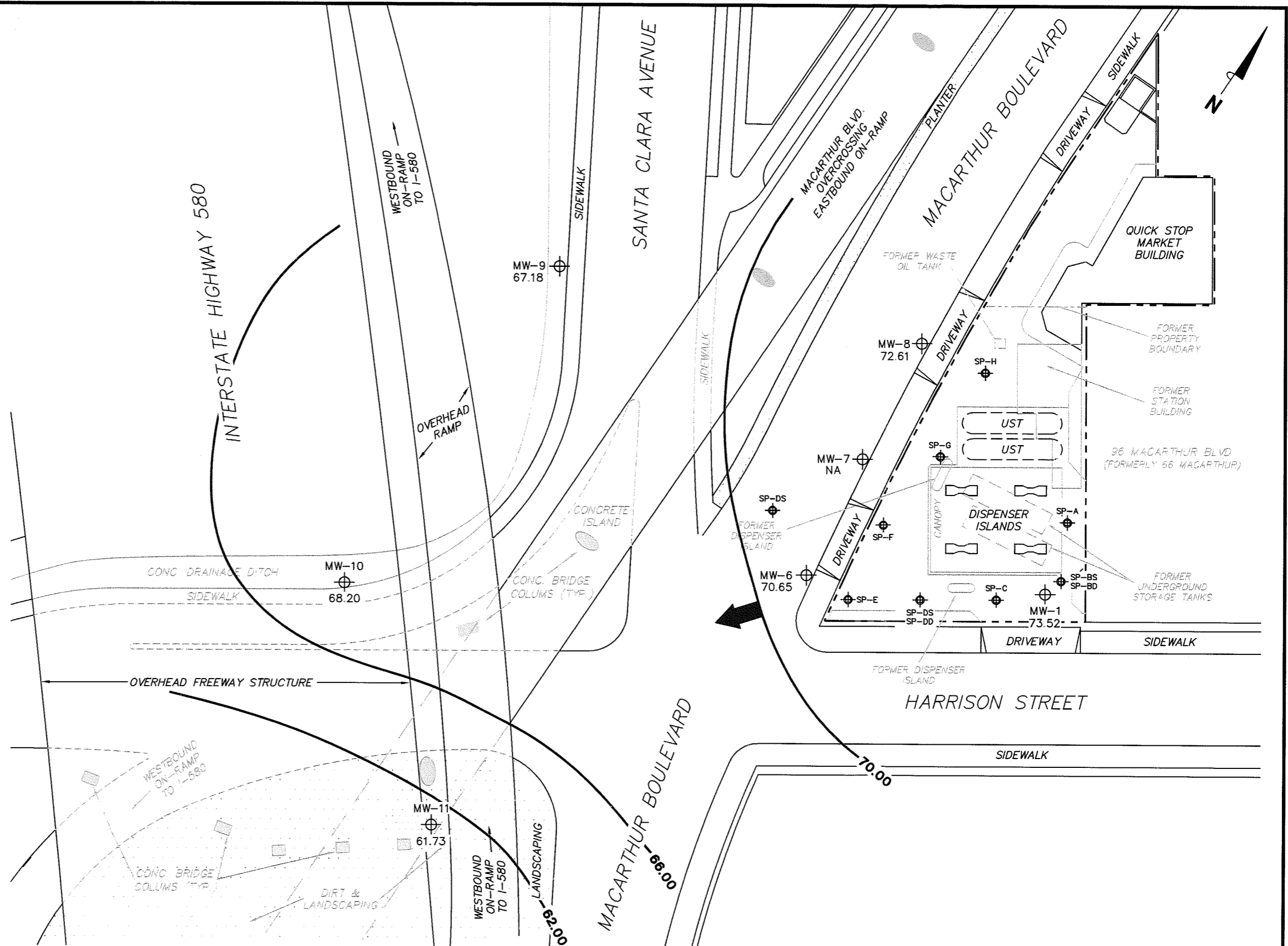
VICINITY MAP

FIGURE 1

MS=1:40 1871-003 L:\Graphics\QMS NORTH-SOUTH\1000\1871+1871\QMS(NEW).DWG Jul 14, 2007 - 1:49pm bschmidt

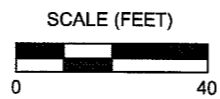
**LEGEND**

- MW-11  Monitoring Well with Groundwater Elevation (feet)
- SP-H  Ozone Sparge Well
- 70.00  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. UST = underground storage tank.  
 NA = not analyzed, measured, or collected.






PROJECT: 125703  
 FACILITY:  
 76 STATION 1871  
 96 MACARTHUR BOULEVARD  
 OAKLAND, CALIFORNIA

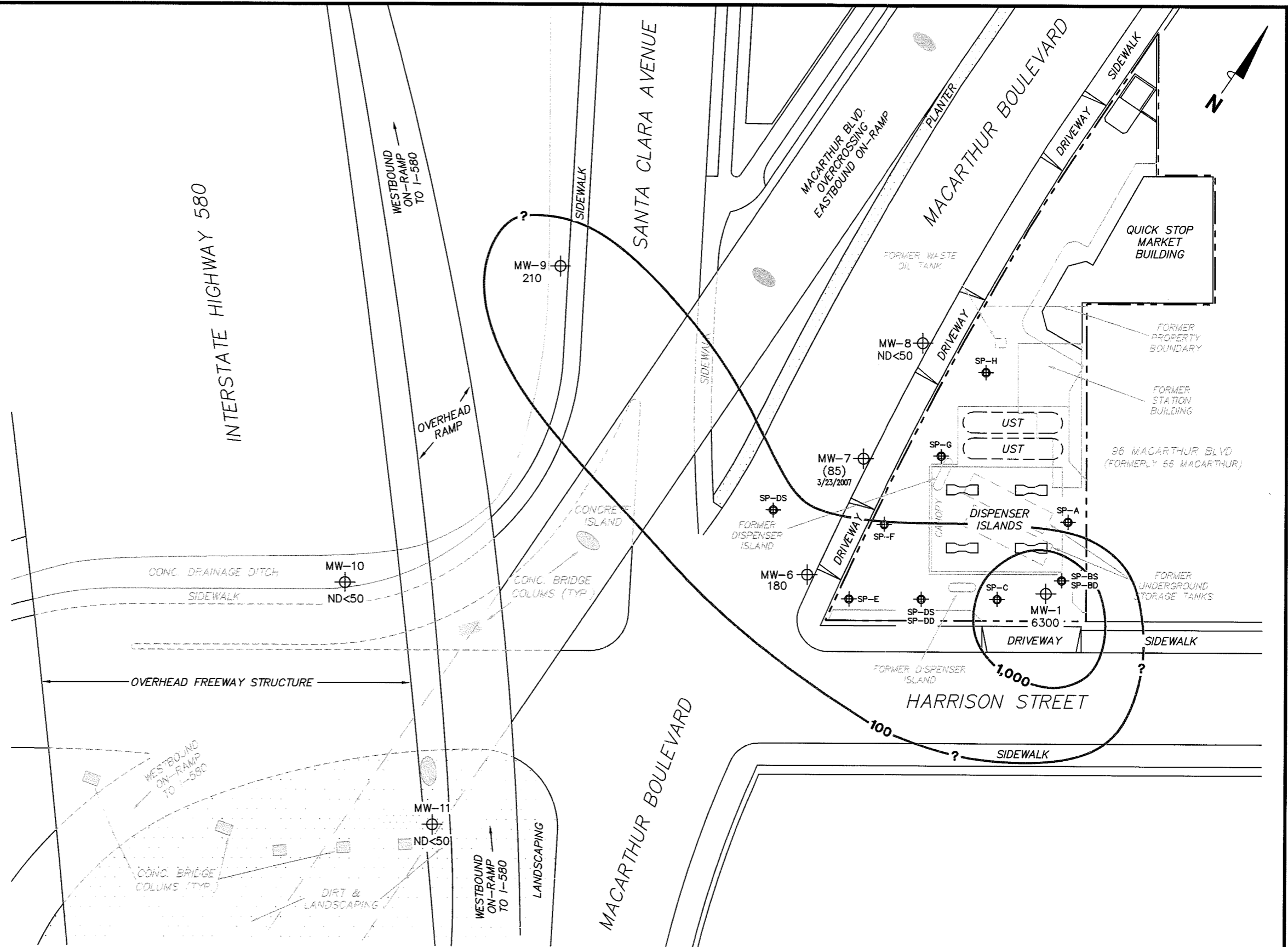
**GROUNDWATER ELEVATION  
 CONTOUR MAP**  
 June 29, 2007

**FIGURE 2**

MS=1:40 1871-003 L:\Graphics\QMS NORTH-SOUTH\1000\1871\1871QMS(NEW).DWG Jul 14, 2007 - 2:23pm bschmidt

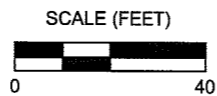
**LEGEND**

- MW-11  Monitoring Well with Dissolved-Phase TPH-G (GC/MS) Concentration (µg/l)
- SP-H  Ozone Sparge Well
-  1,000 Dissolved-Phase TPH-G (GC/MS) Contour (µg/l)



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B.  
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. ( ) = representative historic value.






PROJECT: 125703  
 FACILITY:  
 76 STATION 1871  
 96 MACARTHUR BOULEVARD  
 OAKLAND, CALIFORNIA

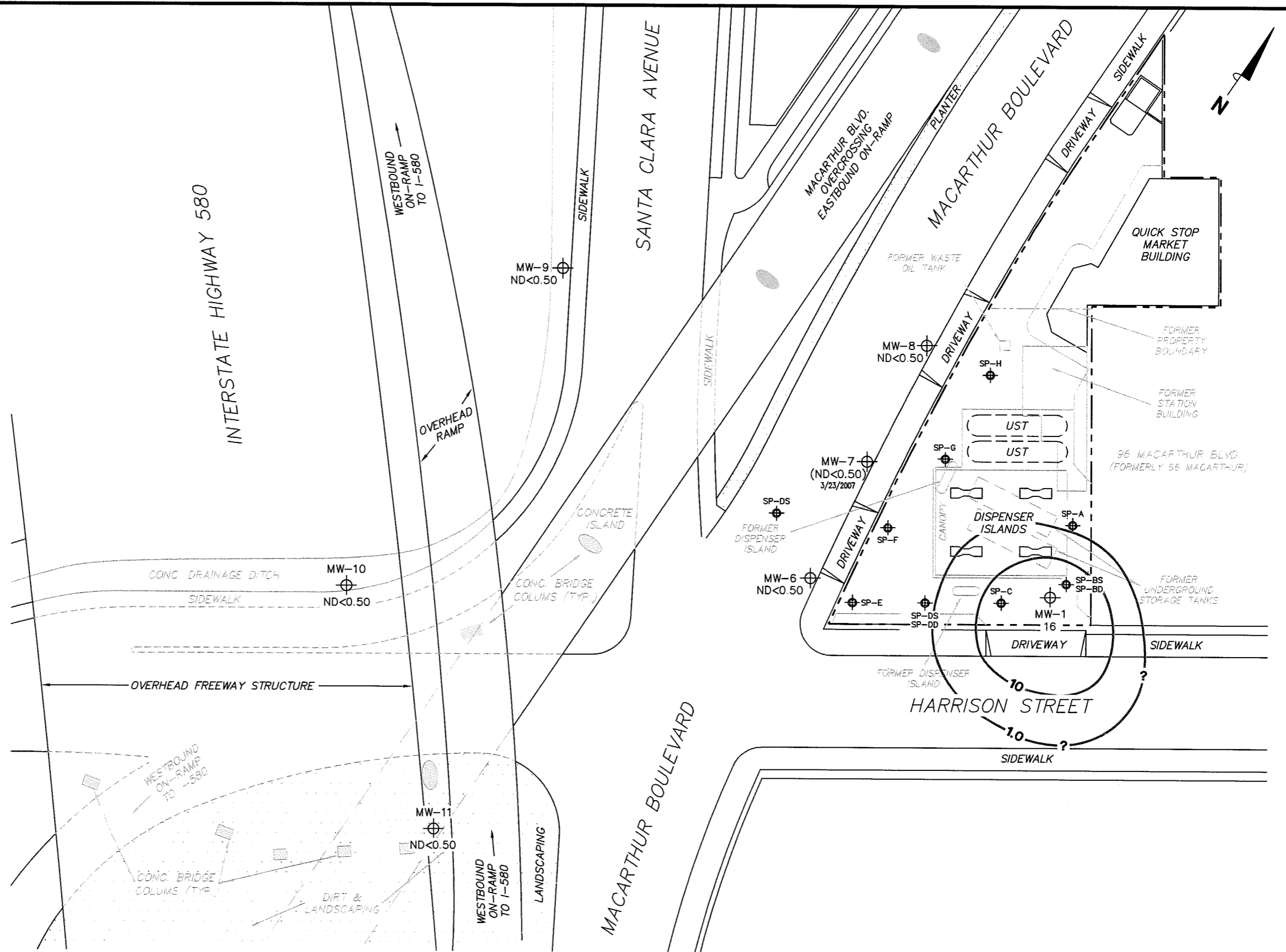
**DISSOLVED-PHASE TPH-G (GC/MS)  
 CONCENTRATION MAP**  
 June 29, 2007

**FIGURE 3**

MS=1:40 1871-003 L:\Graphics\QMS NORTH-SOUTH-1000\1871+1871\QMS(NEW).DWG Jul 14, 2007 - 2:08pm bschmidt

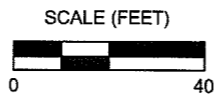
**LEGEND**

- MW-11  Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)
- SP-H  Ozone Sparge Well
-  10 Dissolved-Phase Benzene Contour (µg/l)



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. ( ) = representative historic value.






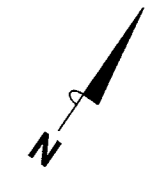
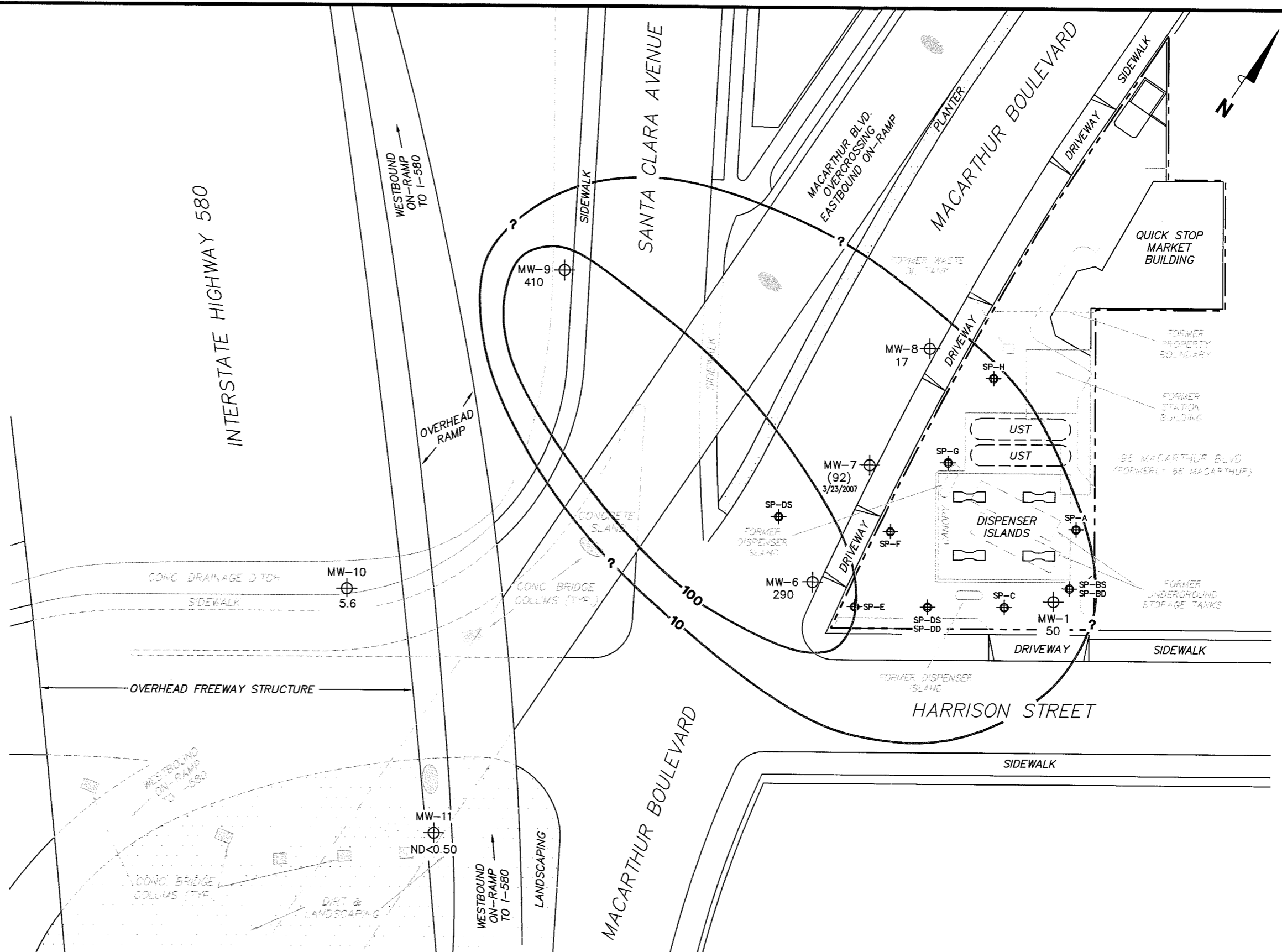
PROJECT: 125703  
 FACILITY:  
 76 STATION 1871  
 96 MACARTHUR BOULEVARD  
 OAKLAND, CALIFORNIA

**DISSOLVED-PHASE BENZENE  
 CONCENTRATION MAP**  
 June 29, 2007

**FIGURE 4**

**LEGEND**

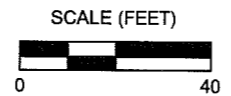
- MW-11  Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)
- SP-H  Ozone Sparge Well
- 100  Dissolved-Phase MTBE Contour (µg/l)



L:\Graphics\QMS NORTH-SOUTH\1000\1871+1871\1871QMS(NEW).DWG Jul 16, 2007 - 8:42am bschmidt

**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. ( ) = representative historic value. Results obtained using EPA Method 8260B.



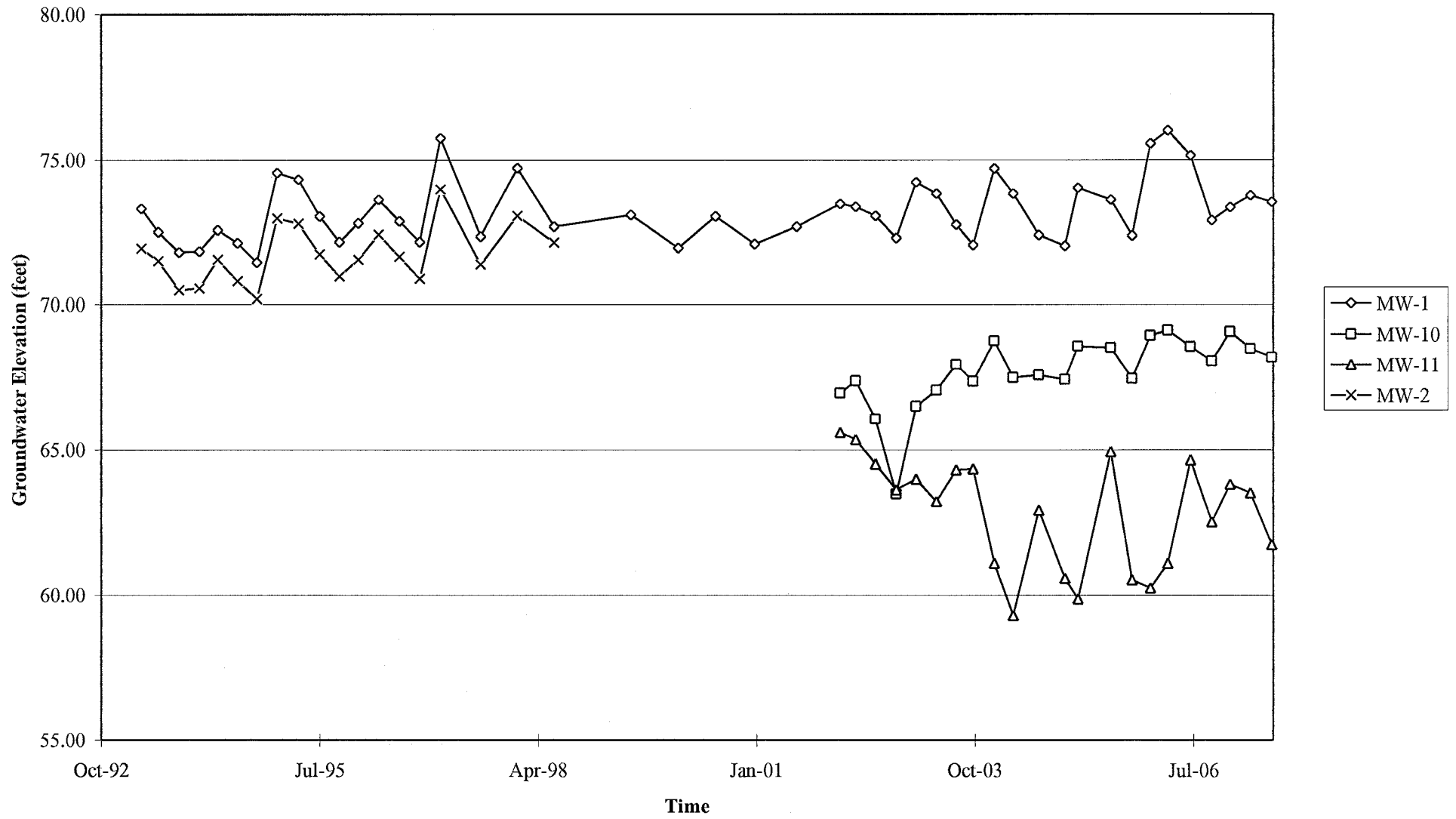
PROJECT: 125703  
 FACILITY:  
 76 STATION 1871  
 96 MACARTHUR BOULEVARD  
 OAKLAND, CALIFORNIA

**DISSOLVED-PHASE MTBE  
 CONCENTRATION MAP**  
 June 29, 2007

**FIGURE 5**

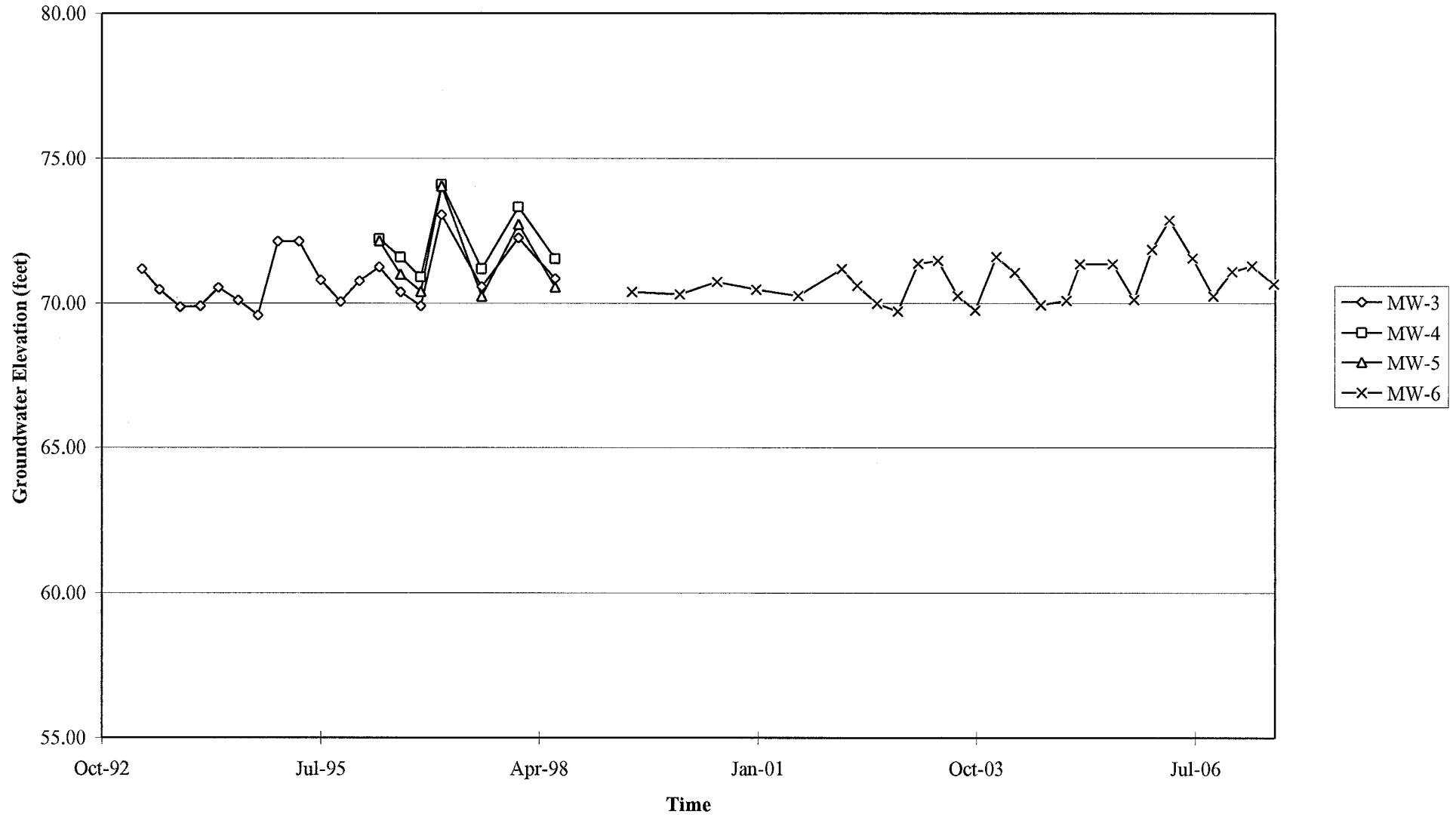
# GRAPHS

Groundwater Elevations vs. Time  
76 Station 1871



Elevations may have been corrected for apparent changes due to resurvey

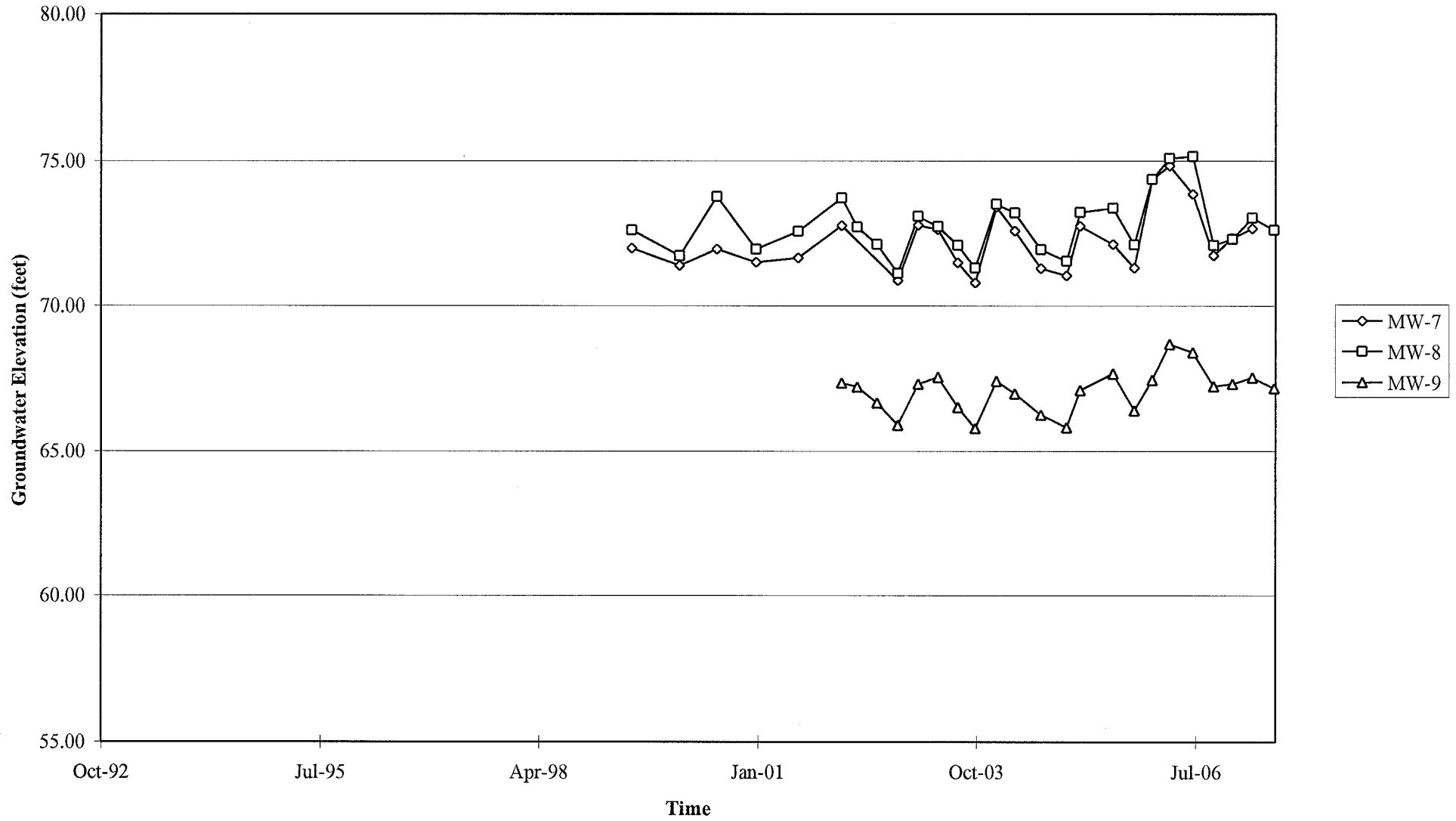
Groundwater Elevations vs. Time  
76 Station 1871



Elevations may have been corrected for apparent changes due to resurvey

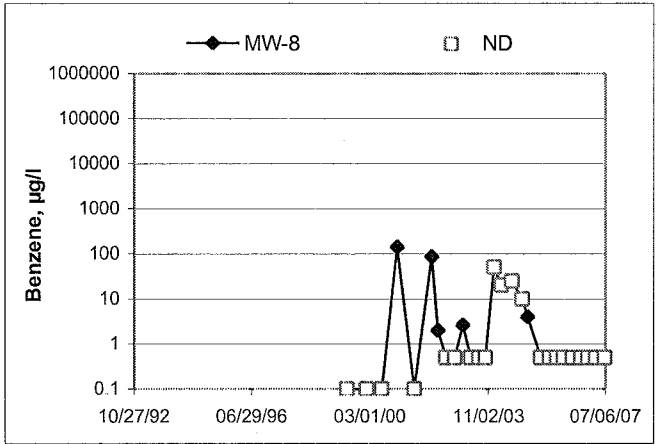
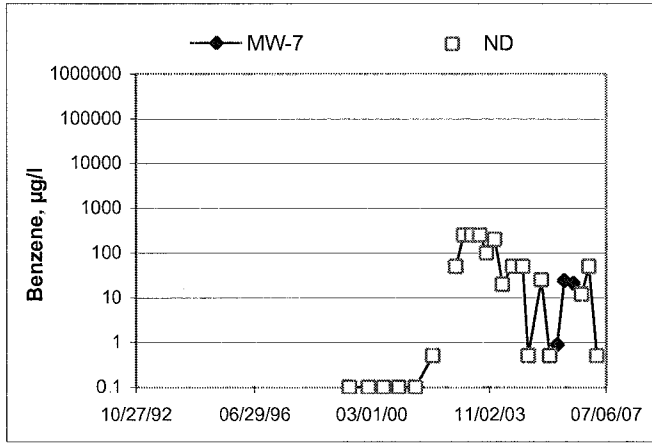
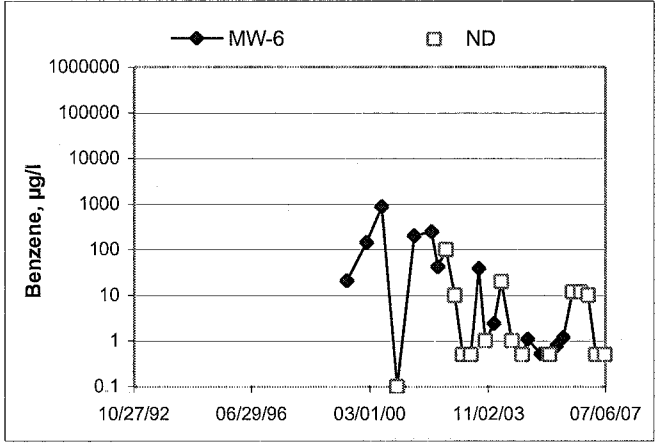
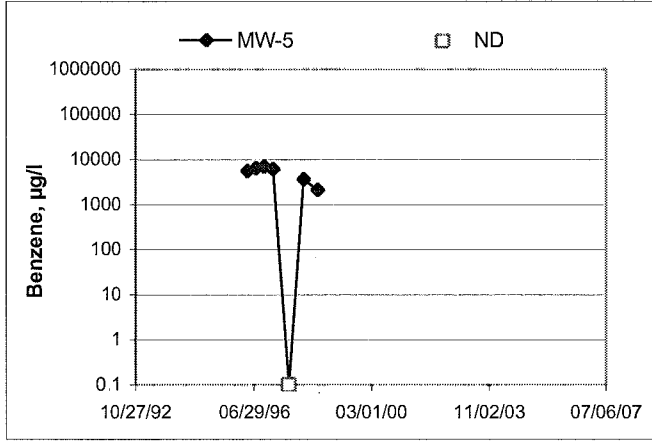
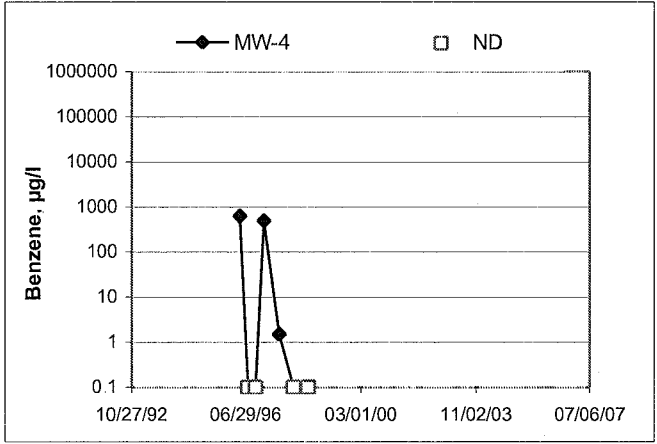
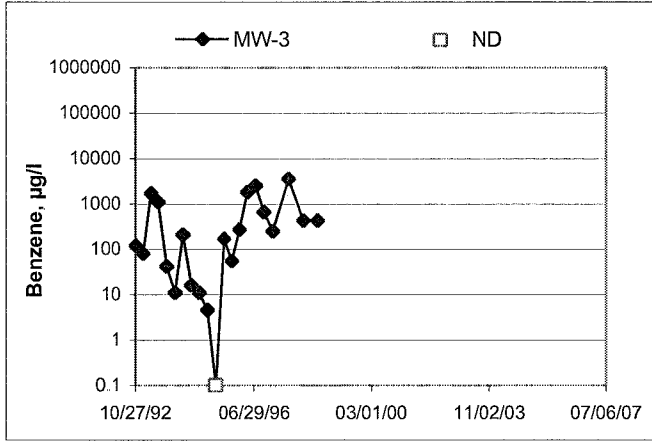
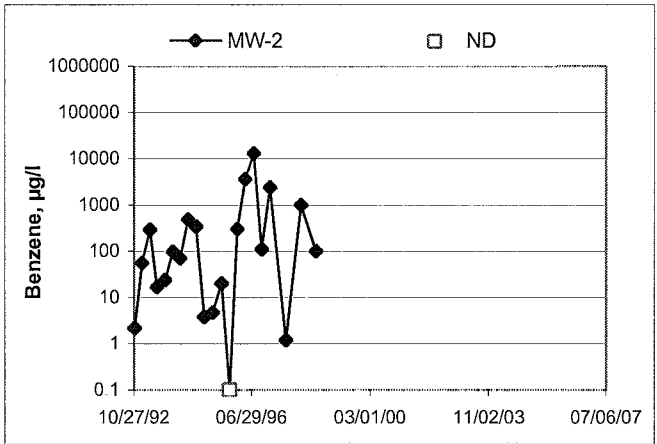
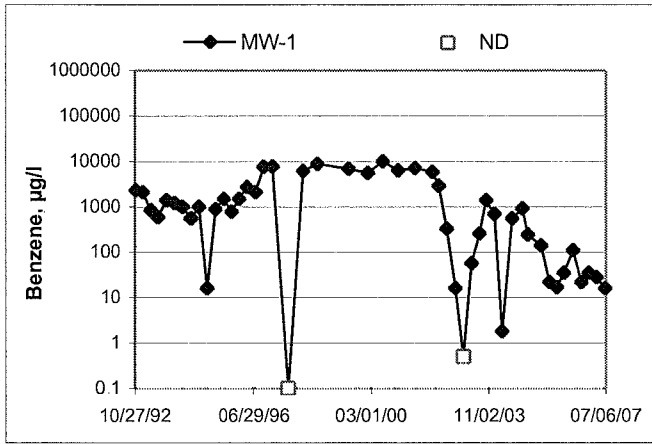


Groundwater Elevations vs. Time  
76 Station 1871

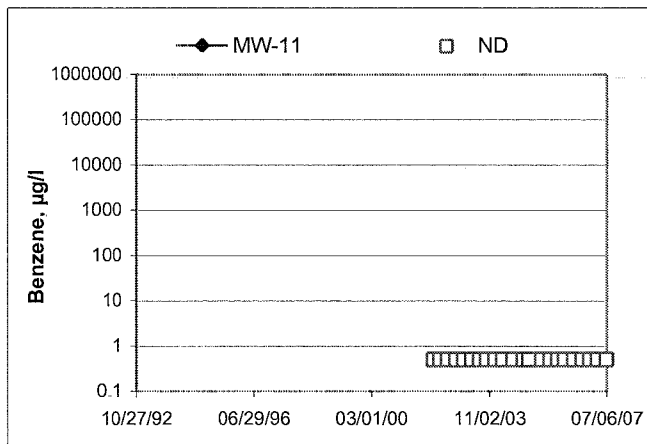
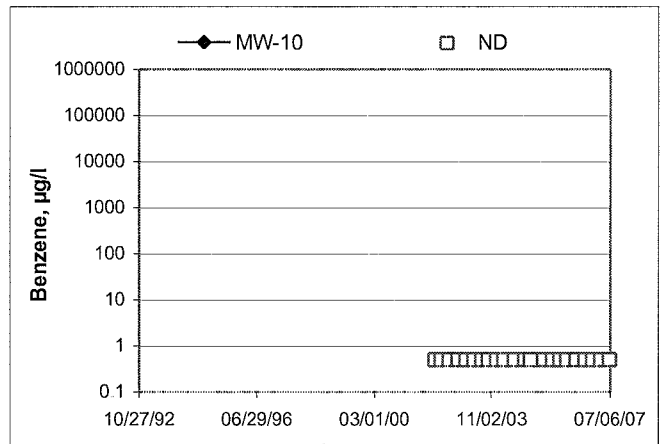
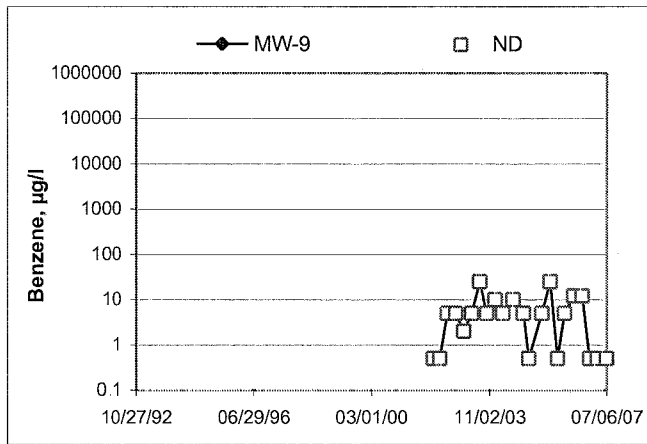


Elevations may have been corrected for apparent changes due to resurvey

## Benzene Concentrations vs Time 76 Station 1871



# Benzene Concentrations vs Time 76 Station 1871



# 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 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 are 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 to a particular wells, 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: JOE

 Job #/Task #: 125703

 Date: 06-29-07

 Site # 1871

 Project Manager A. Collins

 Page 1 of 1

Well #	Time Gauged	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-6	0431	X	24.77	9.02	—	—	0827	2"
MW-7								car parked over well
MW-8	0437	X	24.55	9.10	—	—	0713	2"
MW-9	0448	X	19.60	14.89	—	—	0745	2"
MW-10	0454	X	19.97	6.78	—	—	0838	2"
MW-11	0506	X	30.07	15.58	—	—	0813	2"
MW-1	0517	X	23.95	13.47	—	—	0759	4"
FIELD DATA COMPLETE		QA/QC	CO2	WELL BOX CONDITION SHEETS				
WTT CERTIFICATE		MANIFEST	DRUM INVENTORY	TRAFFIC CONTROL				

## GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 1871

Project No.: 125703

Date: 06-29-07

Well No. MW-6

Purge Method: DFA

Depth to Water (feet): 9.02

Depth to Product (feet):           

Total Depth (feet): 24.77

LPH & Water Recovered (gallons):           

Water Column (feet): 15.75

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 12.17

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F/C)	pH	D.O.	ORP	Turbidity
0646			3	762.1	18.6	7.05	6.73	171	
			6	871.2	19.0	7.33	8.17	100	
	0649		9	817.2	19.2	7.62	8.49	84	
		Static at Time Sampled	Total Gallons Purged		Sample Time				
		9.12	9		0827				
Comments: <u>WENT DRY AT 9 GALS</u>									

Well No. MW-7

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)	Conductivity (uS/cm)	Temperature (F.C)	pH	D.O.	ORP	Turbidity
		Static at Time Sampled	Total Gallons Purged		Sample Time				
Comments: <u>Car Parked over well</u>									

## GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 1871      Project No.: 125703      Date: 06-29-07

Well No. MW-8      Purge Method: DIA  
 Depth to Water (feet): 9.10      Depth to Product (feet): \_\_\_\_\_  
 Total Depth (feet): 24.55      LPH & Water Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 15.45      Casing Diameter (Inches): 2"  
 80% Recharge Depth(feet): 12.19      1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C)	pH	D.O.	ORP	Turbidity
0701			3	573.5	18.6	7.27	5.29	98	
			6	607.0	18.7	6.97	5.33	97	
	0703		9	628.5	18.6	6.89	5.35	92	
Static at Time Sampled			Total Gallons Purged		Sample Time				
10.21			9		0713				
Comments:									

Well No. MW-9      Purge Method: DIA  
 Depth to Water (feet): 14.89      Depth to Product (feet): \_\_\_\_\_  
 Total Depth (feet): 19.60      LPH & Water Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): 4.71      Casing Diameter (Inches): 2"  
 80% Recharge Depth(feet): 15.83      1 Well Volume (gallons): 1

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C)	pH	D.O.	ORP	Turbidity
0727			1	552.6	17.2	7.11	6.25	23	
			2	549.7	17.3	6.85	6.40	21	
	0928		3	549.4	17.4	6.80	6.87	22	
Static at Time Sampled			Total Gallons Purged		Sample Time				
15.83			3		0745				
Comments:									



# GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 1871

Project No.: 125703

Date: 06-29-07

Well No. MW-10

Purge Method: DIA

Depth to Water (feet): 6.78

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

Total Depth (feet): 19.97

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 13.19

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 9.41

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C)	pH	D.O.	ORP	Turbidity
0627			2	603.3	16.5	7.57	6.27	165	
			4	588.0	16.3	7.49	8.75	168	
	0628		6	564.4	16.4	7.60	8.85	169	
0633	0634		8	534.4	16.3	7.60	9.12	172	
Static at Time Sampled			Total Gallons Purged		Sample Time				
14.75			14.75		0838				
Comments:									

Well No. MW-11

Purge Method: DIA

Depth to Water (feet): 15.58

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

Total Depth (feet): 30.07

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 14.49

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): \_\_\_\_\_

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C)	pH	D.O.	ORP	Turbidity
0610			2	2390	17.5	6.56	7.80	242	
			4	2397	16.9	6.76	7.79	232	
	0612		6	2393	16.5	6.90	7.87	223	
Static at Time Sampled			Total Gallons Purged		Sample Time				
18.27			6		0813				
Comments: <u>DID NOT RECHARGE IA 2 HOURS</u>									

# GROUNDWATER SAMPLING FIELD NOTES

Technician: JOE

Site: 1871

Project No.: 125703

Date: 06-29-07

Well No. MW-1

Purge Method: DIA

Depth to Water (feet): 13.47

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

Total Depth (feet): 23.95

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): 10.48

Casing Diameter (Inches): 4"

80% Recharge Depth(feet): 15.57

1 Well Volume (gallons): 7

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. C)	pH	D.O.	ORP	Turbidity
0551			7	481.8	20.0	7.32	7.11	-131	
	0558		14	604.3	19.4	6.62	6.64	-65	
			21	—	—	—	—	—	
		Static at Time Sampled		Total Gallons Purged		Sample Time			
		17.87		17		0759			
Comments: <u>WENT DRY AT 17 GALS. DID NOT RECHARGE IN 2 HOURS</u>									

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)	Conductivity (uS/cm)	Temperature (F. C)	pH	D.O.	ORP	Turbidity
		Static at Time Sampled		Total Gallons Purged		Sample Time			
Comments: _____									



Date of Report: 07/10/2007

Anju Farfan

TRC Alton Geoscience  
21 Technology Drive  
Irvine, CA 92618-2302

RE: 1871  
BC Work Order: 0707544

Enclosed are the results of analyses for samples received by the laboratory on 07/02/2007 21:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Vanessa Hooker", written over a horizontal line.

Contact Person: Vanessa Hooker  
Client Service Rep

A handwritten signature in black ink, written over a horizontal line.

Authorized Signature

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information					
0707544-01	<b>COC Number:</b> --- <b>Project Number:</b> 1871 <b>Sampling Location:</b> MW-6 <b>Sampling Point:</b> MW- 6 <b>Sampled By:</b> Joe Lewis of TRCI	<b>Receive Date:</b> 07/02/2007 21:40 <b>Sampling Date:</b> 06/29/2007 08:27 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: T0600101493 Matrix: W Sample QC Type (SACode): CS Cooler ID:			
0707544-02	<b>COC Number:</b> --- <b>Project Number:</b> 1871 <b>Sampling Location:</b> MW-8 <b>Sampling Point:</b> MW-8 <b>Sampled By:</b> Joe Lewis of TRCI	<b>Receive Date:</b> 07/02/2007 21:40 <b>Sampling Date:</b> 06/29/2007 07:13 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: T0600101493 Matrix: W Sample QC Type (SACode): CS Cooler ID:			
0707544-03	<b>COC Number:</b> --- <b>Project Number:</b> 1871 <b>Sampling Location:</b> MW-9 <b>Sampling Point:</b> MW-9 <b>Sampled By:</b> Joe Lewis of TRCI	<b>Receive Date:</b> 07/02/2007 21:40 <b>Sampling Date:</b> 06/29/2007 07:45 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: T0600101493 Matrix: W Sample QC Type (SACode): CS Cooler ID:			
0707544-04	<b>COC Number:</b> --- <b>Project Number:</b> 1871 <b>Sampling Location:</b> MW-10 <b>Sampling Point:</b> MW-10 <b>Sampled By:</b> Joe Lewis of TRCI	<b>Receive Date:</b> 07/02/2007 21:40 <b>Sampling Date:</b> 06/29/2007 08:38 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: T0600101493 Matrix: W Sample QC Type (SACode): CS Cooler ID:			
0707544-05	<b>COC Number:</b> --- <b>Project Number:</b> 1871 <b>Sampling Location:</b> MW-11 <b>Sampling Point:</b> MW-11 <b>Sampled By:</b> Joe Lewis of TRCI	<b>Receive Date:</b> 07/02/2007 21:40 <b>Sampling Date:</b> 06/29/2007 08:13 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: T0600101493 Matrix: W Sample QC Type (SACode): CS Cooler ID:			



TRC Alton Geoscience  
21 Technology Drive  
Irvine, CA 92618-2302

Project: 1871  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
0707544-06	<b>COC Number:</b>	---	<b>Receive Date:</b> 07/02/2007 21:40	<b>Delivery Work Order:</b>
	<b>Project Number:</b>	1871	<b>Sampling Date:</b> 06/29/2007 07:59	Global ID: T0600101493
	<b>Sampling Location:</b>	MW-1	<b>Sample Depth:</b> ---	Matrix: W
	<b>Sampling Point:</b>	MW-1	<b>Sample Matrix:</b> Water	Samle QC Type (SACode): CS
	<b>Sampled By:</b>	Joe Lewis of TRCI		Cooler ID:

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

 Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0707544-01												
Client Sample Name:	1871, MW-6, MW- 6, 6/29/2007 8:27:00AM, Joe Lewis												
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	0.50		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139	ND	
Methyl t-butyl ether	290	ug/L	2.5		EPA-8260	07/03/07	07/06/07 09:27	DKC	MS-V12	5	BQG0139	ND	A01
Toluene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139	ND	
Ethanol	ND	ug/L	250		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139	ND	
Total Purgeable Petroleum Hydrocarbons	180	ug/L	50		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139	ND	A90
1,2-Dichloroethane-d4 (Surrogate)	96.4	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/06/07 09:27	DKC	MS-V12	5	BQG0139		
1,2-Dichloroethane-d4 (Surrogate)	102	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139		
Toluene-d8 (Surrogate)	100	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139		
Toluene-d8 (Surrogate)	99.9	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/06/07 09:27	DKC	MS-V12	5	BQG0139		
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 20:43	DKC	MS-V12	1	BQG0139		
4-Bromofluorobenzene (Surrogate)	99.8	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/06/07 09:27	DKC	MS-V12	5	BQG0139		



TRC Alton Geoscience  
21 Technology Drive  
Irvine, CA 92618-2302

Project: 1871  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0707544-02												
Client Sample Name:	1871, MW-8, MW-8, 6/29/2007 7:13:00AM, Joe Lewis												
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
Methyl t-butyl ether	17	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
Toluene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
Total Xylenes	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
Ethanol	ND	ug/L	250		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139	ND	
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139		
Toluene-d8 (Surrogate)	99.2	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:07	DKC	MS-V12	1	BQG0139		

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

 Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0707544-03												
Client Sample Name:	1871, MW-9, MW-9, 6/29/2007 7:45:00AM, Joe Lewis												
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	0.50		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139	ND	
Methyl t-butyl ether	410	ug/L	2.5		EPA-8260	07/03/07	07/06/07 09:51	DKC	MS-V12	5	BQG0139	ND	A01
Toluene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139	ND	
Total Xylenes	0.52	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139	ND	
Ethanol	ND	ug/L	250		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139	ND	
Total Purgeable Petroleum Hydrocarbons	210	ug/L	50		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139	ND	A90
1,2-Dichloroethane-d4 (Surrogate)	102	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139		
1,2-Dichloroethane-d4 (Surrogate)	98.4	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/06/07 09:51	DKC	MS-V12	5	BQG0139		
Toluene-d8 (Surrogate)	99.8	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/06/07 09:51	DKC	MS-V12	5	BQG0139		
Toluene-d8 (Surrogate)	99.4	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139		
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/06/07 09:51	DKC	MS-V12	5	BQG0139		
4-Bromofluorobenzene (Surrogate)	98.4	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:31	DKC	MS-V12	1	BQG0139		



TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

 Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0707544-04												
Client Sample Name:	1871, MW-10, MW-10, 6/29/2007 8:38:00AM, Joe Lewis												
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
Ethylbenzene	0.76	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
Methyl t-butyl ether	5.6	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
Toluene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
Total Xylenes	1.6	ug/L	0.50		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
Ethanol	ND	ug/L	250		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139	ND	
1,2-Dichloroethane-d4 (Surrogate)	99.5	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139		
Toluene-d8 (Surrogate)	98.2	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139		
4-Bromofluorobenzene (Surrogate)	99.3	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 21:54	DKC	MS-V12	1	BQG0139		

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

 Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0707544-05												
Client Sample Name:	1871, MW-11, MW-11, 6/29/2007 8:13:00AM, Joe Lewis												
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
Toluene	ND	ug/L	0.50		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
Total Xylenes	0.62	ug/L	0.50		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
Ethanol	ND	ug/L	250		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139	ND	
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139		
Toluene-d8 (Surrogate)	99.7	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139		
4-Bromofluorobenzene (Surrogate)	98.3	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/04/07 22:18	DKC	MS-V12	1	BQG0139		

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

 Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0707544-06		Client Sample Name: 1871, MW-1, MW-1, 6/29/2007 7:59:00AM, Joe Lewis												
Constituent	Result	Units	PQL	MDL	Method	Prep	Run		Analyst	Instru- ment ID	Dilution	QC	MB	Lab
						Date	Date/Time	Batch ID				Bias	Quals	
Benzene	16	ug/L	2.5		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
Ethylbenzene	300	ug/L	2.5		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
Methyl t-butyl ether	50	ug/L	2.5		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
Toluene	ND	ug/L	2.5		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
Total Xylenes	650	ug/L	2.5		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
Ethanol	ND	ug/L	1200		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
Total Purgeable Petroleum Hydrocarbons	6300	ug/L	250		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	99.3	%	76 - 114 (LCL - UCL)		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139		
Toluene-d8 (Surrogate)	99.7	%	88 - 110 (LCL - UCL)		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139		
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)		EPA-8260	07/03/07	07/04/07	22:42	DKC	MS-V12	5	BQG0139		

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

 Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

### 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	BQG0139	Matrix Spike	0707440-02	0	30.050	25.000	ug/L		120		70 - 130
		Matrix Spike Duplicate	0707440-02	0	28.360	25.000	ug/L	6.0	113	20	70 - 130
Toluene	BQG0139	Matrix Spike	0707440-02	0.18000	30.070	25.000	ug/L		120		70 - 130
		Matrix Spike Duplicate	0707440-02	0.18000	29.410	25.000	ug/L	2.5	117	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BQG0139	Matrix Spike	0707440-02	ND	10.300	10.000	ug/L		103		76 - 114
		Matrix Spike Duplicate	0707440-02	ND	9.5100	10.000	ug/L		95.1		76 - 114
Toluene-d8 (Surrogate)	BQG0139	Matrix Spike	0707440-02	ND	10.250	10.000	ug/L		102		88 - 110
		Matrix Spike Duplicate	0707440-02	ND	10.210	10.000	ug/L		102		88 - 110
4-Bromofluorobenzene (Surrogate)	BQG0139	Matrix Spike	0707440-02	ND	9.9600	10.000	ug/L		99.6		86 - 115
		Matrix Spike Duplicate	0707440-02	ND	10.060	10.000	ug/L		101		86 - 115

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

### Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
Benzene	BQG0139	BQG0139-BS1	LCS	28.710	25.000	0.50	ug/L	115		70 - 130	
Toluene	BQG0139	BQG0139-BS1	LCS	28.950	25.000	0.50	ug/L	116		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BQG0139	BQG0139-BS1	LCS	9.9300	10.000		ug/L	99.3		76 - 114	
Toluene-d8 (Surrogate)	BQG0139	BQG0139-BS1	LCS	9.9700	10.000		ug/L	99.7		88 - 110	
4-Bromofluorobenzene (Surrogate)	BQG0139	BQG0139-BS1	LCS	9.9900	10.000		ug/L	99.9		86 - 115	

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine, CA 92618-2302

Project: 1871  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

## Volatile Organic Analysis (EPA Method 8260)

### Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Benzene	BQG0139	BQG0139-BLK1	ND	ug/L	0.50		
Ethylbenzene	BQG0139	BQG0139-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BQG0139	BQG0139-BLK1	ND	ug/L	0.50		
Toluene	BQG0139	BQG0139-BLK1	ND	ug/L	0.50		
Total Xylenes	BQG0139	BQG0139-BLK1	ND	ug/L	1.0		
Ethanol	BQG0139	BQG0139-BLK1	ND	ug/L	1000		
Total Purgeable Petroleum Hydrocarbons	BQG0139	BQG0139-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BQG0139	BQG0139-BLK1	99.4	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BQG0139	BQG0139-BLK1	99.4	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BQG0139	BQG0139-BLK1	99.8	%	86 - 115 (LCL - UCL)		



TRC Alton Geoscience  
21 Technology Drive  
Irvine, CA 92618-2302

Project: 1871  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 07/10/2007 9:18

### 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
- A01 PQL's and MDL's are raised due to sample dilution.
- A90 TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.

Submission #: 07-07544

Project Code:

TB Batch #

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: Intact? Yes  No

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

COC Received YES  NO

Ice Chest ID B1w Temperature: 3.7 °C Thermometer ID: 48

Emissivity 0.98 Container VOA

Date/Time 7/27 Analyst Init Amx

Table with columns for Sample Containers and Sample Numbers (1-10). Rows include various sample types like QT GENERAL MINERAL, PT PE UNPRESERVED, etc. Handwritten entries include '096 A B A B A B A B' in the 1-6 columns for the 40ml VOA VIAL row.

Comments: Sample Numbering Completed By: [Signature] Date/Time: 7/27/02 1332



07-07 544

BC LABORATORIES, INC.

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

CHAIN OF CUSTODY

Analysis Requested

Bill to: Conoco Phillips/ TRC		Consultant Firm: TRC		MATRIX (GW) Ground-water (S) Soil (WW) Waste-water (SL) Sludge	BTEX/MTBE by 8021B, Gas by 8015 TPH GAS by 8015M TPH DIESEL by 8015 8260 full list w/ oxygenates BTEX/MTBE/GAS BY 8260B ETHANOL by 8260B TPH -G by GC/MS	Turnaround Time Requested
Address: 96 MacArthur Blvd.		21 Techology Drive Irvine, CA 92618-2302 Attn: Anju Farfan				
City: oakland		4-digit site#: 1871				
State: CA Zip:		Workorder # 01120-4507897416				
Conoco Phillips Mgr: K. Woodburne		Project #: 125703 Sampler Name: JOE LEWIS				
Lab#	Sample Description	Field Point Name	Date & Time Sampled			
	-1	MW-6	06-29-07 0827	GW		
	-2	MW-8	0713			
	-3	MW-9	0745			
	-4	MW-10	0838			
	-5	MW-11	0813			
	-6	MW-1	0759			
				CHK BY	DISTRIBUTION	
				RML	[Signature]	
Comments:				Relinquished by: (Signature)	Received by:	Date & Time
GLOBAL ID: T0600101493				[Signature] Joe D. Lewis	refrigerator	06-29-07 0955
				[Signature] Joe D. Lewis	Ross Wickoy	7/2/07 1415
				[Signature] Ross Wickoy 7/2/07	R. Remy	7-2-07 1815

(A) = ANALYSIS (C) = CONTAINER

(P) = PRESERVATIVE

R. Remy 7-2-07 2140 [Signature] 7/2/07 2140

## **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.